



IMPACT OF COGNITIVE STYLES AND SELF-EFFICACY ON ACHIEVEMENT MOTIVATION AMONG HIGH SCHOOL STUDENTS

Psychology

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ABSTRACT

An attempt was made in the present investigation Aim: To study the impact of cognitive styles and self-efficacy on achievement motivation among high school students. **Objective:** To assess the impact of cognitive styles and self-efficacy on achievement motivation among high school students.

Sample: The Sample of the present study consists of 400 high school students. **Tools:** Achievement Motivation Scale developed by Prathibha Deo and Asha Mohan (1985), Cognitive Styles inventory developed by Praveen Kumar Jha (2001) and Self-efficacy scale developed by Arun Kumar Sign and Shruti Narain (2014) were administered. **Conclusion:** Results revealed significant impact of cognitive styles and self-efficacy on achievement motivation among high school students.

KEYWORDS

Cognitive Styles, Self-Efficacy, Achievement Motivation and High School Students.

INTRODUCTION:

Education is the keystone of all progress and development. It kindles the light of knowledge in the lives of millions, raises the level of consciousness and unleashes tremendous energy for socio-economic development of a nation and advancement of civilization. It provides the foundation for growth in productivity, incomes and employment opportunities and for the development, application and adaptation of science and technology to enhance the quality of life. Education brings opportunities for access to the benefits of the information revolution that is opening up multidimensional vistas on the whole world.

Cognitive Styles

Cognitive styles describe how the individual acquires knowledge (cognition) and processes information (conceptualization). Cognitive styles are related to mental behaviors which individuals apply habitually when they are solving problems. In general, they affect the way in which information is obtained, sorted and utilized. Cognitive style is usually described as a stable and persistent personality dimension which influences attitudes, values and social interaction. It is a characteristic of cognitive processing which is particular to a certain individual or class of individuals. There are many different definitions of cognitive style.

According to Shade (1989) there exists an overall consensus that "cognitive styles represent a super ordinate construct which accounts for individual differences in a variety of cognitive, perceptual, and personality variables which influence the method of perceiving, organizing, and interpreting information".

Self-Efficacy

Self-efficacy plays an important role in good performance outcomes as observed in people with a strong sense of self-efficacy trying harder and overcoming obstacles in a better way. While on the other hand those with low self-efficacy blame themselves for lacking ability during failures. Self-efficacy beliefs are expected to directly influence motivation that is manifested in the amount of on-task effort.

Individuals whose self-efficacy beliefs are high exert greater effort to master challenges than individuals whose self-efficacy beliefs are low, and a bulk of research shows that heightened efficacy beliefs result in the initiation and persistence of task related coping efforts that increase the chance of successful outcomes (Bandura, 1991).

Self-efficacy is the perceived ability to carry out a desired action. The higher a person's feelings of self-efficacy, the better that person tends to be at a wider range of tasks. And such success, of course, can ultimately lead to more generalized positive feelings about one.

Perceived self-efficacy can influence thought patterns, persistence and performance. Performance potential is more nearly realized when there is a personal belief of capability. If an individual believes in him, then effort will be increased and achievement will follow. Most people willingly undertake those activities in which they judge themselves

capable of managing. The degree of self-efficacy influences the desire to initiate an activity and how often.

Achievement Motivation

Achievement Motivation referred to as the need for achievement, is an important determinant of aspiration, effort, and persistence when an individual expects his performance will be evaluated in relation to some standard of excellence. Such behaviour is called achievement-oriented. Achievement motivation can be defined as the need for success or the attainment of excellence. Individuals will satisfy their needs through different means, and are driven to succeed for varying reasons both internal and external.

Achievement Motivation refers to a pattern of action and feelings connected to striving to achieve some internalized standard of excellence in performance. It is a subjective state of readiness to act in a given direction with a given level of intensity resulting in the achievement of certain effects, objects, improved individual statuses, excellence of performance in any field of activity. It is the expectancy of finding satisfaction in mastering challenging and different performance. In education we sometime call it the 'pursuit of excellence'.

Literature Review:

Vittorio, Frans, Jan and Christian (1998) showed a positive correlation between personality factors and academic motivation, and between cognitive styles and personality factors.

Riding et al. (2003) found that for overall learning behaviour, there was an interaction between working memory capacity and cognitive styles. With the holistic-analytic style dimension, working memory made a remarked difference for analytics but had little effect for holistic, and with the verbal imagery dimension, verbalizers were affected but not imagers.

Akinsola, Adedeji Tella, and Adeyinka Tella (2007) reported that students who had higher achievement motivation scored significantly high scores on a mathematics achievement test compared to their counterpart students with lower achievement motivation.

Theen and Melissa (2008) showed that 69 (45.39%) students have field-dependent cognitive style and 83 (54.61%) students have field-independent cognitive style. Further, the girls achievement was significantly higher than that of boys. Also, there were positive correlation between students cognitive style and achievement in general paper.

Hatice Odaci (2011) found that a significant difference in problematic internet use in terms of students' programs, though levels of problematic internet use did not differ in terms of sex or ownership of a computer.

Chaturvedi and Kumari (2015) revealed by results that Systematic

cognitive style has a higher relationship with psychological well-being as compared to the Intuitive cognitive style, although both cognitive styles are positively correlated with psychological well-being.

Ercag, Galic and Bubic (2019) investigated that cognitive abilities, rational thinking abilities, cognitive styles and self-control play a significant role in explaining the endorsement of epistemically suspect beliefs among university students. The different aspects of rational thought (rational thinking abilities, cognitive styles and self-control, excluding intelligence) were found to be significantly predicting the validation of epistemically uncertain beliefs. Centered on these results, it was recommended that intelligence and rational thinking, although related, denote two fundamentally diverse constructs.

Aisha Khatoon (2021) revealed that achievement motivation had a significant difference between the adolescents of the two groups. It was found that the achievement motivation of private school adolescents was higher than the achievement motivation of Government school.

Objective:

1. To assess the impact of cognitive styles and self-efficacy on achievement motivation among high school students.

Hypotheses:

1. There would be significant impact of cognitive styles on achievement motivation among high school students.
2. There would be significant impact of self-efficacy on achievement motivation among high school students.

Sample:

A sample of 400 students studying in government and private schools located rural and urban areas of Adoni Mandal of Kurnool District of Andhra Pradesh State was selected randomly and administered "Achievement Motivation Scale, Cognitive Styles inventory and Self-efficacy scale" to the subjects were in the age ranges from 14-17 years and using purposive random sampling method.

Variables Studied:

In the light of the hypotheses formulated, the following variables are studied.

Dependent Variable

1. Achievement Motivation

Independent Variables

1. Cognitive Styles
2. Self-Efficacy

Tools:

1. Assessment of Achievement Motivation:

Achievement Motivation Scale developed by Prathibha Deo and Asha Mohan (1985). It consists of 50 items with five options.

2. Assessment of Cognitive Styles:

Cognitive Styles inventory developed by Praveen Kumar Jha (2001) was used. In this Inventory there are 40 items with five options.

3. Self-Efficacy:

Self-efficacy scale developed by Arun Kumar Sign and Shruti Narain (2014). It consists of 20 items with five-point scale were used in the present study.

Research Design:

As there are two independent variables i.e., cognitive styles (low and high) and self-efficacy (low and high), each is divided in to two categories, a 2×2 factorial design was employed in the present study.

Statistical Analysis:

The obtained data was analyzed statistically in order to test the hypotheses using Means, SDs and Analysis of Variance (ANOVA).

RESULTS AND DISCUSSION:

Table-I: Means and SDs for scores on achievement motivation among high school students.

Self-Efficacy		Cognitive Styles	
		Low	High
Low	Mean	152.36	157.61

	SD	18.89	19.53
High	Mean	156.23	163.38
	SD	18.62	17.96

Grand Means

Low Cognitive Styles = (M:154.98)

High Cognitive Styles = (M:159.81)

Low Self-Efficacy = (M:154.30)

High Self-Efficacy (M:160.50)

A close observation of table-II shows that the subjects with high cognitive styles and high self-efficacy obtained a high score of 163.38 indicate that they have high achievement motivation compared with other groups. Subjects with low cognitive styles and low self-efficacy obtained a low score of 152.36 indicate that they have low achievement motivation compared with other groups.

In terms of cognitive styles, subjects with high cognitive styles (M=159.81) have high achievement motivation than the subjects with low cognitive styles (M=154.89). In terms of self-efficacy, subjects with high self-efficacy (M=154.30) have low achievement motivation than the subjects with low self-efficacy (M=160.50).

Table-II: Summary of ANOVA for scores on achievement motivation among high school students.

Source of Variance	Sum of Squares	df	MSS	F-Values
Cognitive Styles (A)	980.840	1	980.840	6.32**
Self-Efficacy (B)	850.160	1	850.160	5.47*
(A x B)	1095.360	1	1095.360	7.05**
Within	61501.572	396	155.307	--
Total	64427.932	399	--	--

** - Significant at 0.01 level

* - Significant at 0.05 level

Hypothesis-1: There would be significant impact of cognitive styles on achievement motivation among high school students.

It is evident from table-III that the obtained 'F' value of 6.32 is significant at 0.01 level indicates that cognitive styles have significant impact on achievement motivation among high school students. As the 'F' value is significant, the hypothesis-1, which stated that cognitive styles have significant impact on achievement motivation among high school students, is accepted as warranted by the results.

Hypothesis-2: There would be significant impact of self-efficacy on achievement motivation among high school students.

As shown in table-III that the obtained 'F' value of 5.47 is significant at 0.05 level indicates that self-efficacy has significant impact on achievement motivation among high school students. As the 'F' value is significant, the hypothesis-2, which stated that self-efficacy has significant impact on achievement motivation among high school students, is accepted as warranted by the results.

Table-III clearly indicates that the 'F' value of 7.05 cognitive styles and self-efficacy (AXB) is significant. This indicates that there is significant interaction between cognitive styles and self-efficacy in causing the effect on achievement motivation among high school students.

CONCLUSIONS:

- There is significant impact of cognitive styles on achievement motivation among high school students. Students with high cognitive styles have good achievement motivation than the students with low cognitive styles.
- There is significant impact of self-efficacy on achievement motivation among high school students. Students with high self-efficacy have good achievement motivation than the students with low self-efficacy.

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