

**A STUDY OF RELATIONSHIP OF COGNITIVE  
STYLES WITH GENDER, SOCIAL CLASS AND  
STUDENTS' ACADEMIC ACHIEVEMENT  
AT ELEMENTARY LEVEL**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

**This thesis is dedicated with deepest love and affection  
to Dr. Javed Iqbal, the researcher's physician and surgeon,  
who brought her back from  
death's neighbourhood  
and  
with great veneration and immense gratitude  
to Dr. M. A. Adeeb, the researcher's spiritual healer,  
who taught her the real meaning of the word *teacher*  
and set the most elevated goals  
for her professional life.**

## APPROVAL SHEET

Title of Thesis: A Study of Relationship of Cognitive Styles with Gender, Social Class and Students' Academic Achievement at Elementary Level

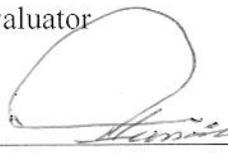
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## **AUTHOR DECLARATIONS**

1. During the period of this registered study in which this thesis was conducted, the author has not been registered for any other academic award or qualification.
2. The material included in this thesis has not been submitted wholly or in part for any academic award or qualification other than that for which it is now submitted.
3. Except where otherwise acknowledged in the text, this thesis represents the original research of the author.

Shagufta Akhtar

## ABSTRACT

Title: A Study of Relationship of Cognitive Styles with Gender, Social Class and Students' Academic Achievement at Elementary Level  
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Cognitive style has always been an area of interest to many educationists and educational psychologists because of its relevance to the field of education and training. Research has been conducted from a variety of perspectives in this area. However, in Pakistan, perhaps it has never been studied in depth so far. The present research aimed at investigating the relationship of cognitive styles with gender, social class, and students' academic achievement in the subject of science at elementary level in order to find out the correlates of cognitive style.

The population of the study was 8<sup>th</sup> class students studying in the Pakistani public sector secondary schools situated in Rawalpindi and Bahawalpur districts of Punjab province. A sample of 511 students was taken from the population of 59,900 students by using two stage cluster sampling technique. The 'Group Embedded Figures Test' developed by Oltman, Raskin and Witkin (1971) was used to identify the cognitive style of the students. The variable of students' academic achievement was measured by averaging out the scores of students obtained in the previously held science test in school and scores obtained in the self designed academic achievement test in science. Social

class of the students was determined with the help of Socio Economic Scale for Pakistan Version 2.1. The data collected through the study instruments were analyzed by using point biserial correlation technique, Pearson's product moment correlation co-efficient, partial correlation, correlation ratio and *t* test. Significant level was .05.

The study results indicated low positive relationship between cognitive style scores and gender; male students were more inclined towards field dependence, while female students were preponderantly field independent. Some positive relationship appeared to exist between students' cognitive style and their academic achievement. The low achievers were found to be field dependent while high achievers tended to be field independent. This result was consistent with the results reported in such studies as Vaidya and Chansky (1980), King (1983), Dwyer and Moore (1995), Tinajero and Paramo (1997), and Murphy, Casey, Day, and Young (1997) etc. Earlier research studies (Vasquez 1991, Forns-Santacana, Amador-Campos, & Roig-Lopez, 1993) suggested a significant association between cognitive styles and social class. Yet, unlike previous studies, this study revealed no significant association between social class of the students and their cognitive styles.

Teachers are recommended to help field dependent children act more field independently to achieve well in those subject areas where field independence is required.