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Research Article

The Relationship Between Cognitive Style and Classroom Adjustment Among Secondary School Pupils

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ABSTRACT

The study was to investigate the relationship between of cognitive style and classroom adjustment of secondary school pupils. The sample selected was 600 pupils of Ernakulam district and normative survey was the method of investigation. The tools used were Group Embedded Figures Test (GEFT) of Oltman,et.al,1971 for assessing cognitive style and Classroom Adjustment Inventory for school students prepared and standardized by the investigator. The result of the study was that significant relationship between cognitive style and classroom adjustment was found for the total sample and for the sub sample English medium students. However, no significant relationship was found for the subsample of Boys, Girls, Malayalam medium, Government and Private. More over the correlation found for the total sample and English medium students are negative which means that when cognitive style increases classroom adjustment decreases.

Key words: cognitive style, field dependence, field independence, classroom adjustment.

Introduction

The main aim of life is to establish adjustment with the changes that continuously go on around us. But now when our educational system is aiming to develop the individual potentialities and needs of the child, it is time for us to rethink whether we are losing the child as a socially adapted individuality. All Educators, even those in positions that are only peripherally connected with the classroom, have encountered behaviorual problem children in the course of their professional duties. Behavioral problem in children has its effects in the totality of their potentiality and obviously it affects the person with whom they come in contact. The peers with behavioural problems may influence children who are typically well behaved toward unacceptable behaviour. Behavioural problem children constitute, therefore, a major concern to all educators as it leads to a series of potentially critical confrontations like unhealthy learning environment, interpersonal conflicts, intrapersonal conflicts and lower academic performance, which again leads to sapping of human and institutional resources. The classroom adjustment may vary from student to student. It is felt that many talented students do not have high adjustment capacity in the classroom. Adjustment in classroom may also depend upon the cognitive style of the individual.

Literature Review

Cognitive Style is an individual's preferred and habitual approach to both organizing and representing information (Riding and Rayner, 1998,P.8). Cognitive controls represent patterns of thinking that control the ways in which individuals think about and process information (Jonassen and Grabowski,1993). They are closely related to mental abilities and are often used as an assessment of ability. Hence cognitive controls are measures of performance. Field dependence-independence is one such example where field independence is considered to be better than field dependence. Sahni (2022) investigated senior secondary students in Haryana, India, and reported that both cognitive style and personality independently influenced academic achievement. The study emphasised the relevance of considering individual differences in educational settings. Balakrishnan and Piramilagandhi (2022) investigated the cognitive styles of secondary school students in Chennai, India. The study found significant differences in cognitive styles based on gender and locality, emphasizing the role of demographic factors in shaping cognitive preferences. Santhi and Veena (2022)

explored the relationship between cognitive flexibility and academic achievement among higher secondary students in Puducherry, India. Their research demonstrated a positive correlation, suggesting that students with higher cognitive flexibility tend to perform better academically.

The cognitive style (how they process information independently or dependently) has an influence on Individual's attitude to satisfy the expectations of others and society on him as well as his responsibilities towards society as a socially efficient member. According to Witkin, Field Independent do best with recalling, reasoning, analytical thinking and reflective thinking when compared to field dependents whereas field dependents are benefited by interpersonal areas demanding social skills and competencies. Primarily this motivated to conduct a study on the influence of cognitive style on classroom adjustment.

Objectives

The present study had the following objective

- To estimate the relationship between cognitive style and classroom adjustment for Boys, Girls, Government, Private, English medium students, Malayalam medium students and for the total sample.

Methodology

The normative survey was the method of investigation. The study was conducted with a sample size of 600 students of Ernakulam district. The sample was selected by applying stratified sampling technique, giving due representation to factors like gender, management category of schools and medium of instruction.

The tools used were the following

- GROUP EMBEDDED FIGURES TEST (GEFT) for assessing Cognitive Style (Otlman,et.al,1971)
- CLASSROOM ADJUSTMENT INVENTORY for school students prepared and standardized by the investigator (2006).

The main statistical techniques employed was Pearson's product moment coefficient of correlation.

Findings of the study

The study was to examine the extent of the relationship between cognitive style and classroom adjustment among secondary school students. The results of the Pearson correlation analysis are presented in Table 1. The analysis was conducted across various subgroups including boys, girls, English-medium students, Malayalam-medium students, government school students, private school students, and the total sample.

TABLE 1: Correlation between cognitive style and classroom adjustment

SAMPLE	NUMBER	r	CONFIDENCE LEVEL		SHARED VARIANCE	SIG	LS
BOYS	306	0.024	-0.008	0.136	0.058	0.678	NS
GIRLS	294	0.044	-0.158	0.070	0.194	0.458	NS
ENGLISH	278	0.183	-0.297	-0.069	3.349	0.002	0.01
MAL	322	0.036	-0.073	0.297	0.13	0.522	NS
GOV	228	0.113	-0.241	0.015	1.28	0.09	NS
PRIVATE	372	0.093	-0.194	0.008	0.865	0.073	NS
TOTAL	600	0.10	-0.179	-0.021	1.00	0.014	0.05

The findings revealed a significant negative correlation between cognitive style and classroom adjustment for the total sample (r = -0.10, p = .014, significant at the 0.05 level). This indicates that, in general, as cognitive style becomes more differentiated or field-independent, classroom adjustment tends to decrease. The shared variance for the total sample was modest (1.00%), suggesting that while a relationship exists, it is not particularly strong. This result supports the notion that highly individualized or field-independent learners may struggle in conventional classroom settings where instructional strategies, peer expectations, and teacher-student interactions may not be aligned with their cognitive preferences.

Among the subgroups, a statistically significant negative relationship was found only for English-medium students (r = -0.183, p = .002, significant at the 0.01 level). The shared variance was 3.349%, which, while still relatively low, is notably higher than for the total sample. This suggests that English-medium students with more field-independent cognitive styles may experience greater difficulty adjusting to the classroom environment. Possible explanations include a mismatch between instructional methods and the preferred learning styles of these students, lack of individualized attention, or an overly rigid curriculum that does not accommodate cognitive diversity.

For other subgroups—boys, girls, Malayalam-medium students, government school students, and private school students—no significant relationship was observed between cognitive style and classroom adjustment. While some subgroups showed weak correlations like girls r = -0.044, government school students r = -0.113) which were not statistically significant. This could indicate that in these contexts, factors such as gender norms,

language of instruction, or school type do not substantially influence the dynamic between cognitive preferences and behavioural adaptation.

Discussions

The correlation found for the total sample and English medium students are negative which means that when cognitive style increases classroom adjustment decreases. This may be due to a lot of factors like the mismatch in the cognitive style that exist between the students and teachers, between peers in the way of perception, interpretation etc or the defect of the curriculum which doesn't meet his internal urge of thinking and learning .It may be also due to the dissatisfying instructional methods followed or a poor teacher-pupil ratio or even the large number of members in the group, which doesn't give him a chance to utilize his mental abilities.The negative correlation observed suggests a potential misalignment between educational environments and the cognitive needs of certain learners. Field-independent students, who typically prefer self-directed learning, analytical problem-solving, and minimal external structure (Witkin et al., 1977), may find it difficult to adjust in classrooms dominated by teacher-centered methods, fixed curricula, or peer interactions that do not support reflective thinking.

The significant negative correlation observed in this study indicates that students with more field-independent cognitive styles have lower levels of classroom adjustment. This finding is consistent with the theoretical framework proposed by Witkin et al. (1977), who observed that field-independent individuals tend to be more autonomous and analytical but may face challenges in structured social environments like classrooms. Their reduced reliance on external cues may hinder their adaptation to collaborative or teacher-centered learning contexts, thereby affecting adjustment.

Similarly, Jonassen and Grabowski (1993) suggested that cognitive controls and styles influence how individuals interpret social and academic cues, impacting their ability to function effectively in group settings. Field-dependent learners, being more socially oriented and reliant on external frames of reference, may adapt better in conventional classroom environments where collaboration, teacher guidance, and conformity are often valued. Pask (1976) found that differences in cognitive style affected how students approached learning tasks, which in turn influenced their academic behavior and interaction with classroom structures. Similarly, Riding and Rayner (1998) emphasised that cognitive style affects coping mechanisms and learning preferences in classroom settings, which may have an effect on students' behavioural and psychological adjustment. A study by Tennant (1988) emphasized that while cognitive style affects learning, it may not directly influence adjustment unless mediated by other factors such as teaching methods, student-teacher rapport, and classroom climate. Similarly, some researchers have argued that social and emotional intelligence might have a more direct effect on classroom behaviour than cognitive style alone (Salovey & Mayer, 1990).

The current study's finding that no significant relationship was found for subgroups such as boys, girls, Malayalam-medium students, and those in government and private schools mirrors similar conclusions drawn by researchers like Zhang (2002), who reported that the influence of cognitive styles on educational outcomes can be moderated by contextual variables like language, cultural background, and instructional style.

Recommendations

The study presents the following recommendations based on the findings.

These findings underscore the need for inclusive instructional practices that accommodate a variety of cognitive styles. Teachers should consider integrating differentiated instruction, cooperative learning strategies, and opportunities for individualized learning pathways. Moreover, professional development programs should be designed to help educators recognize and respond to diverse cognitive needs, thereby promoting both academic success and social-emotional adjustment among students.

- The participation in Co-curricular activities should be promoted as it leads to the sublimation of urges and compensation to failure; above all it leads to individual and social development.
- Teacher must know the capabilities and shortcomings of their students.
- Good teacher-pupil relations should be maintained.
- Acceleration programmes and individualized programmes must be given for Field Independent students.
- Promote collaborative and cooperative learning strategies. Rigid pedagogical methods may not allow for flexible thinking, problem-solving, or exploration, limiting students' cognitive expression.

Conclusion

In the present system of education where group learning methods are given prominence, Classroom Adjustment is a threatening issue that confronts the students. Behavioural problem children are receiving far more attention at the present time than at any other point in the history of the behavioural sciences. Programmes for diagnosis and treatment are expanding quickly on the national, state, and local levels. Efforts should be taken to incorporate these contributions in the curriculum of professional training to teachers- Pre-service and In-service. The results revealed a significant negative correlation between cognitive style and classroom adjustment for the total sample and specifically for English-medium students. This indicates that

students with more field-independent cognitive styles may experience greater difficulty adapting to conventional classroom settings. These results have important implications for educators and policy makers. To foster inclusive and supportive classroom environments, there is a need to recognize individual differences in cognitive processing and adopt flexible, student-centered teaching practices. Incorporating differentiated instruction, reducing class sizes, and training teachers to identify and address diverse learning needs may help bridge the gap between cognitive preferences and behavioural adjustment.

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