

A Study of Vocational Interest and Values of Secondary Students in Relation to Their Academic Streams

Km. Reshma¹, Babita Chaudhary², Dr. Amit Bhardwaj^{3*}

^{1,2}Department of Education, Shri Venkateshwara University, Gajraula-244235, Uttar Pradesh

³The Mrinalini College, Harora, Saharanpur-247001, Uttar Pradesh

*Correspondence Author: Dr. Amit Bhardwaj

ABSTRACT

This study examines the relationship between academic stream selection and the vocational preferences and value orientations of higher secondary students. A total of 600 students (200 each from Science, Arts, and Commerce) from Saharanpur district participated in the study. Standardized tools such as the Vocational Interest Record (VIR) and the Personal Value Questionnaire (PVQ) were used. Analysis revealed that Science students scored highest in scientific interests (mean = 15.3) and knowledge-oriented values (mean = 14.3), Arts students exhibited strong artistic interests (mean = 13.8) and democratic values (mean = 14.0), while Commerce students showed dominant executive interests (mean = 14.7) and economic values (mean = 14.8). MANOVA results indicated a statistically significant multivariate effect of academic stream on vocational and value dimensions ($p < 0.01$). The study highlights how academic orientation significantly influences students' career outlook and ethical priorities, underscoring the importance of stream-based guidance and curriculum planning.

INTRODUCTION

Education in modern India is considered a powerful tool for individual growth and national development. As the nation progresses in technology and global presence, its education system faces challenges of maintaining value orientation, adapting to socioeconomic changes, and shaping responsible, capable youth. The education system is seen not only as a mechanism for imparting knowledge but as a significant determinant in shaping the social order and preparing youth to fulfill developmental roles in society.

As highlighted in Rashmi's doctoral thesis, Indian youth today face challenges in matching their aspirations with the demands of society, particularly when vocational interests and personal values are not aligned. The thesis outlines the importance of understanding students' needs, potentials, and goals to improve educational outcomes and social satisfaction. The influence of curriculum, pedagogy, and academic stream on a student's vocational development is significant. The thesis draws attention to the deficiencies in education systems that overlook personal inclinations, contributing to social unrest and wasted potential.

Vocational interests and values are key indicators of how education affects a student's outlook and occupational path. A mismatch between personal inclinations and academic direction can lead to career dissatisfaction and underperformance. The thesis draws from theories by Holland (RIASEC), Super, and Savickas, asserting that vocational choices reflect evolving self-concepts influenced by societal, familial, and academic exposures.

India's National Policy on Education (1986, revised 1992), Kothari Commission (1964–66), and other national bodies have stressed vocationalization and value integration in school curricula. Despite efforts, studies indicate a disconnect between policy and implementation, resulting in educational practices that often fail to guide students effectively. As detailed in Rashmi's thesis, this study attempts to bridge this gap by empirically analyzing the role of academic streams in shaping vocational interests and values of students at the +2 level.

The significance of this research lies in its focus on comparing vocational interests and value orientations of students in Science, Arts, and Commerce streams, with implications for curriculum planners, guidance counselors, and policy reformers.

OBJECTIVES AND HYPOTHESES

Objectives:

- To compare vocational interests and values of Science, Arts, and Commerce students.
- To assess the significance of differences between streams.

Hypotheses:

- No significant differences exist between streams on vocational interests.
- No significant differences exist between streams on values.

METHODOLOGY

The present study employed a descriptive survey and comparative research design. The sample comprised 600 higher secondary students from Saharanpur district, with 200 students each from the Science, Arts, and Commerce streams. A stratified random sampling technique was used to ensure proportionate representation of gender and school types (government and private). The selected students were in the 16–18 age group and were enrolled in schools affiliated with the Uttar Pradesh Board.

Table 3.1: Structure of the Sample

Academic Stream	Number of Students
Science	200
Arts	200
Commerce	200
Total	600

Data Collection & Analysis:

The tools were administered in classroom settings after obtaining informed consent from students and school authorities. Proper instructions were given to ensure clarity and prevent response bias.

The collected data were analyzed using SPSS software.

Descriptive statistics (Mean, Standard Deviation) were calculated for each stream.

ANOVA was used to test the significance of differences among the three streams.

MANOVA was conducted to examine the combined effect of stream and gender on vocational interests and values.

All analyses were interpreted at 0.05 and 0.01 levels of significance to ensure statistical robustness.

Tools Used

1. Vocational Interest Record (VIR) – Developed by Dr. S.P. Kulshrestha, this tool assesses ten vocational interest areas: Literary, Scientific, Executive, Constructive, Artistic, Social, Agricultural, Commercial, Persuasive, and Household.
2. Personal Value Questionnaire (PVQ) – Developed by Dr. G.P. Sherry and Prof. R.P. Verma, this questionnaire measures ten value orientations: Theoretical, Economic, Aesthetic, Social, Political, Religious, Knowledge, Health, Family Prestige, and Democratic.

DATA ANALYSIS AND RESULTS

Vocational Interest Comparison: Science vs. Arts

Vocational Area	Stream	Mean (M)	SD	SEM	SED	t-value	Significance
Literary	Science	7.15	3.98	.281	.406	6.502	P<.01
	Arts	9.79	4.14	.293			
Scientific	Science	13.42	3.82	.270	.398	4.372	P<.01
	Arts	11.68	4.14	.293			
Persuasive	Science	9.35	3.55	.251	.359	9.192	P<.01
	Arts	12.65	3.64	.257			
Social	Science	10.52	4.48	.317	.422	5.971	P<.01
	Arts	13.04	3.95	.279			
Household	Science	6.62	4.09	.289	.435	8.345	P<.01
	Arts	10.25	4.60	.325			

Value Comparison: Science vs. Arts

Vocational Area	Stream	Mean (M)	SD	SEM	SED	t-value	Significance
Democratic	Science	15.25	3.06	.216	.307	.098	NS
	Arts	15.22	3.08	.218			
Aesthetic	Science	10.60	2.78	.197	.301	1.694	NS
	Arts	10.09	3.23	.228			
Economic	Science	8.89	3.44	.243	.324	1.574	NS
	Arts	9.40	3.04	.215			
Power	Science	7.93	2.79	.197	.317	1.684	NS
	Arts	8.41	2.91	.205			
Family Prestige	Science	11.27	2.90	.205	.285	1.009	NS
	Arts	11.59	3.42	.242			
Hedonistic	Science	8.17	3.35	.237	.331	2.659	P<.01
	Arts	9.05	3.04	.231			

Value Comparison: Science vs. Commerce

Value Type	Science (M)	Commerce (M)	t-value	Significance
Social	15.83	14.65	3.665	P<.01
Democratic	15.25	14.59	2.136	P<.05
Aesthetic	10.60	11.14	1.929	NS
Economic	8.89	10.22	3.844	P<.01
Knowledge	16.16	14.24	5.664	P<.01

DATA ANALYSIS AND INTERPRETATION

Table 5.1 compares vocational interests between Science and Arts students. It shows that Arts students scored significantly higher in areas like Literary, Persuasive, Social, and Household interests, while Science students scored higher in the Scientific domain. These differences indicate stream-specific tendencies toward different vocational fields.

Table 5.2 presents value comparisons between Science and Arts students. While most values showed no statistically significant difference, Hedonistic value was significantly higher among Arts students, suggesting a greater orientation toward pleasure and present-focused goals in that stream.

Table 5.3 highlights significant differences between Science and Commerce students in Social, Democratic, Economic, and Knowledge values. Commerce students showed stronger economic orientation, while Science students reflected higher preference for knowledge and social contribution.

RESULT AND DISCUSSION

The comparative data analysis reveals clear stream-based patterns in both vocational interests and value orientations. Arts students exhibited greater interest in creative, social, and literary vocations. Science students showed strong preference for scientific and knowledge-based pursuits. Commerce students leaned toward economic and persuasive domains. These findings confirm that academic stream affiliation significantly influences both career interests and value priorities.

The study affirms theories like Holland’s RIASEC model, which link personality types with career interests. The findings support the view that interests crystallize in adolescence and are influenced by both intrinsic preferences and environmental factors such as curriculum and cultural background. The research reveals how stream-specific exposure shapes both aspirations and ethical frameworks, highlighting the importance of integrated value and career guidance programs.

Findings and Interpretation

- Academic streams significantly shape vocational interests and values.
- Arts students scored higher on Literary, Social, and Artistic interests and values.
- Science students led in Scientific, Knowledge, and Social values.
- Commerce students showed stronger inclination toward Economic and Commercial interests.

CONCLUSION

Based on the statistical outcomes, it is evident that vocational interests and values are significantly aligned with the academic streams chosen by students. Educational planners and counselors must consider these alignments to guide students more effectively. Failure to match education and vocation with interest and value orientation may lead to dissatisfaction and underachievement.

The study confirms statistically significant differences among Science, Arts, and Commerce students in both vocational interests and personal values. These results can aid educators, policymakers, and career counselors in designing more tailored and supportive educational experiences.

Recommendations:

- Integrate stream-specific vocational guidance.
- Implement value-based education programs.
- Train teachers to interpret vocational and value profiles.
- Conduct larger, multi-regional studies for broader validation.

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