

# Vocational Dimensions and Value Orientation Across Academic Streams: A Comparative Multivariate Study

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## ABSTRACT

This research explores how students' academic stream selection—Science, Arts, or Commerce—affects their vocational interests and value orientations. A sample of 600 students from Saharanpur district was studied using standardized psychometric tools. Analysis revealed distinct stream-wise patterns: Science students excelled in Scientific (M=15.3) and Knowledge (M=14.3) domains, Arts students scored highest in Artistic (M=13.8), Aesthetic (M=13.1), and Democratic (M=14.0), while Commerce students leaned toward Executive (M=14.7), Economic (M=14.8), and Family Prestige (M=13.7). MANOVA confirmed statistically significant differences ( $p < 0.01$ ). These findings underline the influence of educational context on shaping vocational and ethical self-concepts, reinforcing the need for curriculum-driven career planning.

## INTRODUCTION

Education is not only a tool for intellectual development but also a critical driver in shaping a student's professional identity and moral orientation. In the Indian context, higher secondary students must choose among three key academic streams—Science, Arts, and Commerce—each providing a distinct exposure, set of values, and skill acquisition path. These streams do more than define academic direction; they contribute to students' vocational identity and value systems.

Holland's theory (1997) highlights that individuals seek environments congruent with their personality types, represented by six vocational typologies—Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC). Super (1957) emphasized that career decisions reflect one's evolving self-concept. Such models imply that academic environments shape both career aspirations and internalized values.

National frameworks such as the Kothari Commission (1964–66) and the National Policy on Education (1986, 1992) have emphasized the importance of career awareness and value education during adolescence. Despite this, there remains a lack of concurrent empirical studies analyzing both vocational and value profiles using multivariate techniques. This study addresses that gap by exploring the role of academic streams in shaping both dimensions among Indian adolescents.

## METHODOLOGY

**Design:** Descriptive and comparative survey.

**Sample:** 600 higher secondary students (200 each from Science, Arts, and Commerce) from Saharanpur district, selected using stratified random sampling ensuring gender representation.

### Tools Used:

- *Vocational Interest Record (VIR)* by Dr. S.P. Kulshrestha: measured 10 vocational interest areas including Literary, Scientific, Executive, Constructive, Artistic, etc.
- *Personal Value Questionnaire (PVQ)* by Dr. G.P. Sherry & Prof. R.P. Verma: assessed 10 values including Knowledge, Economic, Aesthetic, Religious, Democratic, etc.

### Statistical Analysis:

- Descriptive statistics (mean, SD) for trends
- ANOVA for inter-stream comparisons

- MANOVA to assess the multivariate effect of stream and gender
- Significance tested at 0.05 and 0.01 levels

## RESULTS

**Table 1: Mean Vocational Interest Scores by Stream**

Stream	Literary	Scientific	Executive	Constructive	Artistic	Social
Science	12.1	15.3	10.8	8.4	7.2	10.1
Arts	13.4	11.1	9.7	11.3	13.8	13.1
Commerce	10.9	12.0	14.7	9.3	10.0	11.4

### Interpretation:

Science students showed dominance in Scientific interests, indicating a cognitive and analytical preference. Arts students leaned toward Literary, Artistic, and Social interests, reflecting expressive and humanitarian tendencies. Commerce students showed strongest interest in Executive roles, aligning with organizational and entrepreneurial profiles.

**Table 2: Mean Value Scores by Stream**

Stream	Economic	Aesthetic	Democratic	Religious	Knowledge	Family Prestige
Science	10.3	9.2	10.1	8.7	14.3	11.9
Arts	9.1	13.1	14.0	12.4	11.8	10.2
Commerce	14.8	10.0	9.3	6.9	12.2	13.7

### Interpretation:

Science students favored Knowledge and Family Prestige values. Arts students showed higher preference for Aesthetic, Religious, and Democratic values. Commerce students scored highest in Economic and Family Prestige values, reflecting materialistic and pragmatic life orientations.

## DISCUSSION

The findings affirm the assumptions of Holland's vocational theory and Super's career development model. Students' preferences aligned with the core orientations of their academic streams. The Science stream fosters analytical and academic excellence, leading to high scores in Scientific interests and Knowledge values. Arts students, exposed to humanities and literature, expressed stronger humanitarian and democratic leanings. Commerce students, often career-focused and practical, reflected higher Economic and Executive interests. These stream-specific orientations support the theory that academic exposure reinforces or shapes students' self-concept and vocational goals. The presence of gender moderation effects (seen in prior studies but not detailed here) would further inform differentiated guidance practices.

## CONCLUSION

Academic streams are not just curricular labels but serve as developmental environments influencing students' interests and values. Science, Arts, and Commerce streams each foster unique vocational and ethical profiles, which align students differently with professional choices and life paths. Awareness of these differences is essential for parents, educators, and counselors in guiding students toward congruent educational and career decisions.

### Recommendations

- Incorporate stream-specific career guidance programs in senior secondary schools.
- Employ psychometric assessments (like VIR and PVQ) before or during stream selection.
- Integrate value education explicitly within the curriculum of all streams.
- Conduct orientation sessions for parents and teachers about vocational traits and value development.
- Encourage gender-sensitive counseling to address differential vocational trends.

## REFERENCES

- Holland, J.L. (1997). *Making Vocational Choices: A Theory of Vocational Personalities and Work Environments*.
- Super, D.E. (1957). *The Psychology of Careers*.
- Kulshrestha, S.P. (1985). *Vocational Interest Record*. National Psychological Corporation, Agra.
- Verma, R.P. & Sherry, G.P. (1985). *Personal Value Questionnaire*. National Psychological Corporation, Agra.
- Government of India. (1986, Revised 1992). *National Policy on Education*.
- Kothari Commission. (1964–66). *Education and National Development: Report of the Education Commission*.
- Pradhan, N. (1995). “Vocational Choice Patterns Among Adolescents.” *Indian Journal of Applied Psychology*.
- Singh, R. (2003). “Educational Stream and Value Systems: A Correlational Study.” *Indian Educational Review*, 41(3), 33–47.