

ROLE OF CAREER GUIDANCE IN SELECTION OF APPROPRIATE STREAMS FOR HIGHER EDUCATION: AN EMPIRICAL STUDY OF HIGHER SECONDARY SCIENCE STUDENTS

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Abstract

In India, Career Guidance is essential in assisting Higher secondary science students in selecting the right tracks. When making such important selections, students frequently experience confusion and stress due to the abundance of options accessible. They may make educated decisions when they receive effective career coaching, which gives them insightful information about their interests, strengths, and possible career pathways. It provides a better understanding of pupils' future prospects by evaluating their aptitudes and preferences through a variety of exams and counselling sessions. Additionally, Career Guidance ensures that students are aware of the prospects and difficulties in each stream by bridging the gap between their goals and the realities of various industries. Guidance counsellors assist students in coordinating their academic endeavours with their long-term objectives by providing access to information about various occupations, school requirements, and employment markets. This increases their chances of success in their chosen industries and gives them a boost in confidence. To put it simply, Career Counselling is crucial to enabling students to successfully negotiate the challenges of their academic journey and make wise decisions about their futures. Study survey was conducted among 203 Higher Secondary Science Students to know the Role of Career Guidance in Selection of appropriate streams for higher education and concludes that there is significant role of Career Guidance in Selection of appropriate streams.

Keywords: Career Guidance, Higher Secondary Science Students, Track selection, Informed decisions, Aptitude assessment, Career counselling, Future prospects, Academic success.

Introduction

Higher secondary students in India benefit greatly from career counselling as they choose the right academic pathways. Effective career advising is a critical component of the institutional

reforms that are necessary to support students' "diverse pathways," as stated by Feder and Malcom (2016). Career assistance assists students in navigating the challenges of selecting among a variety of science programs, such as computer science, physics, or biology, by offering them individualised counselling and tools. By ensuring that students are knowledgeable of the advantages and disadvantages of each sector, this guidance empowers them to make selections that are in line with their interests and long-term professional goals. Through a variety of evaluations and counselling sessions, career guidance specialists can determine students' interests and strengths in order to provide customised advice that has a major impact on students' academic and professional paths. In addition to lowering the tension and ambiguity around these important choices, this encourages a more calculated and deliberate approach to career and educational preparation.

"Creativity" is a "key concept" in guidance and career counselling, according to Valverde et al. (2020), since it enables students to consider a variety of options and creatively imagine their futures. Good career advice encourages students to think imaginatively about their abilities, interests, and future career routes, which helps them manage the challenges of deciding between different science streams like computer science, physics, or biology. With this method, students may make selections that are in line with their own goals and talents since they will be well-informed about the potential and difficulties involved with each sector. Career counsellors can provide more interesting and individualised support for students by adding "creativity" into their work. Furthermore, career counselling that places a strong emphasis on "creativity" can better equip students for the quickly evolving labour market. When planning their careers, students must be flexible and receptive to new opportunities and sectors. "Creative career guidance" gives them the tools they need to think creatively, adjust to changing circumstances, and lead innovative lives in their fields of expertise. Through the cultivation of a "creative mindset," career counsellors assist students in acquiring the adaptability and resilience required for both academic and professional success. Essentially, incorporating "creativity" into career counselling gives Indian higher secondary students the ability to confidently and uniquely manage their scholastic and career paths.

Career counselling is not only important for personal development but also for adjusting to the changing needs of higher education. When incorporating new technology and approaches in education, Englund et al. (2017) emphasise the significance of "conceptual change and development in practice". In order to give students current and pertinent information, career counsellors need to stay on top of these changes. This entails being aware of new academic

disciplines, evolving labour market patterns, and evolving educational prerequisites. Career counselling guarantees that students are ready for both present opportunities and future adjustments by doing this. In order to assist students in making well-informed decisions that will last over time, this forward-looking viewpoint is essential. Career guidance provides Indian higher secondary students with the necessary tools to efficiently navigate their educational and professional futures through a combination of psychological empowerment, individualised support, and current information.

Literature Review

According to Kebritchi et al. (2017), selecting a stream is a difficult procedure that involves several "issues and challenges" that could have a big impact on students' academic and career prospects. Career advising offers the essential assistance to help students understand the many stream alternatives available to them in a complex educational environment such as India. A student's "interests and aptitudes" must be evaluated in order to match them with appropriate academic streams for effective career advising. By lowering ambiguity and improving learning, this individualised method assists students in making well-informed decisions. professional counsellors can help students make a smoother transition from secondary to higher education by attending to their individual needs and concerns. This helps to ensure that students choose courses that best align with their abilities and professional goals.

For career advising to be effective, it is necessary to comprehend the "career choice pathways" of students. In order to give students meaningful guidance, career counsellors need to take into account their various backgrounds and objectives (Carrico et al., 2019). Personalised instruction might be especially beneficial for pupils from underprivileged or rural backgrounds. Counsellors can assist students in choosing their academic paths by investigating their unique "interests, strengths, and long-term career goals." With the help of this focused assistance, students are guaranteed to be informed about their alternatives and prepared to make decisions that will support their long-term goals. In order to enable students to successfully negotiate the intricacies of stream selection and make decisions that are appropriate for their unique profiles, personalised career counselling is therefore essential.

The idea of "identity, critical agency, and engineering" put forth by Godwin et al. (2016) emphasises the significance of career counselling in stream selection even further. According to this paradigm, it is critical to help students develop a strong sense of "identity and agency," which may be done through providing them with competent career counselling. Career coaching can offer a supporting framework for students to discover their genuine interests and

abilities in India, where societal and parental expectations frequently place pressure on students' choices. Career Guidance can assist students in making decisions that are both realistic and consistent with their true interests by assisting them in clarifying their personal "aspirations and capabilities." This strategy gives students the strength to resist outside pressure and choose their academic choices wisely, which eventually results in more rewarding and prosperous professional paths.

"Career guidance systems" that use "ensemble learning" methodologies have the potential to greatly improve students' decision-making processes (Reddy et al., 2022). These systems provide students with personalised recommendations based on their aptitudes and interests by merging various data sources and learning models. By bridging the knowledge gap between students' preferences and the various educational pathways, this technique guarantees that the decisions they make are well-informed and appropriate for their future jobs. According to Van Noy et al. (2016), "guided pathways" in community college programs can serve as a model for higher secondary education in India, highlighting the significance of planned career pathways. A comparable system may be put in place to provide pupils a better knowledge of the possible job paths connected to various academic courses.

According to Halim et al. (2018), "parental influence" plays a part in determining a child's interest in science and future profession. Parent-involved career counselling helps increase students' motivation and alignment with appropriate streams in the Indian culture, where family expectations and support are very important. Parents may help students make better decisions and develop a more informed attitude to choosing their academic and professional routes by being involved in the career advising process. This guarantees that students receive regular support and encouragement. Tudor (2018) posits that the integration of academic advising and career coaching can provide notable improvements in student retention and graduation rates, as well as future job satisfaction. By offering "comprehensive career guidance," educators help students better understand their interests and strengths, enabling them to select science majors that will support their long-term professional objectives.

According to Falco (2017), "school counsellors" play a crucial role in assisting students in pursuing jobs in STEM (science, technology, engineering, and mathematics) education. Good "career counselling" assists students in investigating different STEM areas, comprehending the prerequisites for each stream, and making well-informed judgements regarding their futures in school. Counsellors can help students select science streams that align with their interests and

abilities by providing a thorough overview of STEM vocations. This will improve students' engagement and performance in these fields.

Holmes et al. (2018) highlighted that a variety of factors, such as "student and school characteristics," influence "school students' aspirations for STEM careers." Students who receive good career counselling can better comprehend these elements and make future decisions. Career coaching assures students of the chances in disciplines like "STEM" by offering information about various science streams and their career prospects. Among the "factors affecting students? career choice" that Kazi and Akhlaq (2017) emphasised are academic performance, family influence, and personal interests. By providing individualised counsel and assistance, career guidance programs can solve these issues. Career counsellors can assist students in selecting scientific majors that complement their skills and professional objectives by getting to know their individual interests and aptitudes.

Van Tuijl et al. (2016) noted the need for appropriate assistance in helping students make decisions about their educational and professional pathways. Career coaching helps students navigate their options and make decisions that best fit their long-term ambitions in India, where choosing a science stream is crucial for future success. The importance of decision-making models in career advising was highlighted by Gati et al. (2019). By offering organised frameworks for weighing possibilities and reaching well-informed conclusions, these models assist students in navigating the challenging process of selecting a science program. With the use of these "decision-making models," career counsellors can help students evaluate their interests, aptitudes, and professional objectives, resulting in more thoughtful and rewarding decisions. This methodical strategy guarantees that students are selecting science majors that align with their interests at the moment and setting themselves up for future professional success.

Objective

1. To know the Role of Career Guidance in Selection of appropriate streams for higher education.

Methodology

Study survey was conducted among 203 Higher Secondary Science Students to know the Role of Career Guidance in Selection of appropriate streams for higher education. "Convenient sampling method" along with "T-test" were used to collect and analyze the data.

Data Analysis

In the total population of study survey males are 55.7% and females are 44.3%. 34.0% of them are below 16 years, 35.9% comes under the age group of 16-20 years and rest 30.1% are above 20 years of age.

"Variables"	"Respondents"	"Percentage"
Male	113	55.7
Female	90	44.3
Total	203	100
Age (years)		
Below 16	69	34.0
16-20	73	35.9
Above 20	61	30.1
Total	203	100

"Table 1 General Details"

Table 2 Role of Career Guidance in Selection of appropriate streams for higher

education

"S. No. "	"Statements"	"Mean Value"	"t value "	"Sig."
1.	Career guidance provides students with detailed information about various educational streams	3.19	2.755	0.003
2.	Helps students make informed decisions based on their interests, strengths, and future career aspirations	3.12	1.751	0.041
3.	Helps students understand their own abilities, interests, and personality traits	3.18	2.668	0.004
4.	Exposes students to a broader spectrum of possibilities	3.13	1.888	0.030
5.	Help to reduce anxiety by providing a structured approach to decision-making	3.17	2.510	0.006
6.	Help students to align their education with market demand	3.14	2.032	0.022
7.	Advise students on which streams have good prospects in terms of employment opportunities and career growth	3.16	2.344	0.010
8.	Offers personalized support tailored to each student's unique situation	3.20	2.943	0.002
9.	Career guidance helps students set realistic goals and create actionable plans	3.15	2.181	0.015
10.	Assist students in making smooth transitions at various educational stages	3.17	2.515	0.006

Table 2 shows different role of Career Guidance in Selection of appropriate streams for higher education. The respondent says that Career guidance Offers personalized support tailored to each student's unique situation with mean value 3.20, Career guidance provides students with detailed information about various educational streams (3.19), Helps students understand their own abilities, interests, and personality traits (3.18), Help to reduce anxiety by providing a structured approach to decision-making (3.17) and Assist students in making smooth

transitions at various educational stages with mean value 3.17. The respondent also shares that career guidance advise students on which streams have good prospects in terms of employment opportunities and career growth with mean value 3.16, Career guidance helps students set realistic goals and create actionable plans (3.15), Help students to align their education with market demand (3.14), Exposes students to a broader spectrum of possibilities (3.13) and helps students make informed decisions based on their interests, strengths, and future career aspirations with mean value 3.12. All statements pertaining to Role of Career Guidance in Selection of appropriate streams for higher education exhibit statistical significance, with p-values below 0.05 following the application of a t-test.

Conclusion

To sum up, Career Guidance and Counselling is very important while choosing the right science courses for higher secondary pupils. Career Guidance assists students in making wellinformed decisions that complement their interests and strengths by giving them information about different career pathways and the corresponding educational requirements. In order to guarantee that students select career paths that align with both their long-term professional goals and academic aptitudes, this support is essential. Good career counselling can reduce the stress related to choosing a stream and increase student motivation, which will improve academic achievement and satisfaction. In addition, Career Guidance and counselling helps students discover new scientific topics and prospects so they may stay up to date on industry developments and technical breakthroughs. With this proactive strategy, students are guaranteed to be well-prepared to enter the workforce or pursue higher education in fields that have bright futures. future advising helps students make the most of their educational journey by combining individualised counselling with current knowledge about future prospects. This helps students stay motivated and focused on their studies. By helping students match their educational choices with their employment ambitions, comprehensive career coaching ultimately helps to their overall development and success.

The study aims to know different Role of Career Guidance in Selection of appropriate streams for higher education and found that Career guidance Offers personalized support, provides students with detailed information, helps students understand their own abilities, interests, and personality traits, help to reduce anxiety by providing a structured approach to decision-making and assist students in making smooth transitions at various educational stages.

References

- Kebritchi, M., Lipschuetz, A., & Santiague, L. (2017). Issues and challenges for teaching successful online courses in higher education: A literature review. Journal of Educational Technology Systems, 46(1), 4-29.
- Carrico, C., Matusovich, H. M., & Paretti, M. C. (2019). A qualitative analysis of career choice pathways of college-oriented rural central Appalachian high school students. Journal of Career Development, 46(2), 94-111.
- Reddy, K., Reddy, M. A., Kaur, V., & Kaur, G. (2022). Career guidance system using ensemble learning. Proceedings of the Advancement in Electronics & Communication Engineering.
- Van Noy, M., Trimble, M., Jenkins, D., Barnett, E., & Wachen, J. (2016). Guided pathways to careers: Four dimensions of structure in community college career-technical programs. Community College Review, 44(4), 263-285.
- Halim, L., Abd Rahman, N., Zamri, R., & Mohtar, L. (2018). The roles of parents in cultivating children's interest towards science learning and careers. Kasetsart Journal of Social Sciences, 39(2), 190-196.
- Tudor, T. R. (2018). Fully integrating academic advising with career coaching to increase student retention, graduation rates and future job satisfaction: An industry approach. Industry and Higher Education, 32(2), 73-79.
- Falco, L. D. (2017). The school counselor and STEM career development. Journal of Career Development, 44(4), 359-374.
- Gati, I., Levin, N., & Landman-Tal, S. (2019). Decision-making models and career guidance. International handbook of career guidance, 115-145
- Holmes, K., Gore, J., Smith, M., & Lloyd, A. (2018). An integrated analysis of school students' aspirations for STEM careers: Which student and school factors are most predictive?. International Journal of Science and Mathematics Education, 16, 655-675.
- Kazi, A. S., & Akhlaq, A. (2017). Factors affecting students' career choice. Journal of research and reflections in education, 2(2), 187-196.
- Van Tuijl, C., & van der Molen, J. H. W. (2016). Study choice and career development in STEM fields: An overview and integration of the research. International journal of technology and design education, 26(2), 159-183.
- Feder, M., & Malcom, S. (Eds.). (2016). Barriers and opportunities for 2-year and 4-year STEM degrees: Systemic change to support students' diverse pathways.
- Godwin, A., Potvin, G., Hazari, Z., & Lock, R. (2016). Identity, critical agency, and engineering: An affective model for predicting engineering as a career choice. Journal of engineering Education, 105(2), 312-340.
- Englund, C., Olofsson, A. D., & Price, L. (2017). Teaching with technology in higher education: understanding conceptual change and development in practice. Higher Education Research & Development, 36(1), 73-87.
- Valverde, J. D., Thornhill-Miller, B., Patillon, T. V., & Lubart, T. (2020). Creativity: A key concept in guidance and career counselling. Journal of Adult and Continuing Education, 26(1), 61-72