

Career Maturity and Metacognition of Higher Secondary Students

Debadrita Mondal

Ex-Student of the Department of Education, University of Kalyani, Kalyani, Nadia, West Bengal, India 743145

DOI: <https://doi.org/10.52403/ijrr.20250684>

ABSTRACT

Career maturity refers to an individual's readiness and ability to make informed, realistic career decisions and effectively manage career development tasks. Metacognition refers to being aware of and understanding how you think and learn. A researcher conducted a study focusing on career maturity and metacognition. The study aimed to assess the overall level of career maturity, investigate differences based on gender, locality, and academic stream, and examine the correlation between career maturity and metacognitive awareness. For this purpose, a random sample of 200 students was selected from Kalyani University Experimental High School in Nadia. To gather data, the researcher designed a self-developed questionnaire using a five-point Likert scale. The validity of the tool was ensured by the expert assistance. For data analysis, statistical methods such as Mean, Standard Deviation, t-test, and Pearson's product-moment correlation were used. The findings indicated notable variations in career maturity based on gender, geographic location, and academic discipline. Furthermore, there was a strong positive relationship between career maturity and metacognitive abilities.

Keywords: Career Maturity, Metacognition, Higher Secondary

INTRODUCTION

Career maturity refers to an individual's readiness and ability to make informed, realistic career decisions and to effectively cope with the developmental tasks related to career planning and development. The concept is rooted in developmental theories, most notably those of Donald Super, who emphasized that career choice and adjustment are lifelong processes influenced by self-concept, experience, and situational factors. Individuals with high career maturity tend to clearly understand their interests, values, and abilities, and they can set realistic goals, explore occupational options thoroughly, and make responsible career decisions. Career maturity is crucial during adolescence and young adulthood, as individuals begin to form and implement their career plans.

Metacognition refers to the awareness and understanding of one's thought processes. Metacognition plays a vital role in effective learning, as it allows individuals to assess what they know, recognize what they don't know, and choose appropriate strategies to bridge that gap. First introduced by developmental psychologist John Flavell in the 1970s, metacognition has since become a central concept in educational psychology. Research shows that learners who possess strong metacognitive skills tend to perform better academically because they can adapt their learning techniques to different tasks and challenges. A student who is metacognitively aware is more likely to engage in reflective thinking about their

future, set realistic career goals, and take ownership of the decision-making process. Thus, fostering metacognitive skills can enhance career maturity, leading to more confident and well-informed career choices.

LITERATURE REVIEW

The Researcher had completed 26 reviews, some of which are presented here.

1. Rahim. A (2021). studied “Career Maturity and Career Decision-Making Self-Efficacy as Predictors of Career Adaptability among Students in Foundation Program, University Putra Malaysia”.

This study aims to examine the key predictors of career maturity and career decision-making self-efficacy on career adaptability among students in the Foundation Studies for the Agricultural Science programme at University Putra Malaysia.

A quantitative research design using a questionnaire consists of career maturity, career decision-making self-efficacy, and career adaptability. Using the cluster sampling method, a total of 329 students were involved in the study.

The results indicate that these variables were significantly correlated and suggest that students who were able to have more career maturity or have more self-efficacy in their careers were more susceptible to self-adaptation.

2. Rao. A and Reddy. J (2015). Studied “The Relationship Between Metacognition and Career Maturity Among Adolescents”

This study explores the relationship between metacognition and career maturity among adolescents aged 16 to 18 who are currently enrolled in the second year of Pre-University or 12th grade.

Two standardized tools were used in the research, the Metacognitive Awareness Inventory and Career Maturity Inventory. The findings show that metacognition and career maturity levels were not significantly connected. There were no significant gender differences on all

parameters. Though the level of metacognitive awareness was not significantly different between the groups, there was a significant difference in the self-appraisal component of career maturity.

3. Roy, S. and Guha, D. (2024) conducted a study titled "Metacognitive Awareness of Higher Secondary Learners: A West Bengal Perspective."

The objective of the study was to analyse the metacognitive awareness of higher secondary learners of West Bengal.

For the study, a sample of 972 XI standard learners was chosen using the simple random sampling technique. The descriptive survey method was used to collect the data.

The study found no significant differences in metacognitive awareness among higher secondary students in West Bengal based on gender or academic stream; however, a clear variation was observed based on their geographical location.

4. Saher.N and Alim.F (2023). Studied “Career Maturity Level Among Adolescents At Senior Secondary School Stage”

This research focuses on comparing the career maturity levels of senior secondary school adolescents based on gender. Data was gathered using a descriptive survey method, with a representative sample of 60 students—both male and female—drawn from senior secondary schools in Aligarh.

Outcomes of the existing research indicate that most of the adolescents have revealed below average level of maturity regarding attitude towards career selection, self-appraisal, knowing about jobs, and choosing a job. In the areas of career planning and problem-solving, adolescents demonstrated a moderate level of maturity.

RESEARCH GAP

While reviewing the literature, it became evident that numerous researchers, both in

India and internationally, have explored various aspects of career maturity, including career decision-making, career adaptability, and career education. Some studies have also examined the relationship between metacognition and career maturity. However, there appears to be a gap in the literature regarding differences across various dimensions of career maturity in terms of Gender, Locality, and Academic streams.

STATEMENT OF THE PROBLEM

Career maturity refers to a person's readiness to make thoughtful, realistic career choices and follow through with appropriate planning and action. Metacognition, or the awareness and regulation of one's thinking processes, enables individuals to evaluate their strengths, reflect on their goals, and make strategic decisions. This study aims to investigate the levels of Career Maturity among Higher Secondary students, with a focus on variables such as gender, location, and academic stream (Arts and Science). Furthermore, it seeks to explore the relationship between Metacognition and Career Maturity. The proposed study is titled: "*Career Maturity and Metacognition of Higher Secondary Students.*"

OBJECTIVES OF THE STUDY

- To find out the career maturity level of higher secondary school students (the total sample of the researcher's) in Nadia, West Bengal.
- To find out the difference in Career Maturity in terms of gender (Girls and boys) in Higher Secondary students, in Nadia, West Bengal.
- To find out the difference in career maturity in terms of locality (Urban girls and Urban boys) for higher secondary students in Nadia, West Bengal.
- To find out the difference in career maturity in terms of locality (Rural girls and Rural boys) for higher secondary students in Nadia, West Bengal.
- To find out the difference in career maturity in terms of the type of Academic Stream (Arts and Science) of Higher

Secondary Students, in Nadia, West Bengal.

- To find out the correlation between Career Maturity and Metacognition of Higher Secondary students in Nadia, West Bengal.

HYPOTHESIS OF THE STUDY

The researcher framed some hypothesis that are outlined below

- **H_{0.1}** There is no significant difference in Career Maturity in terms of gender (Girls and boys) in Higher Secondary students, in Nadia, West Bengal.
- **H_{0.2}** There is no significant difference in Career Maturity in terms of locality (Urban girls and Urban boys) in Higher Secondary students, in Nadia, West Bengal.
- **H_{0.3}** There is no significant difference in career maturity in terms of locality (Rural girls and rural boys) among higher secondary students in Nadia, West Bengal.
- **H_{0.4}** There is no significant difference in Career Maturity in terms of the type of Academic Stream (Arts and Science) in Higher Secondary students, in Nadia, West Bengal.
- **H_{0.6}** There is no significant correlation between Career Maturity and Metacognition of Higher Secondary students in Nadia, West Bengal.

DELIMITATION OF THE STUDY

- i. The scope of the study is limited to the geographical region of Nadia district in West Bengal.
- ii. The Study is delimited to the Higher Secondary Schools under WBCHSE (West Bengal Council of Higher Secondary Education).
- iii. The present study focuses on three categorical variables

A. Gender (Boys and Girls)

B. Locality (Urban and Rural)

C. Type of Academic stream (Arts and Science)

RESEARCH METHODOLOGY

This study uses a quantitative methodology through the implementation of survey research.

• **Population**

The population for this study included all students from one government Higher Secondary school in Nadia, West Bengal.

• **Sample**

For the current study, the researcher randomly selected 200 students as the sample. The data was collected from

• **Variables**

Here, categorical variables will be used by the researcher along with the main variables.

students in classes eleven and twelve at one school: the government-run Saraswati Trust Higher Secondary School.

• **Nature of sample**

Table 1. Research Data

Girls Students		Boys Students	
Urban	Rural	Urban	Rural
42	56	45	57
98		102	
N=200			

Table 2. Types of variables

No	Name of Variables	Name of Levels	No. of Level
1	Main Variables	Career Maturity	1
		Metacognition	1
2	Categorical Variables	Gender (girls and boys students)	2
		Locality (Urban and Rural)	2
		Academic Stream (Arts and Science)	2

• **Tools**

For the present research work, a Likert model metacognitive thinking scale will be developed by the researcher, which will be standardized by the expert.

Table 3. Scoring Norm

	Strongly Agree	Agree	Don't know	Dis Agree	Strongly Disagree
For Positive Questions	5	4	3	2	1
For Negative Questions	1	2	3	4	5

ANALYSIS OF DATA

- **H_{0.1}** There is no significant difference in Career Maturity in terms of gender (Girls and boys) among Higher Secondary students, in Nadia, West Bengal.

Table 4. Career Maturity in terms of Gender

Group	Number	Mean	Standard Deviation	t value
Girls	98	152.3	11.7	2.016
Boys	102	155.8	12.8	

Statistically significant at the 0.05 level

A t-test was carried out by the researcher to examine the difference in mean scores between the two groups. The obtained t-value of 2.016 was found to be significant at the 0.05 level. This led to the rejection of the null hypothesis, indicating a notable difference in Career Maturity between boys

and girls studying at the Higher Secondary level in Nadia, West Bengal.

- **H_{0.2}** There is no significant difference in career maturity in terms of locality (Urban girls and urban boys) among higher secondary students in Nadia, West Bengal.

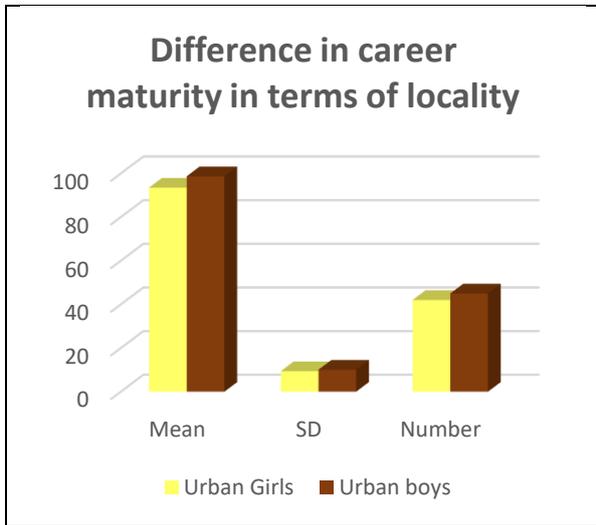


Table 5. Difference in career maturity in terms of locality

Group	Number	Mean	Standard Deviation	t value
Urban Girls	42	93.5	9.4	3.77
Urban Boys	45	98.7	10.10	
Statistically significant at the 0.01 level				

The researcher conducted a t-test to compare the mean scores of the two groups. The obtained t-value of 3.77 was found to be significant at the 0.01 level. This led to the rejection of the null hypothesis, indicating a notable difference in Career Maturity between Urban Girls and Urban Boys

studying at the Higher Secondary level in Nadia, West Bengal.

- **H_{0.3}** There is no significant difference in career maturity in terms of locality (Rural girls and rural boys) among higher secondary students in Nadia, West Bengal.

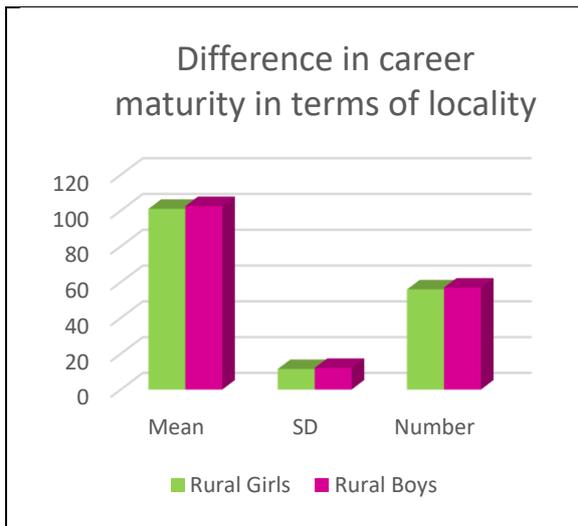


Table 6. Difference in career maturity in terms of locality

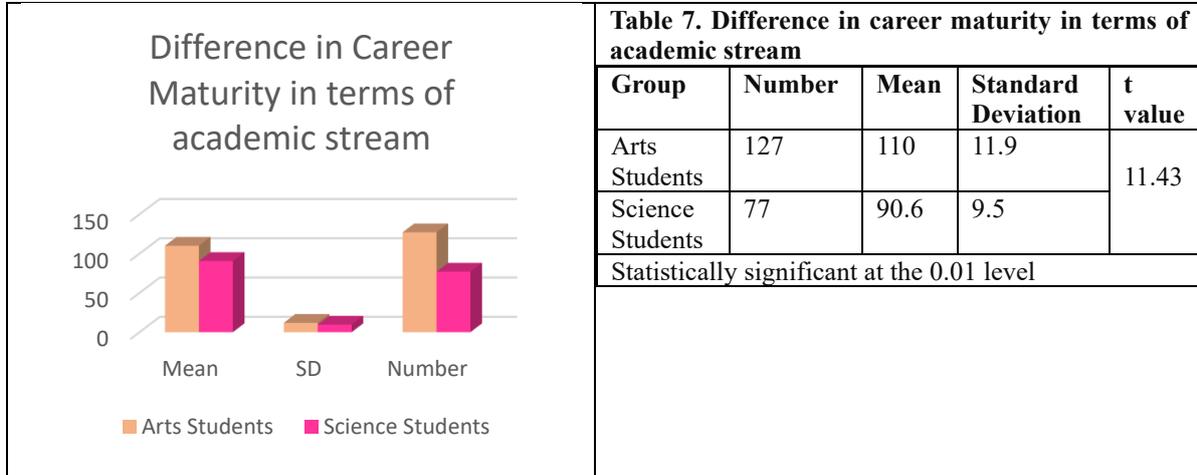
Group	Number	Mean	Standard Deviation	t value
Rural Girls	56	101	11.5	0.67
Rural Boys	57	102.5	12.1	
Not statistically significant.				

The researcher conducted a t-test to compare the mean scores of the two groups. The obtained t-value of 0.67 was found to be

insignificant. This led to the acceptance of the null hypothesis and rejecting alternative hypothesis. This indicates no significant

difference in career maturity between Rural Girls and Rural Boys among Higher Secondary students in Nadia, West Bengal.

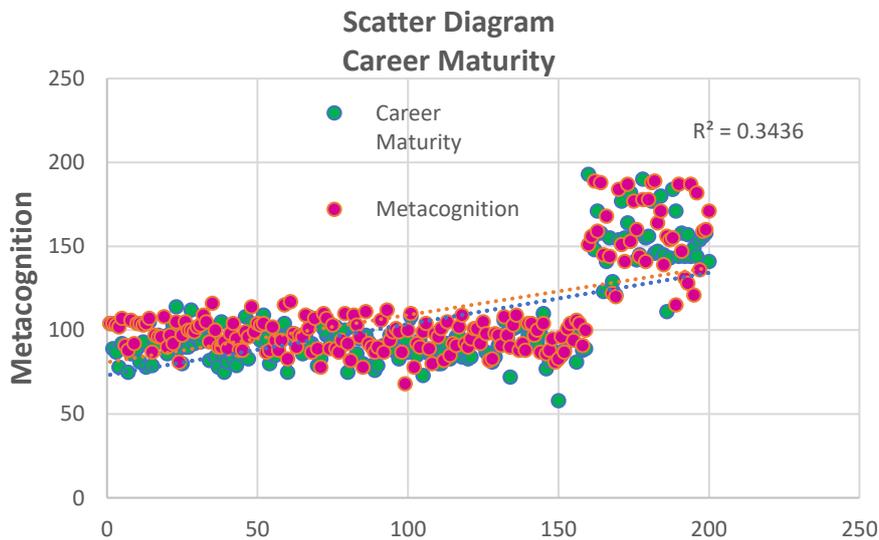
- **H_{0.4}** There is no significant difference in Career Maturity in terms of the type of Academic Stream (Arts and Science) in Higher Secondary students, in Nadia, West Bengal.



The researcher conducted a t-test to compare the mean scores of the two groups. The obtained t-value of 11.43 was found to be significant at the 0.01 level. This led to the rejection of the null hypothesis, indicating a notable difference in Career Maturity between Academic Stream (Arts Students

and Science Students) studying at the Higher Secondary level in Nadia, West Bengal.

- **H_{0.5}** There is no significant correlation between Career Maturity and Metacognition of Higher Secondary students in Nadia, West Bengal.



Group	Number	Mean	Standard Deviation	r value
Career Maturity	200	103.75	28.11	0.87
Metacognition	200	109.17	27.83	

The researcher applied Pearson's r to examine the correlation between Career

Maturity and Metacognition. The resulting r-value of 0.87 indicates a Strong positive

correlation between the two variables. As a result, the alternative hypothesis was accepted, and the null hypothesis was rejected. This finding suggests a significant, Strong positive correlation between Career maturity and Metacognition among higher secondary students in Nadia, West Bengal.

RESULT & DISCUSSION

In addressing the first objective, the researcher evaluates the overall level of Career Maturity among Higher Secondary school students. A standardized questionnaire consisting of 24 items was administered, with each item rated on a 5-point scale, resulting in a maximum possible score of 120.

From the collected data, the highest score achieved was 112, while the average (mean) score across the sample of 200 students was 95.8. Notably, 137 students scored above the mean, indicating that a significant majority demonstrated relatively high career maturity. On the other hand, 63 students scored below the average.

These findings suggest that the overall Career Maturity among Higher Secondary students in Nadia, West Bengal, can be considered generally good.

For the second objective, the researcher found a notable difference in career maturity based on gender. The researcher also identified a difference in terms of locality (urban girls and urban boys). A significant difference in career maturity was also observed across different academic streams. Researcher found a notable difference in Career Maturity between Concern towards their career (Considering one categorical variable - Gender). The researcher identified a strong positive correlation between career maturity and metacognition.

career maturity and metacognition are closely intertwined in shaping a person's ability to navigate their professional journey effectively. Career maturity reflects an individual's readiness to make informed, realistic career decisions, while

metacognition empowers them to understand and regulate their thinking processes.

Declaration by Authors

Acknowledgement: I would like to express my heartfelt gratitude to everyone who contributed to the successful completion of this research paper. I am especially thankful to **Professor Bijan Sarkar** of the Department of Education, University of Kalyani, for his exceptional guidance and unwavering support throughout this study. His insightful advice, thoughtful feedback, and steady encouragement have played a crucial role in shaping the direction and depth of this research. I am truly appreciative of the time and expertise he generously shared, which have greatly enriched my academic journey.

Source of Funding: None

Conflict of Interest: No conflicts of interest declared.

REFERENCES

1. Das. S. An analysis of Career Maturity of Higher Secondary School students in Relation to their Academic Achievement in Mayurbhanj District, Odisha. *International Journal of Scientific Development and Research*. 2023; 8(2):649-655.
2. Rahim. A. Career Maturity and Career Decision Making Self-Efficacy as Predictors of Career Adaptability Among Students in Foundation Program, University Putra Malaysia. *Asian Journal of University Education*. 2021;17(4): 865-877.
3. Rao. a and Reddy, j. The Relationship Between Metacognition and Career Maturity Among Adolescents. *Indian Journal of Applied Research*. 2015;5(1):555-557.
4. Roy. K. Sourav and Guha. D. Metacognitive Awareness of Higher Secondary Learners: The West Bengal perspective. *The international journal of Indian psychology*.2024;12(4):2349-3429.
5. Saher. N and Alim. F. Career maturity level among Adolescents at Senior Secondary School Stage. *International journal of Creative Research Thoughts*.2023;11(2):397-405.

How to cite this article: Debadrita Mondal. Career maturity and metacognition of higher secondary students. *International Journal of Research and Review*. 2025; 12(6): 766-772. DOI: <https://doi.org/10.52403/ijrr.20250684>
