

DOI: 10.5281/zenodo.12426700

RELATIONSHIP BETWEEN META COGNITIVE SKILLS AND PERCEIVED EMPLOYABILITY: A COMPARATIVE STUDY OF MALE AND FEMALE STUDENTS.

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Received: 05/12/2025
Accepted: 06/01/2026

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ABSTRACT

Facing the issue of a lack of talents with innovative competitiveness and metacognition, creative, innovative, and Perceived Employability has been regarded as a crucial factor in enhancing national competitiveness and employability status. The trend of Meta Cognitive Skills and Perceived Employability implemented in higher education. However, limited re-search is available to understand the role Meta Cognitive Skills and perceived employability, especially in postgraduation students. The purpose of the present research was to study the relationship between Meta Cognitive Skills and on Perceived Employability in students. The study was conducted on 50 postgraduate students. The study focused on studying a group of young population who are going to shift from students to employees therefore the age range was kept from 21 years to 25 years. Participants included 50% female and 50% male undergraduate students. The collection of primary data is facilitated through a survey method which includes close-ended questionnaires and self-administered standardized tests. The research found a positive moderate correlation between Meta Cognitive Skills and Perceived Employability. A significant difference was not found in male and female participants on both variables. The research findings are important for strengthening and encouraging students to develop Meta Cognitive Skills and positively perceived employability while pursuing their studies at universities.

KEYWORDS: Meta Cognitive Skills, Perceived Employability, Postgraduate students

1 INTRODUCTION

Given the growing importance of self-managed learning, understanding metacognition (self-monitoring and self-regulation of abilities) is becoming an area of increasing research interest (e.g. Renner and Renner 2001; Zimmerman and Schunk 2001). Given the growing importance of self-managed learning, understanding metacognition (self-monitoring and self-regulation of abilities) is becoming an area of increasing research interest (e.g. Renner and Renner 2001; Zimmermann and Schunk 2001). Given the growing importance of self-managed learning, understanding metacognition (self-monitoring and self-regulation of abilities) is becoming an area of increasing research interest (e.g. Renner and Renner 2001; Zimmermann and Schunk 2001).

Most of the time, we don't know what we're doing when we're doing it, but if we don't know what we're doing, it's very difficult to enhance a process that we commit to at the moment. If preparing students for jobs is one of its purposes, students must be encouraged to see themselves as lifelong learners and take charge of their own learning by modeling this behavior for them. Most students innately pick up some level of metacognitive knowledge and abilities from their parents, co-workers, and especially their professors. The pupils' metacognitive skills, however, significantly improved. When learners acquire metacognitive abilities, they frequently come out as more assured and have a positive perception of Employability in the future. The greatest strategy to assist undergraduates in pursuing a career is to match the planning of the curriculum to the demands of the labour market by offering both relevant academic knowledge and practical experience to meet those demands. To ensure that students are employable, it is crucial to look more into how they feel about their employability.

Human capital is without a doubt one of the most crucial components a business requires to have a sustained competitive edge and, consequently, survive in a complicated, uncertain, and changing environment. Students must develop the skills these organizations require in order to increase their employability as employers want to hire people with the highest knowledge and skill levels for each position. Universities are essential for the development of these attributes, which go beyond the classroom to encompass the experience, knowledge, and skills that the labour market demands. Equipping students with appropriate skills to enter the workforce is increasingly seen as a requirement of university education. However, little

has been done to assess the student perspective as to how they believe employability skills are included or developed.

Meta Cognitive Skills and perceived employability are the main components of a person's life. There was not even a sole study found in the direction of these fields combinedly, particularly on students. Hence an attempt is made to fill this lacuna. Despite having made several reforms and policies to the Indian educational system, Meta Cognitive Skills has not yet been introduced and practiced in schools and universities (Reforms in the Indian education system, 2019). In the present time with the advancement of research on learning style and its application in the field of education, there is a tremendous interest in perceived employability and Meta Cognitive Skills, but presently there is very little research based on the application of Meta Cognitive Skills based learning in the classroom.

Perceived Employability

Perceived Employability is defined as the subjective perception of an individual's ability to obtain sustainable employment based on their own qualifications and self-perceived personal abilities (Hon Jie Chow *et al.*, 2019). It also means students' perception of their ability to find new, equal, and better employment.

In this study, perceived employability means students' perception of their ability to find new, equal, and better employment, and it refers to the Value of Pursuing Course, Insecurity and Stress and Skills and Knowledge. Employability consists of the words "employment" and "ability" and thus concerns the ability to be employed. Perceived employability can be the view from two major angles, one is internal, and another is external. The internal angle is person-specific. It includes specific job skills required for a particular job, whereas the external angle is the available job market.

Meta Cognition Skills

The concept of metacognition was put forward by John Flavell in 1976. The concept has however been mentioned in literature and linked to an educational context since the Greek philosopher Socrates argued that you must 'know thyself' to be wise (Gassner, 2009). Metacognition refers to the ability to reflect upon, understand, and control one's learning (Schraw & Dennison, 1994). Schraw and Moshman (1995) defined metacognitive skills as the deliberate monitoring and regulation of one's cognitive processes, including planning how to approach a

task, monitoring comprehension, and evaluating progress.

Cognitive knowledge refers to knowledge about one's own thinking of how, when and where learning strategies can effectively be utilized for learning and cognitive regulation refers to adjustments of one's own cognition to control and management of learning (Karaoglan-Yilmaz, Yilmaz, Ustun, & Keser, 2019). Metacognitive Skills enable students to understand what they know what they don't know and what they need to know to fill the gaps in their knowledge. It also enables students to understand how to control their cognitive processes and what cognitive strategies lead them to learn (Jaleel, 2016). Metacognitive strategies including planning, monitoring, and evaluation increase metacognitive skills that enhance the quality of the learning process (Karaoglan Yilmaz, Olpak, & Yilmaz, 2018).

2 REVIEW OF LITERATURE

Employability in the Digital Economy: Developing Entrepreneurial and Creative Skills Using Metacognition to Promote 21CL by Ray Webster and John Andre (2022) research-based, flexible model, useful for both education and training programs. The model can help provide students with the necessary skills and initial experience, and companies with graduates and trainees possess an enriched understanding of the demands of working in the digital and collaborative economy.

Nimmi and Zakkariya (2016) examined the relationship between metacognitive skills and employability among university students in India. Using a quantitative research design, the study assessed students' metacognitive regulation (planning, monitoring, and evaluation skills) and their perceived employability levels. The findings revealed that metacognitive skills significantly and positively predicted perceived employability. Students who demonstrated stronger abilities to plan their learning, monitor their progress, and regulate strategies reported higher confidence in their job readiness and career adaptability. The authors concluded that metacognitive regulation enhances individuals' ability to manage unfamiliar tasks, solve problems effectively, and adapt to workplace demands—factors that directly contribute to employability perceptions. The study emphasized that beyond academic achievement, self-regulatory competencies play a crucial role in shaping students' confidence about their professional preparedness.

In the study on “Relationships between Metacognition, Self-efficacy, and Self-regulation in Learning” by Rosa Sera 2017 on 130 students, Results

revealed that self-regulated learning is linked to metacognitive skills such as planning, monitoring, evaluation and concentration. In addition, the knowledge and the proper use of learning strategies – such as the selection of the main ideas in a text – constitutes a related set of metacognitive skills. Finally, it was found that the acquisition of metacognitive knowledge, skills, and attitudes is linked to autonomy in the study and to self-efficacy. The study by Priti Kumari (2021) entitled, “Self-efficacy and Social Intelligence as Determinant of Perceived Employability among Students of Professional Courses. The findings of the research reveal that there was a significant positive relationship of self-efficacy and social intelligence with perceived employability of students.

The study by Evis Qeneni (2014) on the topic “An empirical study of self-perceived employability: Improving the prospects for student employment success in an uncertain environment” established the relationship between students' expectations of finding employment upon graduation and a series of related variables and identify those factors that serve as boosters to self-perceived employability.

Objectives

The specific objectives of the present study are as follows:

1. To examine the gender differences in Meta Cognitive Skills
2. To examine the gender differences in Perceived Employability.
3. To study the relationship between Meta Cognitive Skills and Perceived Employability.

Hypothesis

H1. There will be significant differences between males and females on Meta Cognitive Skills among students.

H2. There will be significant difference between males and female in Perceived Employability among students

H5. There will be a relationship between Meta Cognitive Skills and Perceived Employability among students.

3 METHODOLOGY

There is limited research on the variables that will be used in this study therefore at present an exploratory approach is adopted which will follow a correlational research design. The main focus was on describing and explaining the data, observing the relationship and distribution of variables along with recognizing trends and patterns.

Participants and Research Process

The study was conducted on postgraduation 50 university students. The non-Probability Convenience Sampling technique was used. The study focused on studying a group of young population who are going to shift from students to employees therefore the age range was kept from 21 years to 25 years with a mean age of 22.88 years (SD= 1.37). Participants included 50% female and 50% male students. The collection of primary data is facilitated through a survey method which includes close-ended questionnaires and self-administered standardized tests. Students were required to fill in all the items of the web-based survey therefore, there was no data loss resulting from answering the surveys.

Data Collection Instruments

A personal information form developed by researchers was used to collect data on participants' demographic information such as gender, age, and education level.

Metacognitive skill scale (MSS)

The metacognitive skill scale was developed by Mustafa Altındağ and Nuray Senemoglu in 2013. The aim is to develop a scale that can be used for measuring the metacognitive skills that an individual brings to a learning environment; a 30-item MSS in the Likert scale is developed. It is based on the model of Flavell (Senemoğlu 2007) which shows "The Factors Related to an Individual's Regulation of Learning Activities" that consist of metacognitive knowledge, metacognitive experiences, learning unit (objectives), and learning strategies (actions).

Self-perceived employability (SPE)

The scale was given by K. P. Naachimuthu in 2007 to measure the perceived employability of students. This tool has a total of 39 items. It was divided into three dimensions: The value of Pursuing a Course, Insecurity and Stress, and Skills and Knowledge.

4 DATA ANALYSIS

A total of 50 university students were surveyed in the study. Descriptive statistics was used to calculate mean and SD as Descriptive statistics is used to summarize data in an organized manner by describing the relationship between variables in a sample or population. Calculating descriptive statistics represents a vital first step when conducting research and should always occur before making inferential statistical comparisons so that the researcher should have an organized summary of variables (Meta Cognitive Skills and Perceived Employability). T-test was calculated to

find out the mean difference between Meta Cognitive Thinking and perceived employability in postgraduate students. Pearson's Product Moment correlation coefficients were calculated to find out the relationship between Meta Cognitive Thinking and perceived employability in postgraduate students in participants.

5 FINDINGS

Descriptive Statistics of Participants' Responses

Table 1. Descriptive Statistics

Variables	N	Mean	Std. Deviation
Meta Cognitive Skills	50	109.98	10.508
Female	25	112.28	9.072
Male	25	107.68	11.513
Perceived Employability	50	137.42	70.301
Female	25	145.76	15.62
Male	25	140.08	11.068

Table 2. Independent sample t-test of the dimensions of Meta Cognitive Skills and Perceived Employability (N=50)

Variables	Mean Difference	T	P Value	DF
Meta Cognitive Skills	2.640	1.569	0.123	48
Total Perceived Employability	5.680	1.484	0.145	48

Table 3. Correlations between Meta Cognitive Skills and Perceived Employability among university students (N=50)

	Reflective Thinking	Perceived Employability
Meta Cognitive Skills	1	.301*
Perceived Employability	.301*	1

*. Correlation is significant at the 0.05 level (2-tailed).

6 DISCUSSION

The t value obtained was 1.57 on Meta Cognition Skills after the analysis and the corresponding p-value of 0.124 probability was more than the alpha level of 0.05. Thus, the results were not statistically significant. It could be concluded that there was no significant difference in male and female students. Hence, researchers reject *Hypothesis H1* that there is a significant difference between male and female students in Meta Cognitive Skills. Metacognitive skills such as planning, monitoring, evaluation, and concentration are the same for both male and female students. Finally, it was found that the acquisition of metacognitive knowledge, skills, and attitudes is linked to autonomy in the study and there is no gender gap found (Rosa Sera, 2017). The present findings are consistent with Bidjerano (2005), who reported no statistically significant gender differences in overall metacognitive strategy use among students. This suggests that metacognitive

skills may not be strongly influenced by gender, but rather by individual learning experiences and academic contexts.

Analyses were carried out to identify the level of Perceived Employability among male and female students. The t-value obtained was 1.487 after the analysis and the corresponding p-value of 0.145 probability was more than the alpha level of 0.05. Thus, the results were not statistically significant. It could be concluded that there was a significant difference in the level of Perceived Employability between male and female students. Hence, we reject *Hypothesis H2* that There is not a significant difference between males and females in Perceived Employability among students. Results of the sex-gender identity interaction show that being feminine is associated with the highest level of perceived employability for an unemployed man and the lowest for an unemployed woman (Eva Sifre 2018). The present findings are consistent with Rothwell et al. (2008), who found no significant gender differences in perceived employability among university students, suggesting that employability perceptions may be shaped more by individual and contextual factors than by gender.

The results confirmed a positive, moderate relationship (0.301) between Meta Cognitive Skills and Perceived Employability, which means if Meta Cognitive Skills will increase or decrease then Perceived Employability will increase or decrease moderately. Hence *H3* is accepted that there will be a relationship between Meta Cognitive Skills and Perceived Employability among students. The knowledge and the proper use of learning strategies such as the selection of the main ideas in a text constitute a related set of metacognitive skills and Perceived Employability (Narcien, 2018). Academic success alone is no longer sufficient for students' employment, so it is believed that Meta Cognitive Skills might facilitate students' success in both academic and occupational life (Finch et al., 2013). Nimmi and Zakkariya (2016) examined the relationship between metacognitive skills and perceived employability among university students. The study found that planning, monitoring, and regulating learning strategies significantly predicted higher levels of employability confidence. The authors concluded that metacognitive regulation enhances adaptability and workplace readiness,

thereby strengthening students' perceptions of their employability.

When one becomes aware of one's thought processes and an understanding of the patterns behind them then he/she will definitely be going to understand his/her skills and aptitude to perform the particular task hence it will directly or indirectly lead to a better and comprehensive understanding of employability.

Limitations

Participants of this study were students in any Indian university who had completed post-graduation or pursued the same. Thus, the results might not apply to students from other cultures or subject areas. As typical with self-reporting, possible bias in self-reported data is another limitation, although well-established, reliable data collection instruments were employed in this study. Limited Approach: lack of representation to the maximum population because the survey we conducted is done due to which the researcher was not able to reach as many people are still unaware of many things, so they overlook and ignore the questions. Qualitative data was not taken in this study so results cannot be concluded at the individual level.

Implications

Strategies and learning activities in postgraduate students should aim to stimulate positive perception, Meta Cognitive Skills, and facilitate a community of inquiry in various ways to enhance learner engagement and improve cognitive applications. The research findings will be important for strengthening and encouraging undergraduate students to develop Meta Cognitive Skills and positively perceived employability while pursuing their studies at universities. In addition, the current findings will also provide useful information on the management of higher education institutions in the development of an effective program/module framework to improve the employability of postgraduate students. In addition, a recent study (Bars and Mehmet 2021) found that students' Meta Cognition had a positive effect on students' participation in group discussions as well as their overall engagement in active learning. Extending previous research, this study built multiple predictive models to investigate Meta Cognitive Skills and Perceived Employability through comprehensive statistical analyses.

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