

## Relationship between Locus of Control, Metacognition and Self-Perception of Young Adults

Tanisha Srivastava<sup>1\*</sup>, Dr. Sandhya Bhatt<sup>2</sup>

### ABSTRACT

This study examines the interplay between locus of control, metacognition, and self-perception in the context of early adulthood development. Young adulthood is a major transition period in the individual's life, and it is an apt time to study the interconnectedness of these variables. The study focuses on finding out how an individual's locus of control, characterized by beliefs regarding personal control over life events, influences metacognitive processes and subsequently shapes self-perception. This research uses quantitative measures to extract data through questionnaires and inventories from the sample consisting of 142 young adults. The metacognition inventory by Dr. Punita Govil, Locus of Control Questionnaire by Rotter, and self-perception scale by Dr. KG Agrawal were administered on the participants. By unravelling the intricate connections between locus of control, metacognition, and self-perception, this study contributes to both theoretical frameworks and practical applications in educational and psychological interventions. The results of this research showed that there is a positive relationship between internal locus of control and metacognition. It was also found that the internal locus of control has a significant positive relationship with the self-perception of young adults.

**Keywords:** *Locus of Control, Metacognition, Self-Perception, Young Adults*

Early adulthood is a significant period of transition in an individual's life, during which they establish patterns of thinking and beliefs. The period is crucial because it involves significant changes in the cognitive, emotional, and social aspects of development. Individuals need to understand the intricate dynamics of their psychological processes during this transitional phase. This study aims to investigate the interrelationship between three key constructs—locus of control, metacognition, and self-perception—in the context of young adulthood development.

A young individual encounters the challenge of making significant decisions with enduring consequences, addressing domains that demand problem-solving skills, and resolving challenging social interactions with both family and peers. Literature findings suggest that an individual's metacognitive proficiency could serve as an indicator of their success in navigating these complex environmental factors. In a study done by Jeffrey Landine (1998)

<sup>1</sup>Student, AU

<sup>2</sup>Assistant Professor, AU

\*Corresponding Author

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student's academic average was compared based on metacognition, locus of control, motivation, and self-efficacy. The results indicated that there exists a positive relationship between metacognition and all these variables which collectively impact academic achievement. Therefore, it becomes crucial to comprehend the relationship between the metacognitive level and socially essential skills for adaptation, such as decision-making, problem-solving, and locus of control, and its impact on an individual's self-perception. Instead of addressing these skills separately, a more effective approach during both formal and informal education is to concentrate on aiding individuals in the holistic development of their metacognitive abilities. This approach aims to cultivate self-competence and cognitive effectiveness in individuals.

Locus of Control is an important aspect of personality. The concept was developed originally by Julian Rotter in the 1950s (Rotter, 1966). He believed that actions are contingent on what we do (internal control orientation) or events outside our control (external control orientation). Locus of control pertains to individuals' beliefs regarding their ability to influence events impacting their lives. Originating from the work of Julian B. Rotter in the 1950s, this psychological concept is commonly divided into two primary categories: internal locus of control and external locus of control. Individuals possessing an internal locus of control hold the belief that their actions and decisions exert a substantial influence on the outcomes of their lives. They typically accept accountability for both successes and failures, asserting their capability to shape their destinies. In terms of learning, those with an internal locus of control are more inclined to participate in the learning process and establish actively. On the other hand, people with an external locus of control tend to perceive external factors to be the reason of everything that happens to them. In the realm of learning, those with an external locus of control may adopt a more passive approach, believing their endeavours lack significant impact. The contribution of locus of control in the child's learning is found to be extremely significant. A strong internal locus of control is frequently linked to heightened motivation. Individuals who believe they can control their learning outcomes are more prone to setting goals, exerting effort, and displaying persistence in challenging situations. Metacognition was the term introduced by John Flavell in the 1970s. He viewed metacognition as an individual's ability to be aware of their cognition. To elaborate upon it, metacognition refers to the learner's knowledge, awareness, and control of the processes by which they learn (Brown 1987, Garner and Alexander 1989, Thomas et al.). This ability of the individuals not only enables them to recognize and evaluate their thinking but also reconstruct ideas when required. In young adults, self-appraisal and self-management are associated with components of metacognition. Self-appraisal is the learner's understanding and their affective state during learning. Self-management refers to putting their metacognition into action and helping in problem-solving. Thus, metacognition helps the learner to understand how to learn. Some researches show that the strategies opted for by successful and comparatively more efficient learners are more efficient as compared to those who do not use any strategy. There was a study done at the University of Georgia by John L. Nietfield (2007) to examine college students' awareness of difficulties faced in learning class content followed by a selection of appropriate study strategies to solve the problem. The study was conducted on 94 students. The data analysis led to the understanding that the abilities of students to adjust to the study strategy were not led by difficulties in learning, and they only relied on the passive learning strategy. The self-regulation of their learning process was not affected by the previous effective learning method that was taught to them, thus stating that lack of metacognitive awareness could lead to ineffective learning in various domains.

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Self-perception is the perception that an individual holds towards themselves. The experiences, interpretations of the environment, and attributions play a role in the formation of self-perception (Shavelson et.al, 1976). People who have an internal locus of control are said to view themselves as responsible for whatever they do, and hence are said to have a positive self-perception. Some researchers have found a connection between metacognition and self-efficacy. The achievement of metacognitive knowledge and the use of strategic learning is linked to the self-efficacy of individuals which also plays a part in building the self-perception of individuals (Cera et.al, 2013). The more the person is likely to attribute personal control over everyday life, the more positively they judge themselves in the present and future.

### METHODOLOGY AND METHODS

#### *Aim*

To investigate the relationship between locus of control, metacognition, and self-perception among young adults.

#### *Objectives of the study*

- To investigate the relationship between locus of control and metacognition among young adults.
- To explore the impact of locus of control on the self-perception among young adults.
- To analyse the impact of metacognitive abilities on the self-perception among young adults.

#### *Participants*

142 young university students participated in this study, aged between 18-25 years of age. Purposive sampling was used to collect the data. There were 70 people who had internal locus of control and 72 with external locus of control.

#### *Hypothesis*

- **H1:** There is a positive relationship between the internal locus of control and metacognition among young adults.
- **H2:** There is a positive relationship between metacognition and self-perception of young adults.
- **H3:** There is a significant positive relationship between internal locus of control and self-perception among young adults.

#### *Description of tools*

Metacognition Inventory was used to analyse individual's metacognition level. This scale is developed by Dr. Punita Govil. It is used to know the level of metacognition of college students. There are 30 items in this scale. High score indicates higher level of metacognition, and low scores indicate low level of metacognition. It takes around 16-20 minutes to complete the whole questionnaire.

Locus of control was measured using Rotter's locus of control questionnaire, consisting of 29 items. Each question consists of two options, the respondent must select the statement that they concur most with. The scores range from 0-23, with lower score indicating high locus of control and higher scores indicating external locus of control. It takes 5-10 minutes to complete the questionnaire.

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Self-perception scale by Dr KG Agrawal is used to measure the self-perception of individuals. It consists of 40 items and is a self-reporting questionnaire. Each question consists of two choices, the respondent must put a tick in front of the agreed statement. The scoring involves allotting 1 score for each correct answer. The score on SPMS ranges from 0-40.

### Procedure

Data was collected in the classrooms in accordance with the sample design. After building up the rapport with the students, they were given the brief purpose of this research, and their participation was completely voluntary. They were made to sign a consent form and were given the instructions regarding the completion of the experiment. They were also told that their responses would be kept completely confidential and there was no time limit applied to the completion neither was there any write or wrong answers. After the completion of the experiment, participants were thanked and sent off. Responses were collected and scoring was done. Correlation analysis and regression analysis was used to analyse the data using SPSS.

**Inclusion criteria:** All the young university students who are more than 18 years of age, and less than 25 years of age.

**Exclusion criteria-** All the students who are more than 25 years of age.

### Correlation Analysis

**Table 1.1 internal locus of control correlated with the metacognition and self-perception**

		internal locus	Metacognition	Self-perception
Internal Locus	Pearson Correlation	1	.606**	.496**
	Sig. (2-tailed)		.000	.000
	N	70	70	70
Metacognition	Pearson Correlation	.606**	1	.314**
	Sig. (2-tailed)	.000		.008
	N	70	70	70
Self-Perception	Pearson Correlation	.496**	.314**	1
	Sig. (2-tailed)	.000	.008	
	N	70	70	70

\*\**. Correlation is significant at the 0.01 level (2-tailed).*

**Table 1.2 external locus of control correlated with metacognition and self-perception**

		External Locus	Metacognition	Self-Perception
External Locus	Pearson Correlation	1	.050	.048
	Sig. (2-Tailed)		.677	.691
	N	72	72	72
Metacognition	Pearson Correlation	.050	1	-.068
	Sig. (2-Tailed)	.677		.570
	N	72	72	72
Self-Perception	Pearson Correlation	.048	-.068	1
	Sig. (2-Tailed)	.691	.570	
	N	72	72	72

**Regression Analysis**

*Table 1.3 regression analysis on internal locus of control, and self-perception as independent variables and metacognition as dependent variable*

Coefficients<sup>a</sup>

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	115.726	8.413		13.756	.000
1 self-perception	.027	.170	.018	.158	.875
Locus of control	3.149	.590	.597	5.337	.000

a. Dependent Variable: internal metacognition

**Interpretation**

Correlation analysis results are presented in Table 1.1. A significant positive correlation is found between internal locus of control and metacognition ( $r=0.606$ ,  $p<0.01$ ), people who have strong internal locus of control have higher scores on metacognition. Thus, H1 is accepted. There is a weak positive correlation between metacognition and self-perception ( $0.314$ ,  $p<0.01$ ). Thus, H2 gets accepted. The internal locus of control has a moderate positive relationship with self-perception ( $r= 0.49$ ,  $p<0.01$ ), indicating that people who perceive their control strongly on the circumstances have a more positive self-perception. Thus, H3 gets accepted. Table 1.2 reflects the relationship between external locus of control, metacognition, and self-perception. The results were found to be insignificant ( $p>0.01$ ) which means that people who have external locus of control would not have a significant relationship with metacognition and self-perception.

Table 1.3 shows the regression analysis with metacognition as the dependent variable and the impact of two other independent variables on it. The t value is statistically significant ( $t= 13.756$ ), Which means that even when all the independent variables are zero, the dependent variable metacognition is still positive by 115.726. The self-perception of people with internal locus of control have a positive relationship with metacognition ( $t= 0.158$ ,  $sig.= 0.875$ ), but this effect is insignificant since the significance level is more than 0.05. Moreover, internal locus of control has a significant positive relationship with metacognition, ( $t= 5.337$ ,  $sig.= 0.000$ ). The beta coefficient signifies that one standard increase in internal locus will lead to a 0.597 standard deviation increase in metacognition.

**RESULT AND DISCUSSION**

The results of our study show that if young adults believe that they have greater control over the circumstances in their lives, they may achieve a higher level of metacognitive awareness, that is, they have a much better idea of how to plan and orient things. In research done on the impact of metacognitive experiences on the learning process, cognitions, and affect of individuals, it was found that metacognition impacts the efficiency of control decisions in learning and has a benefit of positive affect and positive self-belief on one’s experiences which has also been seen to determine how to confront the problem situation (Efklides,2005). Moreover, metacognitive awareness is also prominent in building up people’s decision-making and problem-solving capacity (Karsli, 2015). Internal locus of control also has a direct impact on the self-perception. This tells us that our perception of ourselves depends entirely on how we attribute to the situations. Studies also show that the more individuals perceive themselves as responsible for their academic achievement, the more positive self-concept they have (Sagone and Caroli, 2014). The relationship between

metacognition and self-perception is found to be insignificant, which shows that people's awareness of their cognition does not play a role in their perception of themselves. This research focuses on the metacognitive development which requires the incorporation of both metacognitive knowledge, and metacognitive regulation. It provides the learners with both knowledge of cognitive processes and strategies so that together with experience and practice of cognitive and metacognitive strategies they can do self-evaluation of the learning outcomes. Thus, it is important to incorporate training programs in the universities to make people learn about how to inculcate metacognitive skills and how they could perform efficiently if they have better control over the circumstances in their lives.

### CONCLUSION

It could be concluded from this study that individual's locus of control has a significant effect on their metacognition and self-perception. The more an individual belief in their control over the circumstances in their lives, the more efficient they would be in regulating their cognitions and would have a positive self-perception. The implication of this study is not restricted to the academic domain, it also applies to the other aspects of an individual's life. The result of this study also puts emphasis on the need of training problems, where the metacognitive skills of the students should be increased.

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### ***Conflict of Interest***

The author(s) declared no conflict of interest.

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