

Intuition and rational thinking on decision making among college students

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World Journal of Advanced Research and Reviews, 2024, 22(02), 1347–1354

Publication history: Received on 04 April 2024; revised on 13 May 2024; accepted on 15 May 2024

Article DOI: <https://doi.org/10.30574/wjarr.2024.22.2.1481>

Abstract

The aim of this quest was to understand the relationship between Intuition and Rational thinking on Decision making and gender difference among college Students. The current study sought to investigate young adults in the age range of (18-25 years) Intuition and rational thinking on decision making. Correlation research design with Quantitative study was used in this study. In young adults' population only college students (18-25 years) from Bangalore and Coimbatore, a total of 304 (151 males and 151 females) were the sample for the research. Simple random sampling Technique was used in the present study. The findings showed that there is and association between Intuition and Decision-making. It includes a connection between rational thinking and decision-making. T-test were used for gender. There is a gender difference in rational thinking but no gender difference in Intuition and decision Making. In view of these findings the study recommended educating them in early stages about skill development. Individuals to reflect on their decision-making styles, preferences, strengths, and weaknesses.

Keywords: Intuition; Rational thinking; College student; Decision making.

1. Introduction

Intuition is the innate ability to comprehend or apprehend knowledge without the necessity for deliberate analysis or conscious reasoning. It involves an immediate sense of understanding or insight that is often described as a gut feeling or hunch [2].

Different people have varying tendencies and needs when it comes to processing knowledge in a methodical, analytical way utilizing a system of logic that follows rules. This is known as rational thinking, or more literally the processing of data [7]

The process of choosing a course to take or an option among multiple possibilities is referred to as decision-making. It entails analyzing the information at hand, projecting possible outcomes, taking preferences and values into account, and deciding on a course of action [9]

Numerous functions of intuition in decision-making, there is a substantial and intricate corpus of work that has examined human decision making. According to some experts, managers seldom have the option of making judgment based only on well-organized, reasoned analysis; instead, they must rely on their gut feeling and discretion. Our findings suggest that the delivery room is an environment where professionals continue to depend on impromptu decision-making methods and where subjectivity plays a significant role. Information technology (IT) has the ability to facilitate evidence-based decision making, yet expert intuition remains indispensable.[1]

The study of intuition poses a significant challenge to decision making research. This defines intuition, examines how intuition has been interpreted historically in the literature on decision-making, emphasizes the need to distinguish

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between intuition, explores the circumstances in which intuition is most likely to lead to wise decisions, and offers four challenges. These include explaining how preferences change over time, shedding light on morality and other culturally acquired values, emphasizing the necessity to teach intuitive reactions, and addressing challenges associated with using intuition to make decisions in a changing environment. [3]

According to theories of dual cognition, people receive information in two different ways: logically and intuitively. These styles are frequently examined in connection to personality traits since they are essential to comprehending cognitive processes. Developed by Pacini and Epstein in 1999, Rational-Experiential Inventory (REI) utilized a commonly used instrument to assess A person's inclination towards logical or instinctive reasoning. Validity REI's distinction has also been confirmed by other measures, such as the (PID)subscale. Overall, these investigations demonstrate the validity of the REI in evaluating cognitive preferences by indicating that the dual process distinction between intuition and reason is constant in a variety of cultural contexts [7]

According to current research, cognitive ability and accurate intuitive thinking may also positively correlate. findings from two research that directly compared the predictive power of cognitive capacity for accurate intuition vs the effective intentional correction of an incorrect intuition. The findings demonstrated that while cognitive capacity was largely predictive of perfect intuitive reply, it was also connected with the corrective propensity. These results compel us to reconsider the definition of sound reasoning as well as the function of cognitive ability in reasoning. Smart reasoners are not adept at purposefully correcting incorrect intuitions.[8]

The methods of the autonomic system in daily decision-making were the main focus of research. In strategic chess issues with obvious best moves, our study investigates the importance of slow contemplation for specialists that show excellent decision-making outputs. Our study measures the objective value of desired actions at the beginning versus the end of decision making using state-of-the-art computer software. It concludes that more thought is highly beneficial for both professionals and less competent people, regardless of how easy or tough the topic is. Our findings have significant ramifications for how training works to improve decision accuracy across specializations [6]

We study the effects of applying experience-based intuition along with rational processes on the judgments. when selecting suppliers. In particular, we investigate whether efficiency in terms of cost, quality, delivery, and innovation of the chosen supplier is greater. Many people in a group employ a highly logical or a highly based on experience method of decision-making. We find that using logical approaches improves cost performance based on data from 54 teams. The choice produces suitable supplier outcomes along all measured performance characteristics when sourcing team members rely on their expertise and intuition [5]

2. Materials and method

2.1. Research Design

Research design helps to focus on research methodologies that are appropriate for the topic matter. The framework of research methods and techniques used in this study is a Correlational research design. Two different groups must participate in this kind of investigation. There are no presumptions when looking at a link between two variables, and the relationship is calculated using statistical analytical tools and gender differences.

2.2. Statement of the problem

The present study has attempted to find out the gender differences between intuition, rational thinking and decision making among college Students. The study also tries to find the relationship between intuition and rational thinking on decision making.

Objectives

- To study the relationship between intuition on decision making among college students.
- To study the relationship between Rational thinking on decision making among college students
- To find out whether there is a significant difference in the level of Intuition, Rational thinking on Decision making between males and females.

2.3. Hypotheses

H⁰¹: There is no significant relationship between intuition on decision making.

H⁰²: There is no significant relationship between rational thinking on decision making.

H⁰³: There is no gender difference between intuition, rational thinking and decision making among college students.

2.4. Operational definition of the variables

2.4.1. Intuition

The term "intuition" describes the capacity to comprehend or know something without the aid of explicit evidence or deliberate thought. It incorporates quick decisions, gut instincts, pattern identification, and subconscious procedures that help people navigate challenging circumstances and make decisions making

2.4.2. Rational thinking

The cognitive process of methodically examining data, assessing supporting information, and balancing advantages and disadvantages in order to reach logical conclusions or make defensible decisions is known as rational thinking.

2.4.3. Decision making

The cognitive process associated with determining a course of action or among several options based on a methodical assessment, analysis, and study of pertinent data, objectives, preferences, possible outcomes, or decision criteria considered decision-making. .

2.4.4. Variables

The variable of one dependent variable Decision making and the Independent variable Rational thinking, Intuition.

2.4.5. Demographic variables

The differences variables be gender male, female and the age range be 18 to 25 years.

2.4.6. Universe of the Study

The population for the study is young adults. Young adults as per the relevance for my study are from age 18 years to 25 years. Both males and females are included in the study.

2.5. Geographical area

The interested participant between the age group of 18-25 in Bangaluru and coimbatore.

2.6. Sampling Distribution

The study will include approximately 302 participants (both males and females) at the college level. Age range lies between 18 and 25 years

2.6.1. Inclusion criteria

- Sample is a young adult group between 18 to 25 years.
- Literacy adult be taken.
- Individual from a Bangaluru and Coimbatore.

2.8.2. Exclusion criteria

- Individuals who leave the responses incomplete.
- Individuals who do not agree with the ethics of the research.
- Multiple responses from the same individuals will not be considered.
- Individuals with any mental disorder.

2.7. Sample and Techniques

Simple Random Sampling method has been used for data collection.

2.8. Research Ethics followed

All the appropriate ethical measures were adhered to in the study. Participants were informed of their right to withdraw at any point. The questionnaires and statistical software were used in accordance with their respective norms, with data being handled sensitively and analyzed as per the manuals. Informed consent was obtained from all individual participants included in the study

2.9. Tools for the study

Rational experiential inventory (REI) is consisting of 40 items in the questionnaire contain of intuition and rational thinking. Each dimension is assessed using two subscales composed of 10 items each under the factors Rational Ability, Rational Engagement, Experiential Ability, and Experiential Engagement.

Decision style scale (DSS) 10 item scale two sub scale intuitive and rational thinking

2.10. Statistical Analysis

Correlation coefficient – Pearson correlation Coefficient in order to understand the relationship between intuition and rational thinking and decision making. And t-test was also used in order to see if there is any gender difference among the variables.

2.11. Descriptive and Inferential Statistics

Descriptive Statistics is used to synopsise the data, as well as understand the representation of the population. Inferential Statistics is used to test the hypotheses using Correlation, Independent Sample T-Test.

3. Results and Discussion

This study was directed in order to assess the intuition and rational thinking on decision making among college students. The college student and 18 to 25 years old from Bangalore and Coimbatore were served. A sample of 302 students participated out of which 151 male and 151 female .In order to understand the dimension of the study were used is Rational experiential inventory (REI) is consist of 40 items in the questionnaire contain of intuition and rational thinking. The current form of the Rational-Experiential Inventory (REI-40) (Epstein et al., 1998; Pacini & Epstein, 1999) Hamilton, k.,shih,s.,&Mohammed,2016 decision making. The study focused on correlation as well as the gender difference of the data towards the variables. In order to find the relationship between the variables of the study, Pearson correlation test was used for the sample and the scores were noted. Independent t-test was conducted to find the significant differences between the male and female among college students. Data analysis was conducted using IBM SPSS Statistics software, version 21.0,

Table 1 Socio-demographic details of the participants

	Gender	N
Age range		302
	Male	151
	Female	151

Table 1 show the sociodemographic characteristics of the study participants. The sample comprised (N=302) young adults aged 18-25, with 151 males and 151females.

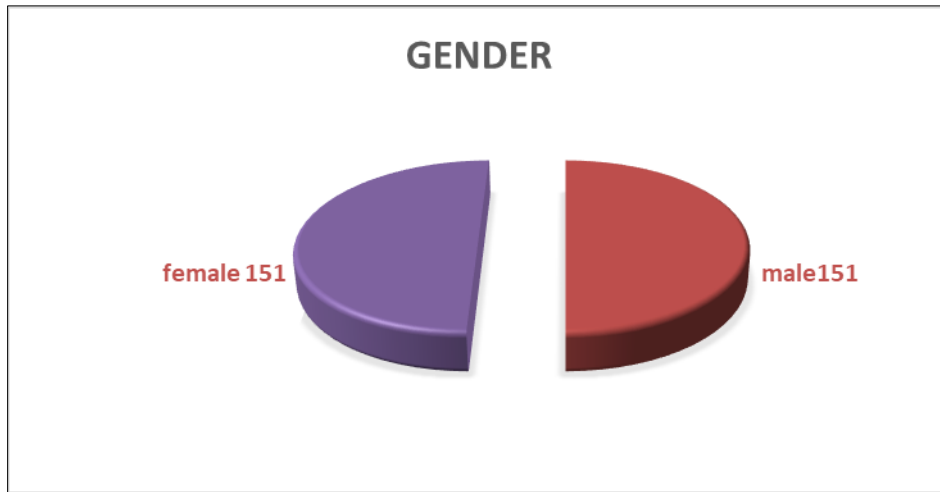


Figure 1 Representation of Gender

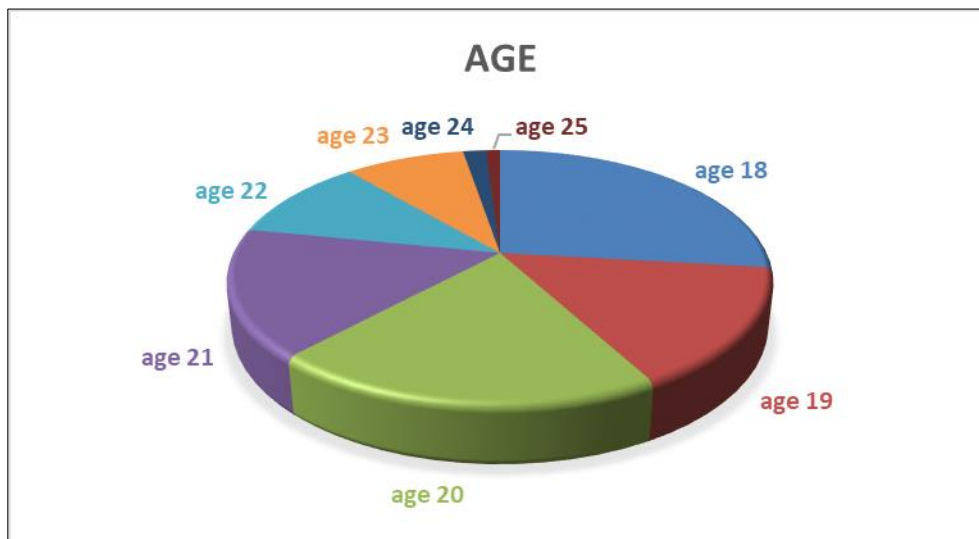


Figure 2 Representation of Age

Table 2 Results of the Descriptive Statistics

N=302	Mean	Std. deviation
Intuition	57.60	6.427
Rational Thinking	56.46	7.868
Decision Making	32.70	6.321

Table 2 shows the mean and standard deviation of intuition and rational thinking on decision making among college student in the age category of 18- 25 years. The total sample of the study is 302 young adult. The mean value of intuition 57.60 and std is 6.427, Rational thinking 56.46 and std 7. 868. Decision making 32.70 and std 6.321.

Table 3 There is no significant relationship between Intuition on Decision making among college student.

variable	Intuition	Decision making
Intuition	1	-0.209**
Decision Making	-0.209**	1

Note: ** indicate that the correlation is significant at $p < 0.01$

It OKKshows the correlation between Intuition and decision making among college students. The negative correlation coefficient of -0.209 suggests weak negative relationship between "Intuition" and "Decision Making" among the sample of 302 participants. This means that as scores on one value variable increase, scores on the other variable tend to decrease value slightly. Indicate that the correlation is significant at $p < 0.01$.

Table 4 There is no significant relationship between Rational thinking and Decision making among college students.

variable	Rational thinking	Decision making
Rational thinking	1	-0.126*
Decision making	-0.126*	1

Note: *. indicating that the correlation at $p < 0.05$

An analysis of the above table indicated that there were 151 Male and 151 females taking the total of 302 college students, who were the part of this study The correlation between the rational thinking on decision making. A significant negative correlation was observed between Rational Thinking on Decision Making. The $r = -0.126$: Represents the Pearson correlation coefficient between "Rational Thinking" and "Decision Making. $p = 0.028$: Indicates that the correlation is statistically significant at the 0.05 level (2-tailed).

Table 5 There is no gender difference between Intuition and Rational thinking on decision making among college students.

variable	Male		Female		t
	M	SD	M	SD	
Intuition	57.33	6.355	57.79	6.476	-0.628
Rational Thinking	55.44	7.981	57.40	7.625	-2.175
Decision making	32.64	5.367	32.86	7.083	-0.302

Note: * indicate that the t value is significant at $p < 0.05$

In the Intuition group, the no significant difference in means between males and females, as indicated by the tests assuming equal variances ($t(300) = -0.628, p = 0.531$) and not assuming equal variances ($t(299.893) = -0.628, p = 0.531$). The mean difference between male and female scores was -0.464, with a 95% confidence interval ranging from -1.917 to 0.989. For the Rational thinking group, there was a statistically significant difference in means between males and females. When assuming equal variances, the t-test showed a significant difference ($t(300) = -2.175, p = 0.030$), and the mean difference was -1.954. The 95% confidence interval for this difference ranged from -3.721 to -0.186. Similarly, when not assuming equal variances, the results were consistent with a significant difference ($t(299.381) = -2.175, p = 0.030$). In the Decision-making group, there was no significant difference in means between males and females. Both the t-tests assuming equal variances ($t(300) = -0.302, p = 0.763$) and not assuming equal variances ($t(279.536) = -0.302, p = 0.763$) yielded nonsignificant results. The mean difference was -0.219, with a 95% confidence interval spanning from -1.642 to 1.205. Overall, these results suggest that while there are significant differences in means between males and females in the Rational Thinking group, there are no significant differences in the Intuition on Decision Making groups.

4. Discussion

The relationship between rational thinking and decision making. Gender difference between Intuition , rational thinking and decision making .It was hypothesized there is no significant relationship between Decision making

among college students aim to evaluate the relationship between (H01) Intuition on decision making there is no relationship between rational thinking on decision making. The data analysis primarily involved the Pearson correlation and independent sample t-test used to determine whether there was a statistically significant relationship and gender differences in intuition, rational thinking and decision making among college students. The significance of the null hypothesis (H02) which often state that there is no relationship between the variable rejected. This means there is a significant negative correlation ($r = -0.126$) between decision making on rational thinking at the 0.05 significance level. The data suggests that as decision making abilities increase, rational thinking tends to decrease, or vice versa. With a p-value of 0.028. The output of an independent sample t test significant gender differences in intuition and decision making and the rational there is no gender difference among college students. Therefore, significant difference in the score for the female. There was a significant difference Male ($M = 57.33$, $SD = 6.355$) and Female ($M = 57.79$, $SD = 6.476$), ($t = -0.628$, $p = 0.531$) and the null hypothesis of no gender difference in intuition is accepted. For the Rational thinking group, there was a statistically significant difference in means between males ($M: 55.44$, $SD: 7.981$) and females ($M = 57.40$, $SD = 7.625$) The null hypothesis of no gender difference in rational thinking is rejected. The significant difference ($t = -2.175$, $p = .030$), In the Decision-Making group, there was no significant difference in means between ($M = 32.64$, $SD = 5.367$) and females ($M = 32.86$, $SD = 7.083$). variances ($t = -0.302$, $p = 0.763$) The null hypothesis of no gender difference in rational thinking is rejected.

5. Conclusion

The sample for this study consisted of 302 college students between the age group of 18 to 25, There 151 were male and 151 was female. The study aims at understanding the relationship between intuition and rational thinking on decision making among college students. The negative correlation between "Intuition" on "Decision Making" suggests that as high score in intuition compare to decision-making abilities tend to decrease among college students. The negative correlation between "Rational Thinking" on "Decision Making" indicates that a person with high rational thinking scores increase tend to low in decision-making abilities among college students. The result of gender difference showed there is a difference between the male and female in rational thinking. There is no significant difference between male and female in intuition and decision making.

Limitation

In-person interactions could yield better data, but the sample was limited to the cities of Coimbatore and Bengaluru, which may not accurately reflect the entire Indian population. Online questionnaires may also only capture a portion of the story.

Compliance with ethical standards

Statement of ethical approval

The presents research work does not contain any studies performed on animals.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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