

# Innovation: An Adoption

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## ABSTRACT

The objective of the present study was to explore the individual orientation towards change. In the present study hypothesis was stated as that the percentage of the participants in the category of Early Majority and Late Majority will be more as compared to Innovators and Laggards. Individual Innovativeness scale was used to assess the individual orientation towards change. Total 43 participants participated in the present study and data was analyzed through descriptive analyses and it was found that the percentage of participants in the category of Early Majority and Late Majority were more as compared to Innovators and Laggards.

**Keywords:** *Innovators, Early Majority, Laggards, Late Majority, Innovation.*

## 1. Introduction

The term "innovation" has a rich history dating back to medieval time. In the medieval time the term "Novation" was used for a medieval legal term, where it pertained to renewing obligations through changing contracts for new debtors. Over time, the concept evolved, drawing on ancient Greek philosophy's contrasting ideas of imitation and invention. Imitation, initially viewed as invention in certain historical periods, was instrumental in economic growth, particularly evident through patents given to importers and improvements in goods' quality during the sixteenth to eighteenth centuries. The Renaissance sparked a spirit of discovery, fueling advancements across various fields, aligning scientific discovery and technological advances with industrialization by the nineteenth century.

Marxist perspectives in the nineteenth century connected industrial production with broader economic and social changes. Economic theories of the twentieth century increasingly linked production efficiencies with technological advancements, fostering growth. The term "innovation" emerged in this context, initially focusing on psychological aspects, then evolving to encompass economic growth and organizational survival. By the late twentieth century, innovation became intertwined with technological, social, and personal development.

In the twenty-first century, "innovation" encompasses a multitude of meanings, influenced by centuries of evolution. It symbolizes advancement, technological change, social progress, and individual development across various domains and personalized contexts.

The wide variety of literature available on innovation has interpreted and defined innovation in various ways. Roger defines innovations as "an idea, practice, or object that is

perceived as new by an individual or other unit of adoption" (Rogers, 2003). Individual innovativeness is defined as developing, adopting or implementing an innovation (Yuan and Woodman, 2010). Roger in the year 2003 stated that in individual innovativeness theory, there is always a new information within social system and that this new information is processed by adopters. People respond differently to innovation as per their personality traits as stated by Roger (2003). Individual innovativeness is divided into five categories i.e. innovators, early adopters, early majority, late majority and laggards. Innovators are the one who are risk takers and they are the one who are willing to take initiative and time to try something new which comprise of 2.5% of the population. They are the one who are eager to be the first to try out an innovative item. Early adopters which can be characterized as an individual essential to adoption by whole group and which consist of 13.5% of the population and they are the one who will consume or buy items after innovators. Early majority which consist of 34% of the population and they are the individual who are unwilling to take risk and they are the one who adopt new ideas before an average person would do. Late majority individuals are the one who suspect or are resistant to change and they comprise of 34% of the population and one who are skeptical to changes. Laggards individuals are the one who are adamant in resisting change and they consist of 13% of the population. Laggards are the one who are bound by tradition and they are the hardest to convert. Innovators and early adopters are the one who try new products while early majority needs more time to get comfortable with the products. This model helps in understanding the adoption of information and technology in industries or any institutions.

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**2. Literature review**

A study done by Ms. A.Gomathi in the year 2023 on “the impact of New Start-ups among College Students” on 100 college undergraduate commerce students and it was found that majority of students from commerce programs are highly interested in the startup of new business rather than a job.

Roffeei, Siti Hajar Mohd; Yusop, Farrah Dina; Kamarulzaman, Yusniza conducted a study in the year 2018 on the “Determinants of Innovation Culture amongst Higher Education System” on 1008 undergraduate students from five public research universities in Malaysia. And it was found that self-efficacy, effective communication, and innovation culture have a significant effect on innovative behaviour.

A study done by Hsing-Yuan Liu, Chia-Chen Chang, I-Teng Wang, Shu-yuan Chao in the year 2020 on the association between creativity, creative components of personality and innovation on 98 senior-year nursing students and it was found that innovation was correlated with curiosity and there was no significant association between creativity and creative personality.

Mei-Hui Lin, Tsai-Fu Chuang, Han-Pin Hsu conducted a study on the relationship among teaching beliefs, student-centred teaching concept and the instructional innovation in the year 2014 on 538 teachers of elementary schools. The result indicate that there is a positive relationship between the teaching beliefs and the instructional innovation and the teacher with a high degree of student-centred teaching concept would exhibit a higher level style of instructional innovation and a causal relationship was found between the teacher's teaching beliefs and instructional innovation.

**3. Objective of the Study**

The objective of the present study was to understand the individual adoption of innovation.

**Hypothesis**

The percentage of the participants in the category of early majority will be more as compared to innovators and laggards.

The percentage of the participant in the category of late majority will be more as compared to innovators and laggards

**4. Methodology**

**Tool**

The Individual Innotiveness scales was developed by Hurt et al.(1977). This scale was developed to understand the individual orientation to change. The scale consists of 20 items which is based on 5 likert scale i.e. from Strongly Disagree as 1 to Strongly Agree as 5.

**Sample**

Total 43 undergraduate college going students

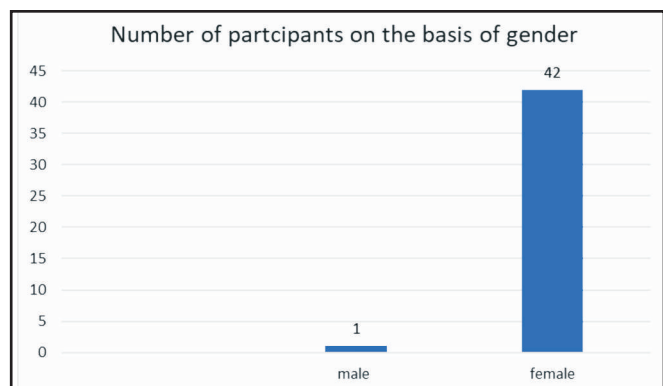
participated in the present study. Purposive sampling method was used to collect the data. The number of female was found to be 42 and male was 1. The age range of the participants were from 18-22 years. The other demographic characteristics included were stream, year, place of residence, were they part of any society of the college.

**Table 2.1 : Demographic Characteristics of the participants (N=43)**

Demographics		
Gender	Number	Percentage
Male	1	2.33
Female	42	97.67
Stream		
Commerce	15	34.88
Science	28	65.11
Year		
First year	3	6.97
Second year	40	93.02

**5. Data Interpretation and Result**

The objective of the present study was to explore the individual innovativeness among college going students. For the analysis, the data was analyzed using descriptive statistics. Bar diagrams and pie chart were used to depict descriptive statistics. Mean and percentage were calculated from the raw score.



**Figure 2.1 : Bar diagram of participants on the basis of gender.**

It can be seen from the above bar diagram that the female participants were more as compared to male.

It can be seen from the bar diagram in Figure 2.2 that the participants from science stream were more as compared to the participant from the commerce stream.

It can be seen from the Table 2.2 that the total raw score was found to 2627 and mean was found to be 61.07 which indicate that the sample falls in the category of early majority.

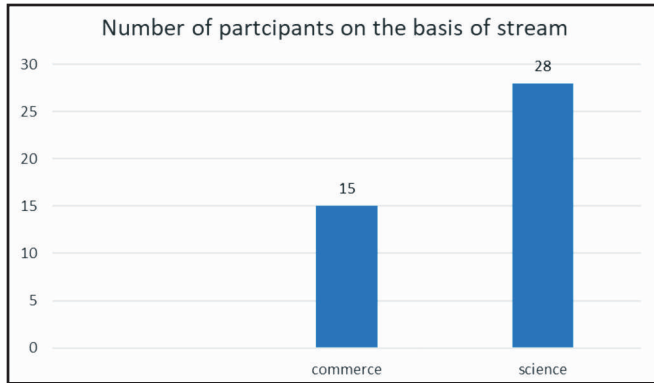


Figure 2.2 : Bar diagram of participants on the basis of stream

Table 2.2 : Result of Mean

Sum of raw scores	Number of participants	Mean
2627	43	61.09

Table 2.3 : Number and percentage of participants in each category of individual innovativeness

Category	Number	Percentage
Innovators	1	2.32
Early Adopters	6	13.95
Early Majority	23	53.48
Late Majority	11	25.58
Laggards/Traditionalist	2	4.65

As it can be seen from the above table that the percentage of participants in the category of Early Majority was more as compared to other categories. The percentage of participants in the category of Innovators was least as compared to other four categories.

**6. Discussion**

The objective of the present study was to explore the Individual Innovativeness among college undergraduate students. Innovation can be defined as an idea, practice, or object that is perceived as new by an individual or other unit of adoption (Roger, 2003). To study the individual innovativeness among college students Individual Innovativeness scale was used. Total 43 college students participated in the present study and descriptive statistics was used to analyze the data.

It can be inferred from table 2.3 that the total number of participants in the category of innovators was found to be 1 which was 2.32 percent of the participants. It can be supported from Roger theory on innovation where he mentioned that innovators are the one who are eager to try new ideas to the point where their venturesome becomes obsession.

As it can be seen from the table 2.3 that total 6 participants fall in the category of early adopter which was found to be

13.95 percent. It indicates that the early adopters are the one who provide advice and information sought by other adopters about an innovation and they are the one within their group to adopt (Kaasinen, 2005)

Total number of participants in the category of early majority was found to be 23 which was 53.48 percent of the participants. It can be observed from the table 2.3 that the percentage of participants in the category of early majority was more as compared to other categories. Individuals in this category will adopt new ideas just before the average member of the social system and their innovation decision time was relatively longer than innovators and early adopters as they deliberate more time before adopting a new idea. Moore in the year 1991 studied the categories in relation to the adoption of technological products in business and the findings indicate that the success or failure of any technology depends upon the gap between early adopters and early majority.

It can be observed from table 2.3 that the total number of participants in the category of late majority was found to be 11 which was 25.58 percent of the participants. Late majority individuals are little skeptical about the new idea and adopt just after the average members of social system has adopted.

The total number of participants under the category of laggards or traditionalists was found to be 2 which was 4.65 percent of the participants. Laggards are the one who are last to adopt an innovation and they are fixated on the past and all decisions must mainly interact with other traditionalists.

The hypothesis of the present study was that the percentage of the participants in the category of Early Majority will be more as compared to Innovators and as it can be seen from table 2.3 that the percentage of participants in the category of Early Majority was more as compared to Innovators. Early Majority as defined by Roger are the one who will adopt new ideas just before the average member of the social system. The early majority individuals are considered to be pragmatic and risk-averse and they prefer to wait and see how the product reform and what others have to say about it. And they are not easily influenced and they rely on trusted sources. Early Majority are found to be skeptical but open minded.

The second hypothesis in the present was that the percentage of the participants in the category of Late Majority will be more as compared to Innovators and as it can be referred from the table 2.3 that the percentage of Late Majority was found to be 25.58 as compared to Innovators which was found to be 2.32. As it can be inferred that the percentage of Late Majority was found to be more as compared to Innovators and hence the hypothesis has been accepted. Roger characterized Late Majority as skeptical and they adopt new ideas only after the average

meber of the social system has adopted. And such adoption could be result of economic pressure or in response to increasing social pressure. They prefer to observe th experience of early adopters and the early majority before making decision.

## 7. Conclusion

The objective of the present study was to explore the individual innovativeness among college undergraduate students. The first hypothesis was stated that the percentage of the participants in the category of the early majority will be more as compared to innovators and hence it has been proved. The second hypothesis was stated that the percentage of the participants in the category of Late Majority will be more as compared to innovators nad hence it has been proved.

## 8. Limitation

The present study had a small sample size i.e 43 college students. The data was collected through convenience sampling which limits the representation of the entire population. The present study has focused more on the five dimension of innovation and hence it covers only the quantitative aspect and not the qualitative aspects. Most of the students belong to a particular university and hence it does not cover diverse stream especially medicine.

## 9. Future Implication

A mixed research can be incorporated and sample size could be expanded. The present topic can be studied on different population. In future more studies can be done the reason and factors that influence people belong to different dimension so that companies can include those factors while implementing new technology.

## 10. References

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