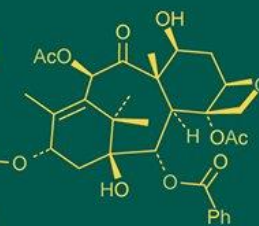
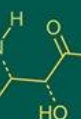
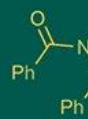


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Learning styles of higher education study pattern among undergraduate students of Kolar district of Karnataka state

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Abstract

Learning styles play a vital role in the learning process and contribute to the overall educational environment. Learning style, as an integral and vital part of a student's learning process, has been constantly discussed in the field of education and pedagogy. Therefore, the study was conducted in Kolar of Karnataka State. Total sample size of 250 respondents were selected through purposive sampling technique. The results revealed that most of them were from rural areas with good academic performance. It is evident from results that, majority of the respondents fifty six per cent were having visual type of learning style more than half of the population might follow visuals namely reading books, newspapers, posters, maps followed by thirty three per cent of respondents were categorized under auditory type of learning style with recorded lecture notes, hearing from friends during preparation for exam and a small portion only ten per cent of the respondents were having a kinesthetic type of learning style which was very rare learning style who will be more active and follow movement. The findings of the study also revealed that learning styles do not have a significant influence on academic performance and time spent for self-study. Therefore, it can be concluded that Learning styles can be simply understood as the various techniques that respondents prefer to use to perceive and process information and interact with the learning environment.

Keywords: Learning styles, Higher Education, Academic performance, learning environment

Introduction

Learning styles are more concerned with the ways in which students prefer to learn than what they actually learn. There are three primary concepts that make up the framework of learning styles: Visual, Auditory and Kinesthetic learning style. There are variable sensory modes that individuals can utilize to perceive their environment including visual, audio, kinesthetic, haptic, print and interactive.

Visual learners are those who prefer visual sensory modes to perceive their environment. They are assumed to learn best by visual stimuli such as pictures, graphs, maps, diagrams or images, charts, flash cards, circulars, symbols, printed text and slides. They perceive information the best through coloured depictions and media. They believe in what they see and grasp better through visuals.

Auditory learners learn best through listening. They benefit greatly from spoken stimuli and are excellent listeners. They enjoy listening to lectures, talking, speech, recorded messages, folk songs, verbal instructions, telephonic audio calls and music. They understand best by hearing and they perceive the things through oral communication. They may be categorised under good listener category and they grasp the things or learning which may be said by verbally from teachers and their friends during preparation of exams.

Kinesthetic learners learn through movement and they remember best through hand movements. The human body is naturally built for movement and kinesthetic learners prefer to keep their bodies in motion. Kinesthetic learners process information best when moving their bodies. They like to move their hands and respond to sounds and music through physical movement, retention through doing such as playing with pen, coins in the pocket or moving objects. They are not concerned with visual or aural presentations and do not process

information effectively when presented information in such formats. They are more socialised ready to mingle with people and hand shake without any hesitation.

Therefore, the present study was undertaken to understand the learning style of undergraduate students and to relate it to their academic performance and time spent for self-study.

Methodology

The study was conducted in Horticulture College of Kolar district of Karnataka state which comes under the jurisdiction of University of Horticultural Sciences, Bagalkot. The study was conducted during the academic year 2024-25. A total sample size of 250 respondents was selected through purposive sampling technique. A class of 65 respondents from I year, 64 from II year, 62 of III year and 59 of IV B.Sc. were selected for the study. In order to identify the learning styles, their responses were collected on three-point continuum *viz.*, often, sometimes and rarely of 5, 3 and 1 respectively. The data was collected by using structured interview schedule containing appropriate questions for bringing the required data. Percentage analysis, Mean and Cumulative frequency method were used for the analysis and interpretation of the data.

Results and Discussion

Distribution of respondents according to family background was presented in Table 1. The results revealed that seventy-eight per cent of the respondents were from rural background may be parental occupation was agriculture and only twenty-one per cent of the respondents were come from urban cities.

Table 1: Distribution of respondents based on Family background

Sl. No	Category	Frequency	Percentage
1	Rural	196	78.40
2	Urban	54	21.60
Total		250	100.00

Table 2: Distribution of respondents based on learning styles categories

Sl. No	Category	Frequency	Percentage
1	Visual	140	56.00
2	Auditory	83	33.20
3	Kinesthetic	27	10.80
Total		250	100.00

It is observed from the table 2 that, majority of the respondents fifty six per cent were having visual type of learning style more than half of the population might follow visual aids namely charts, graphs, reading books, newspapers, posters, maps. Visual learners tend to remember information better when it's presented with images, colors, use of white boards, projectors. Visual elements can make learning more interesting and enjoyable for them.

It was evident that 33.20 per cent of respondents were categorized under auditory type of learning style with recorded lecture notes, hearing from friends during preparation for exam, they enjoy participating in conversations to lectures to grasp new concepts. Auditory listeners memorize information by associating it with how it

sounds or by repeating it aloud. They may talk to themselves or others to process information or stay focused. It was clear from the table 2 that, only 10.80 per cent of the respondents were having a kinesthetic type of learning style. These individuals learn best by participating in hands-on activities. These individuals are described as haptic learners as they often learn best when they can physically interact with learning material as they have strong sense of touch. They prefer using their sense of touch to learn; therefore, they benefit greatly from activities that require them to work with their hands. They process information most effectively when they can actively engage with the material, rather than just listening or reading about it. They often excel in activities that involve movement, manipulation of objects and practical application of knowledge. They enjoy artwork, making things together, hands on learning, physical activity, practical application.

Table 3: Distribution of respondents based on time spent for self-study

Sl. No	Category	Frequency	Percentage
1	1 Hour	77	30.80
2	2 Hours	57	22.80
3	3 Hours	47	18.80
4	4 Hours	36	14.40
5	5 Hours	33	13.20
Total		250	100.00

With reference to the table 3, about thirty per cent of the respondents were spending one hour daily for self-study followed by twenty-two per cent of them spent for 2 hours as this is due to study hours in hostels are made mandatory and only thirteen per cent of the respondents were spending time about 5 hours daily for self-study. It was observed that there was no relationship between learning style and time spent for self-study and academic performance.

Conclusion

Learning styles is a field of research that has many useful implementations for both the learner and educator. Learning styles can be simply understood as the various techniques that students prefer to use to perceive and process information and interact with the learning environment. Identifying the various dimensions of learning styles provides educators with a greater awareness of the unique technique of using teaching methods for providing conducive learning environment. Kinesthetic learners may struggle with traditional methods as they may find it challenging to learn effectively through lectures, reading or solely visual or auditory methods. Therefore educators can use this awareness to maximize student learning and support effective education by developing teaching methods that incorporate various learning styles.

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