

Scientific Attitude and Knowledge of College Students in Organic Chemistry

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Abstract: *The objective of this study is to find out if there is any significant difference in the scientific attitude and knowledge of college students in organic chemistry with respect religion and locality. The investigator adopted survey method for the study. The sample consisted of 123 college students. Simple random sampling technique was used as a tool for this study. Findings shows, there is no significant difference between the mean scores of scientific attitude and Knowledge in organic chemistry of religion and locality of Students. There is no significant relationship between scientific attitude and Knowledge in organic chemistry of religion and locality of Students. The present study reveals that religion and locality did not influence the attainment of Scientific Attitude and Knowledge of college Students in Organic Chemistry.*

Keywords: Knowledge in organic chemistry, Scientific Attitude

1. Introduction

Chemistry is one of the basic sciences. Knowledge of chemistry is indispensable for the pursuit of any of the other sciences. Everyone can and should understand basic chemistry, It's important to understand chemistry if you are studying any of the sciences because all of the sciences involve matter and the interactions between types of matter. The importance of chemistry won't be diminished over time, so it will remain a promising career path. Chemistry is typically divided into several major sub-disciplines. There are also several main cross-disciplinary and more specialized fields of chemistry.

Organic chemistry is the study of the synthesis, structure, reactivity and properties of the diverse group of chemical compounds primarily constructed of carbon. All life on earth is carbon-based, thus organic chemistry is also the basis of biochemistry. The ability to form compounds containing long chains of carbon atoms is the basis of polymer chemistry. It is a specific discipline within the subject of chemistry. Current trends in organic chemistry are chiral synthesis, green chemistry, microwave chemistry and fullerene chemistry. Organic chemistry is very important, and is driving a lot of development in the technological world.

2. Need for the study

Everything is chemistry, so nothing can exist without chemistry. It is important to know it and to sustain life on earth peacefully. Chemistry applies in every field of over life. Education of organic chemistry is not only the source of getting a good job, but also a fun or a practical which make over life interesting. Organic chemistry plays a key role in the knowledge societies and this knowledge is rising by leaps and bounds within no time. Scientists and academicians require a broad understanding of the latest updates in the respective discipline for their professional and learning endeavours.

We decided to conduct a study to find out the scientific attitude and knowledge in organic chemistry.

Objectives

- 1) To find out if there is any significant difference between the scientific attitude and knowledge of college students in organic chemistry concerning Hindu and Non- Hindu.
- 2) To find out if there is any significant difference between the scientific attitude and knowledge of college students in organic chemistry concerning rural and urban
- 3) To find out whether there is any is significant relationship between the scientific attitude and knowledge of college students in organic chemistry concerning Hindu and Non -Hindu.
- 4) To find out whether there is any is significant relationship between the scientific attitude and knowledge of college students in organic chemistry concerning rural and urban.

Hypothesis

On the basis of the objectives the following hypotheses were framed:

- 1) There is no significant difference in the scientific attitude and knowledge of college students in organic chemistry concerning Hindu and Non -Hindu.
- 2) There is no significant difference in the scientific attitude and knowledge of college students in organic chemistry concerning rural and urban
- 3) There is no significant relationship between the scientific attitude and knowledge of college students in organic chemistry concerning Hindu and Non- Hindu.
- 4) There is no significant relationship between the scientific attitude and knowledge of college students in organic chemistry concerning rural and urban.

3. Methodology

The present investigation was undertaken by using normative survey method

The sample of the Study

The present study consists of 123 college students. The sample was selected by using simple random sampling technique.

Tools Used

Scientific attitude and knowledge in organic chemistry tool was constructed by Investigator

Statistical analysis

Mean,
 Standard Deviation
 Differential analysis and
 Correlation analysis

The Mean Scores of Scientific attitude and knowledge in the organic chemistry of Hindu and Non-Hindu of Students

Variable	Religion	N	Mean	S.D	T	Remarks
Attitude	Hindu	84	162.90	171.82	0.52	NS
	Non-Hindu	39	163.33	170.74		
Knowledge in Organic chemistry	Hindu	84	13.76	1.84	0.71	NS
	Non Hindu	39	13.51	1.78		

The above calculated t values are lesser than the table value, the null hypothesis, there is no significant difference between the mean scores of scientific attitude and Knowledge in organic chemistry of Hindu and Non Hindu of Students is accepted by students.

The Mean Scores of Scientific Attitude and Knowledge in the Organic chemistry of Rural and Urban students

Variables	Locality	N	Mean	S.D	t	Remarks
Attitude	Rural	92	170.80	11.05	1.27	NS
	Urban	31	173.48	9.87		
Knowledge in Organic chemistry	Rural	92	13.83	1.75	1.44	NS
	Urban	31	13.26	1.95		

The above calculated t values are lesser than the table value, the null hypothesis, there is no significant difference between the mean scores of Scientific attitude and Knowledge in organic chemistry of Hindu and Non-Hindu of Students is accepted by students.

Correlation between Scientific Attitude and Knowledge in the organic chemistry of college students concerning Religion

Variable	Number	S.D	r-value		Remarks at 0.05 level
			Calculated	Table	
Hindu	84	82	0.029	0.217	NS
Non Hindu	39	37	0.191	0.304	NS

As the calculated r values are lesser than the table values, the null hypothesis, There is no significant relationship between scientific attitude and Knowledge in organic chemistry of Hindu and Non Hindu of Students is accepted by students.

Correlation between Scientific Attitude and Knowledge in the Organic Chemistry of College Students concerning Locality

Variable	Number	S.D	r-value		Remarks at 0.05 level
			Calculated	Table	
Rural	92	90	0.150	0.205	NS
Urban	31	29	-0.060	0.355	NS

As the calculated r values are lesser than the table values, the null hypothesis, There is no significant relationship between scientific attitude and Knowledge in organic

chemistry of rural and urban of Students is accepted by students,

4. Findings

- 1) The above calculated t values are lesser than the table value, the null hypothesis, There is no significant difference between the mean scores of Scientific attitude and Knowledge in organic chemistry of Hindu and Non Hindu of Students is accepted.
- 2) The above calculated t values are lesser than the table value, the null hypothesis, there is no significant difference between the mean scores of scientific attitude and Knowledge in organic chemistry of Hindu and Non Hindu of Students is accepted
- 3) As the calculated r values are lesser than the table values, the null hypothesis, There is no significant relationship between scientific attitude and Knowledge in organic chemistry of Hindu and Non Hindu of Students is accepted
- 4) As the calculated r values are lesser than the table values, the null hypothesis, There is no significant relationship between scientific attitude and Knowledge in organic chemistry of rural and urban of Students is accepted.

5. Conclusion

The present study reveals that religion and locality did not influence the attainment of Scientific Attitude and Knowledge of college Students in the Organic Chemistry.

Reference

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