



Local Government Quarterly

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- ★ Panchayati Raj and Capacity Building: A Study
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Scientific Temper in Urbanites: A KAP Study on COVID-19

S. K. Kataria, Rashmi Singh

A scientific man ought to have no wishes, no affections - a mere heart of stone.

-Charles Darwin

Corona, pandemic, mask, sanitizing hands, quarantine, vaccine, antibody, plasma therapy, immunity, isolation, lock down and social distancing etc. have been some buzz words in recent months. However the core term is missing completely at every platform across the country and that is — 'scientific temper'. Pt. Jawaharlal Nehru coined the term 'scientific temper' and he defined it in his book 'Discovery of India' in 1946, as an attitude of logical and rational thinking. He wrote "What is needed is the scientific approach, the adventurous and yet critical temper of science, the search for truth and new knowledge, the refusal to accept anything without testing and trial, the capacity to change previous conclusions in the face of new evidence, the reliance on observed fact

and not on pre-conceived theory, the hard discipline of the mind—all this is necessary, not merely for the application of science but for life itself and the solution of its many problems". Later on, the cultivation of scientific temper was very well placed in India's first public policy effort on science that was the 'Scientific Policy Resolution, 1958'.

Science and Indian Society

Although the term is included in the list of fundamental duties mentioned in the Constitution of India (Article-51A (h)), yet no one can say that the Indian society always follows scientific temper; rather it is still characterized by its traditional, feudal, irrational and sentimental nature.

It was the month of September, 2013 when a local seer named Shobhan Sarkar of Village Daundia Khera (Sangrampur), District Unnao, Uttar Pradesh wrote letters to the President of

India, the Prime Minister, the Ministry of Mines and Archaeological Survey of India (ASI) and claimed that a 19th century king of Daundia Khera, Rambaksh Singh had appeared to him in a dream and told him that 1000 tons of gold treasure were buried under the ruins of an old fort located in the village. While his letters initially went ignored, later, the ASI and Geological Survey of India (GSI) were persuaded to inspect the place. A team of ASI visited the site on October 12 and drilled two holes at the locations suggested by Mr. Sarkar. The ASI said that they detected some metal around 20 meters below the ground. Interestingly, the GSI report also confirmed a prominent non-magnetic anomalous zone occurring at 5-20 meter depth, indicative of possible non-conducting, metallic contents or alloy. By that time the whole matter became international news and the Indian electronic media started the live coverage of the incident. Based on the initial reports of the ASI and GSI and beliefs of Indian society, the ASI started the excavation work on October 18, 2013. Heavy police security was deployed and night vision cameras were also installed. After three days and digging 48 cm in to the ground a brick wall, pieces of bangles and clay toys were found. On October 29, 2013 the ASI announced that there was no gold buried in the location and stopped excavation work and on November 18, 2013 the ASI began filling up the trenches.

The Scientific temper is a way of life (defined in this context as an individual and social process of thinking and acting) which uses the scientific method and which may, consequently, include questioning, observing physical reality, testing, hypothesizing, analysing, and communicating (not necessarily in that order). 'Scientific temper' describes an attitude which involves the application of logic and discussion, argument and analysis are vital parts of scientific temper.

Wherever the issues of spread of an infectious disease like Corona is concerned it becomes almost imperative to have a total acceptance of scientific measures to control and treat such dangers effectively. It is generally said that the Indian society is emotional rather than rational and this ultimately resulted into numerous socio-economic and political complications including health hazards.

COVID-19: The Pandemic

COVID-19 or Novel Corona Virus Disease also known as SARS Cov-2 is the most severe pandemic of recent decades which has affected almost all the countries (216 countries till Oct.10,2020) sparing some very small and isolated territories. Started from Wuhan city of China in December, 2019 the disease spread across the

globe in next six months. India witnessed its first case of Corona on January 30, 2020 through a medical student who came from Wuhan to Thrissur, Kerala and on the same day the WHO declared it Global Health Emergency. The first death occurred on January 11 in China, and in India the first Corona casualty was reported on March 10 in Karnataka, that of a 76years old man returned from Saudi Arabia and comorbid with diabetes, asthma and hypertension.

The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. So, Face Mask, Social distancing (2 Gaz Ki Doori) and Sanitizing the hands became the worldwide practice during this pandemic. All the countries had initiated strict measures including imposing national emergency, lock down, closing of schools, hotels, markets, and religious places, with sealing of international and domestic movements, mass tracking, tracing and testing of suspected contact persons and following of protocols of isolation and quarantine. The Government of India initiated 'Janata Curfew' on March 22, 2020 and two days later first lock down was imposed and it was extended in many phases with certain guidelines. The process of unlocking was started from June 08, 2020.

Since lock down resulted in a severe panic situation among all segments of society especially in labour class, migration of working labour class took place from big cities to the rural and remote areas amid non availability of transport facilities. Economic growth dipped sharply due to closing of manufacturing units and drop in demand. Economies of all countries faced a historic jolt and at the same time the life style of modern societies was forced to adopt a new social order of distancing.

Rapid increase in number of Corona cases became a serious concern and challenge for every nation including for their economy, health machinery as well as law and order enforcing agencies. As on October 10, 2020 a total 3,74,75.839 cases of Corona positives were reported with more than 10lac deaths across the globe and the figure was more than 70 lac and 1.08 lac respectively, in India.

It is interesting to note that the Corona impacted urban societies more seriously across the globe and village population was less affected. While there could be numerous causes for greater impact on urbanites, the notion that urban populations are more aware, scientific, resourceful, and health conscious has been washed out by Corona completely in India and other developing countries too.

Table: 1 Spread of COVID-19 (as on Oct. 10, 2020)

Top 10 Countries in the World		Top 10 States in India		Top 10 Cities in India	
Name of the Country	No. of Cases	Name of the State	No. of Cases	Name of the City	No. of Cases
USA	78,95,026	Maharashtra	12,29,339	Pune	3,10,446
India	69,79,423	Andhra Pradesh	6,91,040	Delhi	3,01,046
Brazil	50,57,190	Tamilnadu	5,91,811	Bengaluru	2,67,362
Russia	12,85,084	Karnataka	5,61,610	Mumbai	2,22,784
Colombia	8,94,300	Uttar Pradesh	3,83,086	Thane	1,99,925
Spain	8,90,367	Delhi	3,01,046	Chennai	1,78,108
Argentina	8,71,468	West Bengal	2,52,806	East Godavari	1,03,898
Peru	8,43,355	Odisha	2,20,388	Nagpur	89,931
Mexico	8,09,751	Telangana	1,88,025	Hyderabad	63,859
France	6,91,977	Bihar	1,82,121	Ahmedabad	34,576

Source- www.worldometers.info/ Ministry of Health and Family Welfare / Indian Express daily.

Introduction and Methodology of the Study

The present study is an effort to analyse the Knowledge, Attitude and Practice (KAP) of Corona protocols by the most highly educated segment of the Indian society i.e., university teachers. The study was conducted on the teachers of a State university of Rajasthan where about 200 teachers and 170 other staff are employed in various faculties and buildings of all faculties are not located in one campus. It is contextual to mention here that the faculty members of Humanities, Education and Social Sciences had a small formal 'meeting session on COVID-19 protocols' by the administration of concerned unit during the study period. The study was started from June 20, 2020 and ended on October 10, 2020. The following methods were used-

- A. Direct and participatory observation.
- B. Structured Questionnaire which were filled in face-to-face.

Every day on-the-job activities like meetings, group sittings, counselling of students and scholars, off line examination and admission duties of all faculty members were noticed and recorded with a checklist. The check list included observing the type and method of wearing the mask, hand sanitization, social distancing application, and following of other COVID-19 protocols issued by the WHO and government.

Objectives

There were two objectives for the study, based on personal experiences-

1. To compare science and non-science faculties of the university in KAP Study about Corona.

2. To observe the gap between knowledge, attitude and practice about Corona, among the university faculties.

Results and Discussion

Results of the primary data of the study with discussion are as follows -

Table: 2 Demographic Information of the Participants

Science Faculty			Non- Science Faculty		
Variables	N	Percentage	Variables	N	Percentage
Gender			Gender		
Male	28	77.77%	Male	30	50.84 %
Female	8	22.22 %	Female	29	49.15 %
Age Group			Age Group*		
Below 30 yrs.	2	5.55 %	Below 30 Yrs.	5	8.47 %
Between 30 to 45 yrs.	26	72.22 %	Between 30 to 45Yrs.	43	72.88 %
Above 45 Yrs.	8	22.22 %	Above 45 Yrs.	10	16.95 %

*one respondent did not mention age.

According to the Table -2 which is about the demographic information of participants or respondents, it clearly showed that in the study two major literate groups were taken as a sample that is the faculties belonging to science and non-science subjects. In total there were 36 participants from science group and 59 participants from non-science group.

In science group out of total 36 responses 28 (77.77%) were males and

remaining 8 (22.85%) were females whereas in non-science faculty group that is total 59, males were contributing 50.84 % and rest were females contributing 49.15%. The maximum participants were from the age group of 30 to 45 years in both the science and non-science groups, while only 5.17% and 8.57% were below 30 yrs. and remaining very small percentage was of age above 40 years.

Table: 3 Results of the Knowledge Survey

S.No.	Groups	Science Faculty N= 36		Non-Science Faculty N=59	
		Yes	No	Yes	No
Q.2	The prevention techniques of COVID are sanitizers, masks and social distancing.	100%	-	98%	2
Q.5	Did the corona make you wash your hands frequently?	97%	3%	93%	7%

S.No.	Questions	Science Faculty N= 36		Non-Science Faculty N=59	
		Yes	No	Yes	No
Q.9	Do you agree that twenty seconds through hand wash techniques should be used?	100%	-	98%	2%
Q.11	Do you agree that at least 1% of sodium hypochlorite solution should be used for mopping the fomites (surfaces)?	76%	24%	93%	7%
Q.21	Do you think that cotton fabric masks help us from the virus?	63%	37%	21%	79%
Q.22	Has somebody in your family or in relatives suffered from COVID- 19?	46%	54%	36%	64%
Q.23	Fourteen days observation is required for the corona sufferers?	97%	3%	97%	3%
Q.24	All persons did not have a serious effect of Corona, but the people who are elderly and have co morbid conditions can be affected more?	94%	6%	98%	2%
Q.25	Intake of non veg. food increases the chances of Corona disease?	38%	62%	56%	44%

Graph: 1

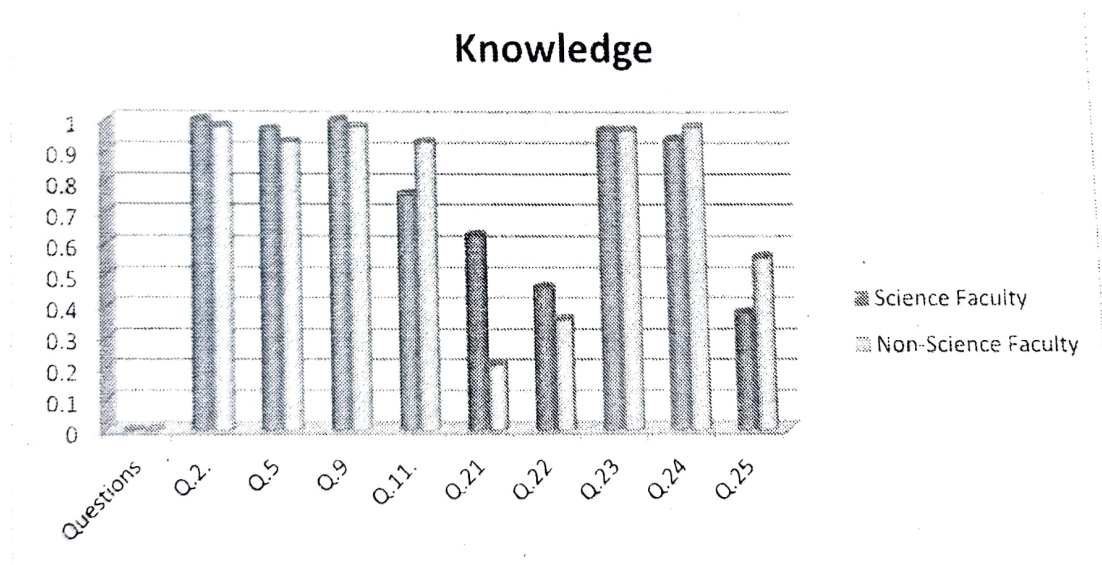


Table-3 and Graph -1 represents the result of the knowledge survey about the COVID -19 among science and non-science faculties. The majority of

participants from science group (100%) and from non-science group (95%) were aware about the prevention techniques of COVID-19. Further in

both the groups that is science groups (94%) and non-science group (98%) were aware that elderly people and those with co-morbidity are affected more by COVID-19. Majority of all the participants in both the groups were aware of hand wash techniques and also about fourteen days observation required for the corona infected.

In all we can say that in the knowledge survey there was negligible difference found in both the sample groups and they were having the correct and required knowledge about COVID-19. So, in overall knowledge survey there was no major difference found in the knowledge about Corona among science and non-science faculty members.

Table: 4 Results of the Attitude Survey

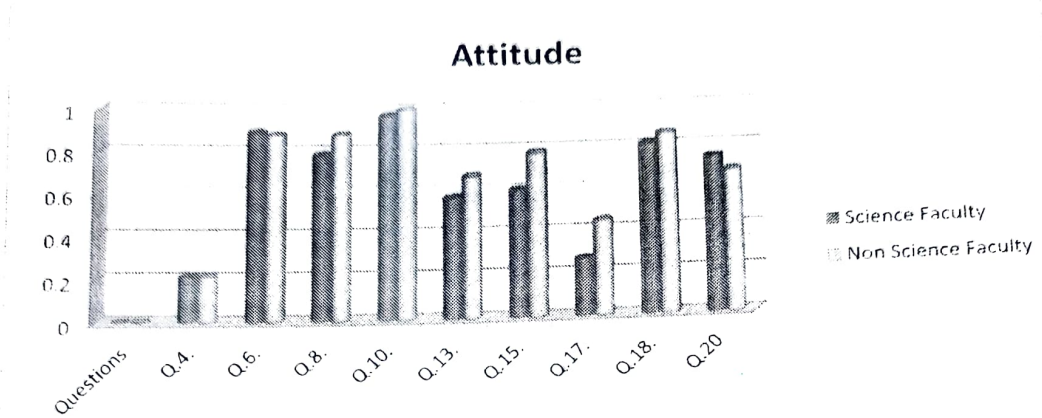
S.No.	Questions	Science Faculty N=36		Non-Science Faculty N=59	
		Yes	No	Yes	No
Q.4	Do you think that COVID 19 is not a pandemic rather it is a marketing strategy of some companies?	21%	79%	21%	79%
Q.6	Do you really feel that we all will survive this pandemic disease?	89%	11%	88%	13%
Q.8	Do you think that lockdown helps us in these situations?	78%	22%	88%	12%
Q.10	Do you feel that SMS (soap, mask, social distancing) can help us from corona?	97%	3%	100%	-
Q.13	Do you believe that COVID-19 is a man (lab) made virus?	57%	43%	67%	33%
Q.15	Do you really think it affected you mentally?	60%	40%	78%	22%
Q.17	Do you think that lighting candles <i>Diyas</i> ; ringing bells/ <i>Thalis</i> had helped us in this pandemic?	27%	73%	45%	55%
Q.18	Do you believe that any person can prevent its spread?	81%	19%	86%	14%
Q.20	Do you think that it will be successfully controlled?	74%	26%	67%	33%

Table - 4 shows the participant's attitude about Corona. In science group 79% were having the belief that this is a pandemic and not a marketing strategy of companies whereas in non- science this percentage was same as 79%. It means that the respondents of both

streams believe that this is a serious pandemic disease.

Maximum participants agreed that lockdown had helped us in this situation in both the groups. Some interesting results were that 57% in

Graph: 2



science group believe that COVID-19 is a manmade virus and in non-science group the percentage was 67%.

Also 27% of participants in science group and 45% participants in non-science group think that lighting candles, diyas and ringing bells/ thalis had helped us in this pandemic.

89% in science faculty group and 88% in non-science faculty group were found to be optimistic and they feel they can easily survive this pandemic disease.

Approximately 90 % of the participants rely on newspapers, and official websites for the information of about COVID-19 among science groups, whereas 80 % of the participants in non-science group rely on TV channels, newspapers, friend circle and colleagues, WhatsApp and social media and all these sources could be the reason of the development of attitude, beliefs in the non-science group.

Table: 5 Results of the Practice Survey

S.No.	Questions	Science Faculty N=36		Non-Science Faculty N=59	
		Yes	No	Yes	No
Q.1	Did the corona disease make you sanitize your hands very frequently?	100%	-	95%	2%
Q.3	Did you maintain the rules of social distance?	100%	-	100%	
Q.7	Do you use Sodium hypochlorite solution for mopping the floor and doors in your house and office?	50%	50%	72%	28%

S.No.	Questions	Science Faculty N=36		Non-Science Faculty N=59	
		Yes	No	Yes	No
Q.12	Did you follow the sneezing etiquettes during this pandemic?	89%	11%	100%	-
Q.14	Did you seriously follow the lockdown?	94%	6%	100%	-
Q.16	Did you avoid visiting the outdoor places?	100%	-	96%	4%
Q.19	Have you ever made an objection to anyone not wearing a mask properly?	94%	6%	97%	3%

Graph: 3

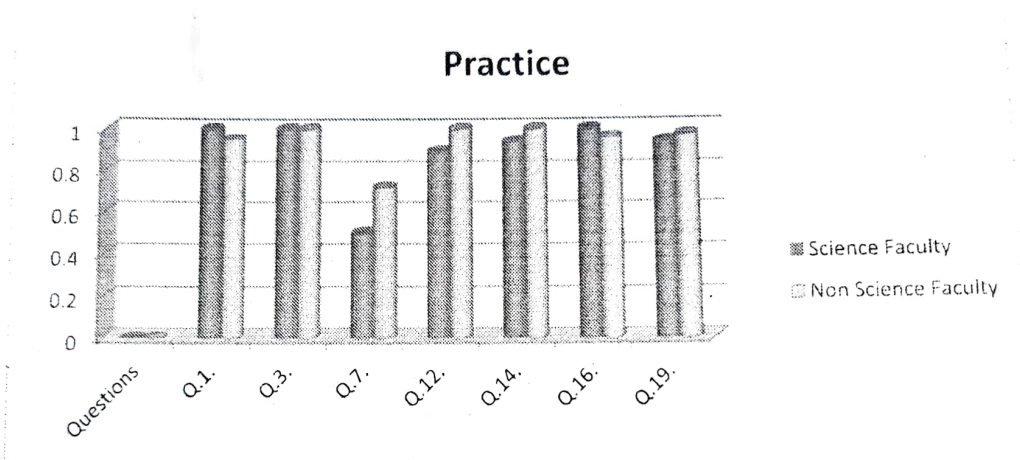


Table - 5 and Graph - 3 show the behaviour and prevention practices of the respondents. As per the responses to the questionnaire, 100 % participants of science faculty sanitize their hands very frequently, maintain the social distance, and also avoided visiting the outdoor places, whereas this percentage was 95%, 100%, and 96%% in non-science faculty group.

It was surprising to know that 89% of science faculty and 100% of non-science faculty follow the sneezing etiquettes during this pandemic, whereas it is a fact that the transmission

of CORONA virus happens maximum by the droplets. The percentage of respondents using the sodium hypochlorite solution for mopping the floor and doors in the house was found to be very low.

Findings of Practice-observation

In a KAP study, it is very difficult to have reliable data through a structured schedule or by a questionnaire so the direct and participatory observation technique was used in this study. All the respondents who filled the questionnaire have already been

observed for about four months regularly at their work place. All the COVID-19 protocols especially type and method of wearing mask, maintaining social distancing and sanitization of hands were checked and observed by the team through a checklist.

It is important to mention here that 96% personnel of Humanities, Social Sciences and Education faculties were following COVID-19 protocol very religiously and also wearing surgical mask or N-95 marks, while in Science faculty this figure stood at 72% and almost half the faculty members and staff were wearing cotton masks there. It means that the responses on practice part filled by the science faculty respondents were not true. Even, 06 (16.66%) faculty members did not wear the mask during the interaction with the research team while they responded to the questionnaire stating that they always wear a mask.

Discussion on responses of questionnaires

COVID-19 is a very new virus which has changed the lives of people across the globe. People's thoughts, perception and attitude about life have changed. Work from home, online office and online teaching-learning and many more new trends came in vogue due to this pandemic. So, this KAP study is required to understand the knowledge, attitude, practices among

higher education faculty members which may affect it directly or indirectly in prevention and intervention. Thus, this study aimed to assess the KAP level of the highly literate population for this new corona disease namely COVID-19.

The first objective of the study was to compare the knowledge, attitude and practice between science and non-science group of university teachers. In the study findings, it was revealed that there was no major difference between the two different samples. This may be due to their work profiles and also the data collection time. This data is collected after lockdown and also after 6 months of the disease; therefore it is likely that all the faculties have gained the knowledge and awareness about the disease. Reason for this being that in the lockdown time people might have gathered knowledge about the disease through the newspapers, TV channels, friends and colleagues, and social media. This is also clarified by 90 percent of the science faculty members and approximately 80 % of the non-science faculty members. In all the three that is knowledge, attitude and practice there was negligible difference found in the percentages of science and non-science faculty members. In KAP both the groups showed almost the similar percentages. Most of the respondents were very much aware about the prevention, clinical symptoms, about quarantine

and also how this disease is spread. Talking about knowledge, a very great effort has been taken by the government at all the levels for spreading and providing the information about COVID-19. Talking about attitude both the groups of faculty members, that is science and non-science, have positive and optimistic approach towards COVID-19. Results of the study show that the participants in both the groups also adopt good and safe practices according to the available knowledge. Maximum respondents in both the groups avoided going to the crowded places, thoroughly wash their hands, and also sanitize their hands very frequently. About 90% respondents take good measures like using mask, sanitizer, hand wash, hot water gargles, and use of kaadha, gloves, and also medicines like Vitamin C to prevent the Corona infection. The respondents also prefer to use the surgical three-layered mask and N-95. All these measures were used by both the science and non-science faculty members groups.

The second objective was to see the gap between knowledge, attitude and practice about Corona, among the university faculties. It was found that there was no such gap found between knowledge, practices and attitude between the two groups. Besides using the survey method, observation method was also used for finding out

how good practices are followed by the participants. And it was found that there was gap among some of the faculty members who were not taking proper precautions like covering of face and nose with mask, maintaining social distancing, and shaking hands.

Conclusion

Although the sample size and area of the study were very small, the following important lessons are useful for policy makers and health administrators

1. Education (especially higher education) does not play decisive role in awareness generation and promoting sense of national duty. In the present study the organization (a State university in Rajasthan) there have been 03 deaths of employees due to Corona, in its administrative office and also 06 employees had lost their family members in the pandemic, but no remarkable change was seen in adopting COVID-19 protocols in the unit even after these casualties. The reason is that no top official is wearing mask in the unit. About 40% respondents say that Corona virus had entered in their family or in friends' circle and by this small sample we can assess the spread of Corona in India. The study also shows the basic nature of human being as being negligent.

2. Training and continuous focus play a significant role in generating awareness and developing the attitude which may lead to the desired practice. In the present study area, it was noticed that overall, 19 personnel were infected by Corona virus (till Oct.10, 2020) in total, and among these 04 personnel were from Social Sciences and Humanities faculties and 15 from Science faculty. All infected personnel have been negligent in adopting COVID-19 protocols. As regards the responses on the question about cotton-made masks, 63 % science faculty said it can be effective for virus too, while only 21% non-science faculty believe that it is effective.
 3. It is clear that scientific temper is essentially not related with the studies of science because the higher spread of COVID-19 in Science faculty is an evidence of routine human negligence.
 4. About 67 % respondents of non-science faculty and 57% of science faculty believe that COVID-19 is a manmade virus. And fact is that nobody has the scientific evidence of lab-made virus. It simply means that popular media and also the forums of new media (Social media like WhatsApp, face book, and twitter) influence our lives up to big extent and common sense is not always found so commonly.
 5. Urban population which is more educated, comparatively richer, considered as highly aware, and having easy access to health facilities was more and severely affected by the pandemic in comparison to its rural counterpart. Further, there is low immunity level in urbanites and densely populated human settlements lead to fast spread of Corona virus in cities.
 6. There is limited preparedness in the country to face natural or manmade disasters and even after continuous efforts by the government the regular increase in Corona cases is not only a serious concern but also a question about the entire education system of the country. Very few citizens of India know that having scientific temper is a fundamental duty.
 7. The study roughly indicates that knowledge does not always decide attitude and attitude may not be totally converted into practice.
- Had we had a sound system of education, firm belief on science and logical social beliefs the situation of COVID-19 could have been far better and under control. The success stories of New Zealand and Hong Kong and some other countries are the examples of utility of scientific temper in holistic human development.

Limitations

The major limitation of this study was that the sample size is confined to the faculties of the State University and its related colleges. The sample used cannot be generalized to all the populations outside the University. As the questionnaires were self-answered by the respondents, there is also a chance of misrepresentations by the respondents. Area of study was limited and sample size was also very small. But with this, more studies can be conducted in various colleges and also with the general population. However, it is clear that, so far as scientific temper and its practices are concerned, we still have a long way to go.

References

1. Jawaharlal Nehru, The Discovery of India, The John Day Company, New York, 1946, p.512.
2. S.K.Kataria, Role of Youth in Developing Scientific Temperament, Souvenir of South Asian Universities Festival, Mohanlal Sukhadia University, Udaipur, 2015, p.6.
3. <https://www.worldometers.info/coronavirus/>
4. <https://www.mohfw.gov.in/StateData>
5. https://en.wikipedia.org/wiki/Scientific_temper
6. <https://indianexpress.com/> dated Oct.09, 2020

