

ANALYZING THE AWARENESS AND CITIZEN'S PERCEPTION ABOUT UTILITY AND CONVENIENCE OF 'AAROGYASETU' MOBILE APPLICATION

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ABSTRACT

The Pandemic that disrupted the socio-economic aspects of mankind was responded by our government proactively by bridging up the gap in adversely affected lives and essential medical support through a moral and technologically simple solution for citizens. 'Aarogyasetu' Mobile Application is one such initiative by the government in terms of social welfare. Through its simplicity of features, ease in usage and benefits provided, the app has influenced citizens positively and is being considered as an aid in fighting the disasters of the pandemic. For installing the App commonly available digital platforms of smart phone operating system software are essential and it uses a base of simple Bluetooth and GPS tracking technologies for its operations. Above all the open minded thought process of citizens which is pro for its acceptance is backed by the convenient use of app on simple day to day used equipment like a mobile phone. The features help individuals to secure their moves and safeguard themselves and their families from infection. This adds to its popularity among common citizens. Researcher here focused on the awareness element along with opinions of citizens pertaining to the utility and convenience dimensions of the app. The app prominently showcases the role of today's technologically equipped world that is ready to face challenges. Little betterment to features will make the app much robust and helpful for the citizens in their struggle against pandemic odds.

Keywords: *Pandemic, Technology, Mobile Application, Citizen, Infection*

INTRODUCTION

The crisis originated at Wuhan, China, leaked out across the boundaries and affected the world in the form of COVID Pandemic and almost every country across the globe initiated an administrative battle backed by medical machinery against it to protect their citizens. Even in India the government came up with a technology based initiative in the form of 'Aarogyasetu' Mobile Application that can be installed on smart phones by citizens. The app has supportive features of tracing and updating the virus infected citizens and informing the rest of the citizens to stay protected. The app also has enhanced in terms of functionality where it provided the symptom information, helped the vaccination registration drives and located hotspots or red zones to alarm citizens timely. Any such app needs infrastructural setup in terms of mobile phone availability, telecom network, internet connectivity and a basic literacy to operate it. In a developing nation like India these things are no more a big challenge. Yet apart from this the biggest need is the psychological acceptance by end users that makes it free from usage barriers. Overruling objections and improvising the feature set for better application and convenience is the key requirement that any such app developer needs to consider at priority. The research titled "Analyzing the Awareness and Citizen's Perception about Utility and Convenience of 'Aarogyasetu' Mobile Application" hence aimed largely at understanding the awareness spread across the citizens and their perceptions being studied with respect to easier and convenient application by common citizens.

OBJECTIVE OF LAUNCHING 'AAROGYASETU' APP

- a) To ensure individuals are safe by rising alert and providing key information about infected persons, areas and hot spot locations.
- b) To ensure individuals are able to take care of their family members through the unique services of tracing and monitoring. Also App provides registration facility for citizens for vaccination.
- c) To enable government to save the citizens from the widely spreading pandemic that has brought down the socio-economic harmony of the nation.

FEATURES OF 'AAROGYASETU' APP

- a) App is compatible with smart phones having Android and iOS covering major number of citizens in India.
- b) App makes use of common technologies like Bluetooth and GPS for tracking and tracing information.
- c) App includes a 'Self Assessment' Test for users based upon their symptoms and a peculiar colour coding scheme to enable users to know their status about safety, potential dangers and high risk chances.
- d) App is controlled by Government and was integrated with CoWin portal enabling citizens to get support for vaccination registration.

PROCESS FOLLOWED BY 'AAROGYASETU' APP

A systematic and simple process is followed by the 'Aarogyasetu' App for its citizen services as-

- Patient / Individual reports at medical laboratory for test.
- Infection Samples are extracted by medical staff.
- Indian Council of Medical Research (ICMR) is updated about the test result in case patient is infected.
- ICMR in turn updates the information to AarogyaSetu
- AarogyaSetutags the patient asCOVID+veandoriginates the contact tracing

ADVANTAGES OF 'AAROGYASETU' APP TO CITIZENS

Some key benefits of the app to citizens include:

- a) App is user friendly and acts as a protective shield for users.
- b) App is useful in spreading awareness and detecting symptoms and infections.
- c) App assists in getting e-pass for travel, provides planning convenience with updated information and aids the vaccination process.
- d. App data through its Application Programming interface (API) can be integrated with digital devices like computers, mobile phones etc. making its application versatile.

CHALLENGES OR LIMITATIONS IN 'AAROGYASETU' APP

Some barriers or limitations of the app include:

- a) App currently has application limited to COVID infections and Pandemic only.
- b) App is criticized of surveillance encroaching citizen's privacy of movements.
- c) App data that is stored with government cannot be controlled by end users and app has no provision of deregistering user.
- d) App works with specific technologies like Bluetooth and GPS and in case of lack of access to these technologies the app may be producing misleading information.

STATEMENT OF PROBLEM UNDER STUDY

The crisis that society faced with the outbreak of COVID pandemic went on growing in leaps and bounds. Indian Government came up with an initiative to secure the society by providing relevant and up to date information pertaining to the spread of the virus infection, its symptoms, major affected areas having these impacted patients and precautions needed by other citizens through a mobile application 'Aarogyasetu'. The app is unique in nature and significantly contributes to the objective of enhancing security of citizens and needs widely being promoted for its exhaustive coverage across the nation protecting the society. Use of these types of apps requires basic technological support and mere literacy about the cause. Researcher under this paper titled "Analyzing the Awareness and Citizen's Perception about Utility and Convenience of 'Aarogyasetu' Mobile Application" thus has attempted to find out the general awareness among citizens about the app and the perception of citizens towards its utility and convenience.

REVIEW OF LITERATURE

Rajan Gupta et al (2020) have meticulously studied the pros and cons related to the 'Aarogyasetu' App and have diligently suggested improvements with respect to security features of the app. Authors have pinpointed the significance of the app in securing the society and have expressed the need for bettering the scope of it for many useful applications.

PrakashBabuKodali et al (2020) highlight the fact that 'Aarogyasetu' app is a timely taken measure by the government to battle against the odds of the pandemic. Authors suggested very appropriately that the inputs collected by a tracking app like the 'Aarogyasetu' helps the

administrators to plan future actions needed to secure the societal welfare. The administrators to ensure the popularity of app need to emphasize on betterment of its features along with convenience being provided to end users.

AkshayDahatonde (2020) has made a point suggesting that the 'Aarogyasetu' app is popular among the young generation of the country as they used it for longer span and the features influenced them positively. Author describes it as the need of hour that innovative ideas need to be implemented for raising the acceptability of the app and the scope can be improvised with additional set of features.

Shweta Devidas Kedare (2020) has rightly opined that the critical issue with the 'Aarogyasetu' app lies in the vulnerability it displays in terms of confidentiality of an individual's personal matters. Author has given a series of measures to safeguard the app from criticism of encroaching the privacy of citizens, and wishes government inculcates these features to make the use of app wider and popular among citizens.

OBJECTIVES OF STUDY

1. To identify the level of awareness among Indian citizens pertaining to the 'Aarogyasetu' App promoted by Indian government for their security in Pandemic situations.
2. To study the utility factor with respect to the features available in the application and analyzing the convenience to its end users.

RESEARCH METHODOLOGY

The primary aim of research was to understand the awareness among citizens about the 'Aarogyasetu' App and citizen's perception about its utility and convenience factors. Thus citizens from different demographic backgrounds were surveyed to register their opinions. The sample size selected was 120 citizens. The structured questionnaire was split in three major sections pertaining to firstly citizen's profile – 9 questions, secondly study of awareness level – 5 questions and finally study of perception about the utility and convenience – 12 statements seeking opinions were asked related to topic under study. Secondary data was collected from research papers and articles presented in conferences, magazines etc. which were relevant to the topic.

The study is aimed to identify the level of awareness among the Indian citizens pertaining to 'AarogyaSetu' App initiated by Indian Government as one of its key measures to spread social message related to staying safe by an individual from corona infections and protecting the society as well. The research also tries to understand the utility of the application and the convenience it provides to the end users which will add to its popularity and success.

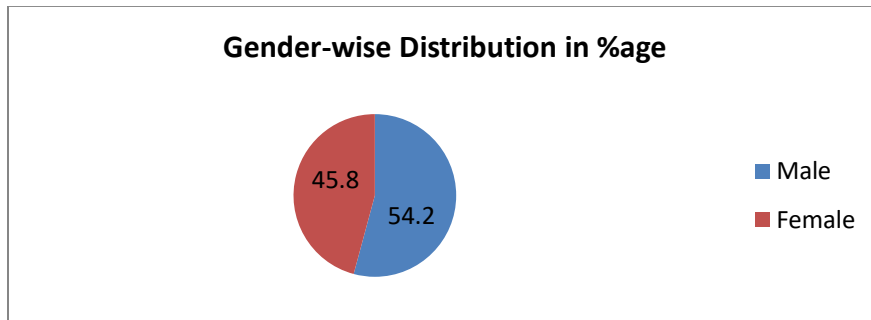
A simple percentage method was used to analyze the collected data.

The major limitations of research include limited sample size as compared to the explicitly large population using the app and the use of preliminary analysis techniques for analyzing the collected data.

PRIMARY DATA ANALYSIS

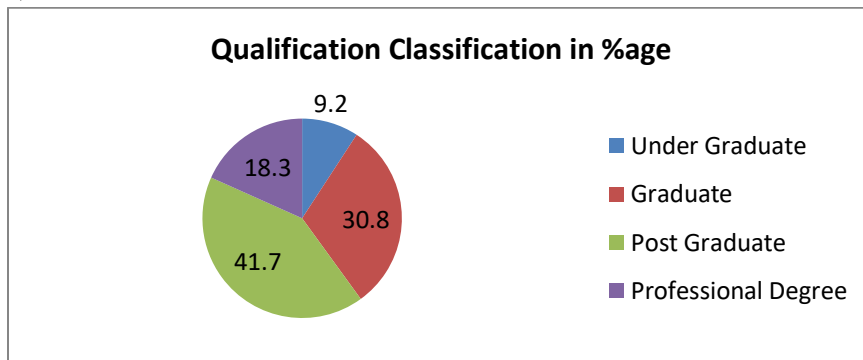
A) Citizen Profile:

a) Gender-wise Classification:



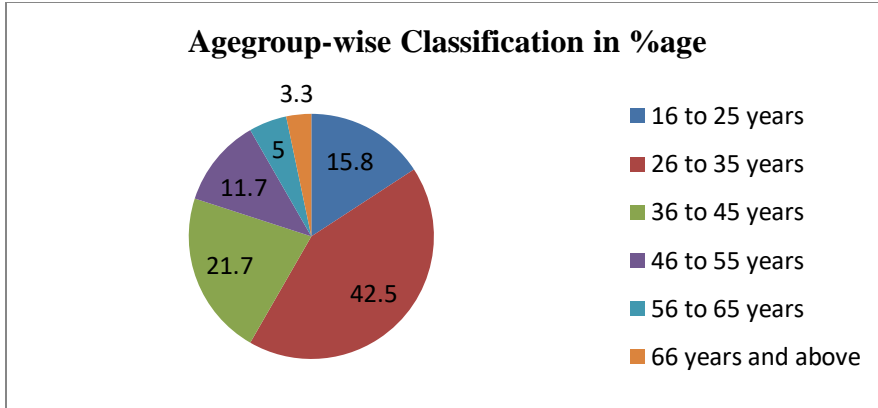
Maximum i.e. 54.2% Male, followed by 45.8% female participated in the study as respondents.

b) Educational Profile:



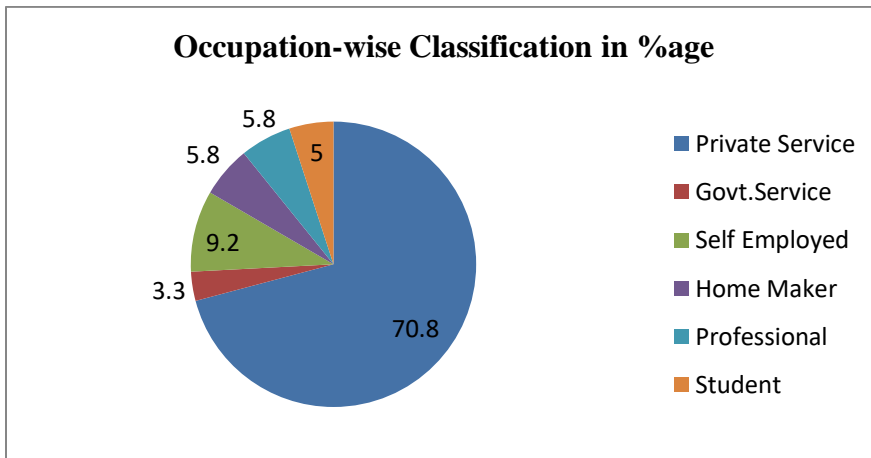
41.7% respondent citizens were Post Graduate followed by 30.8% Graduate respondents.

c) Age Profile:



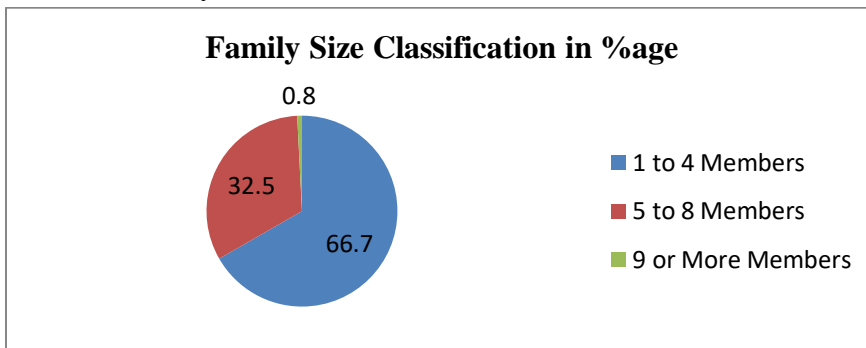
42.5% of total respondents were from age group 26 to 35 years, followed by 21.7 % of them being from 36 to 45 years age group.

d) Occupation Profile:



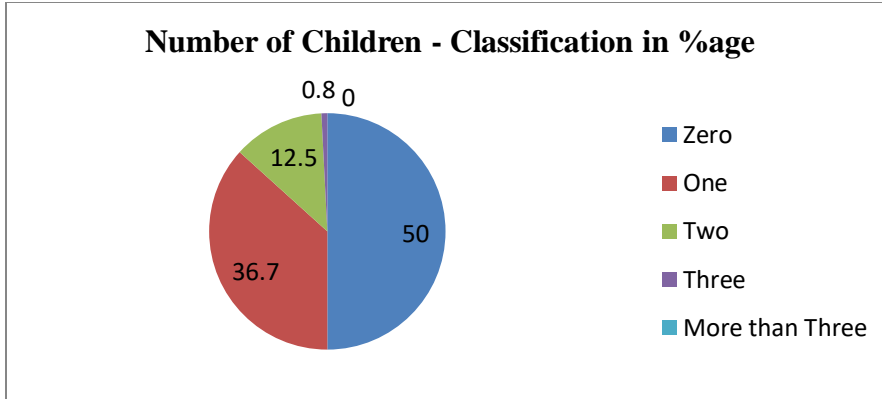
Majority i/e/ 70.8% respondents were from Private Service sector.

e) Size of family:



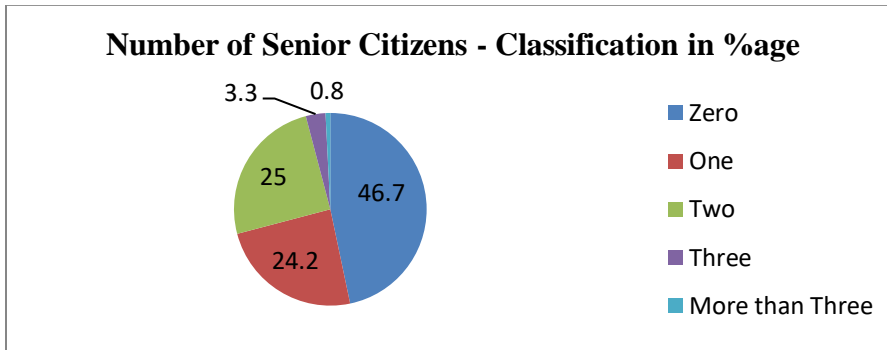
Majority of the respondents i.e. 66.7% reported to have 1 to 4 family members.

f) Number of Children in Family:



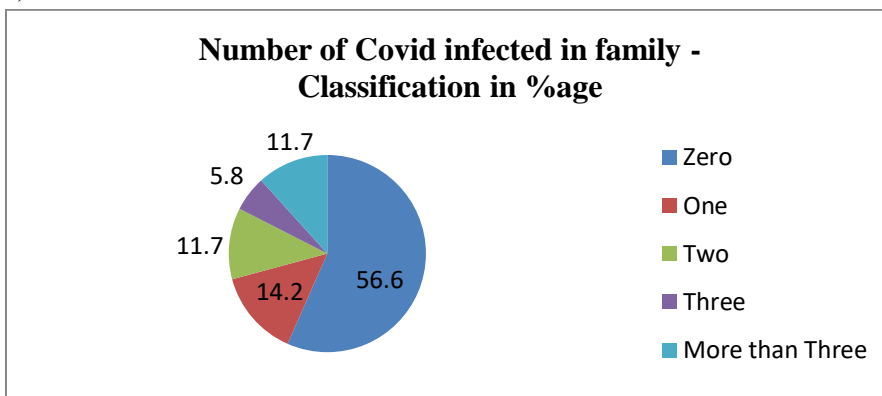
Exactly half i.e. 50% respondents belonged to a family where there were no children while 36.7% of them reported to have one child in the family.

g) Senior Citizens in family:



Nearly half i.e. 46.7% respondents belonged to families having no senior citizens whereas 25% respondents stayed with two senior citizens in family.

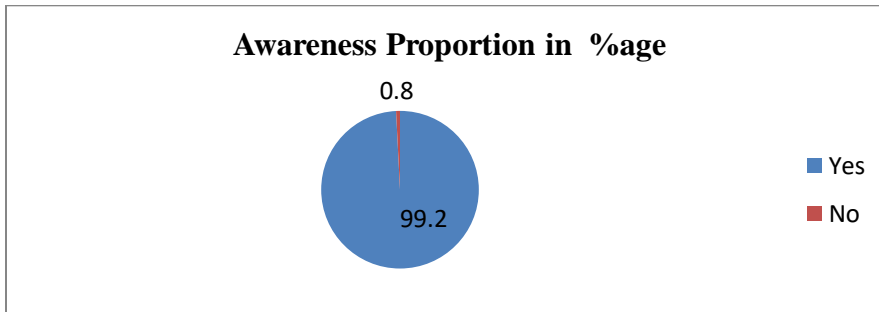
h) COVID Affected families:



56.6% which is maximum, among respondents have reported no patients of corona in family, while 14.2% respondents had one member in family who was detected COVID positive.

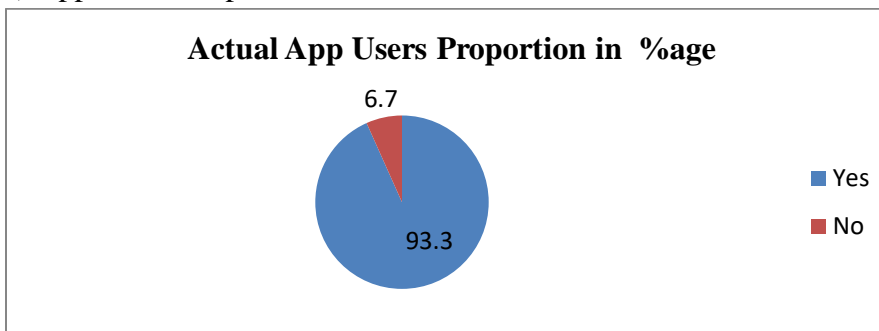
B) App Awareness Status:

a) Awareness Proportion:



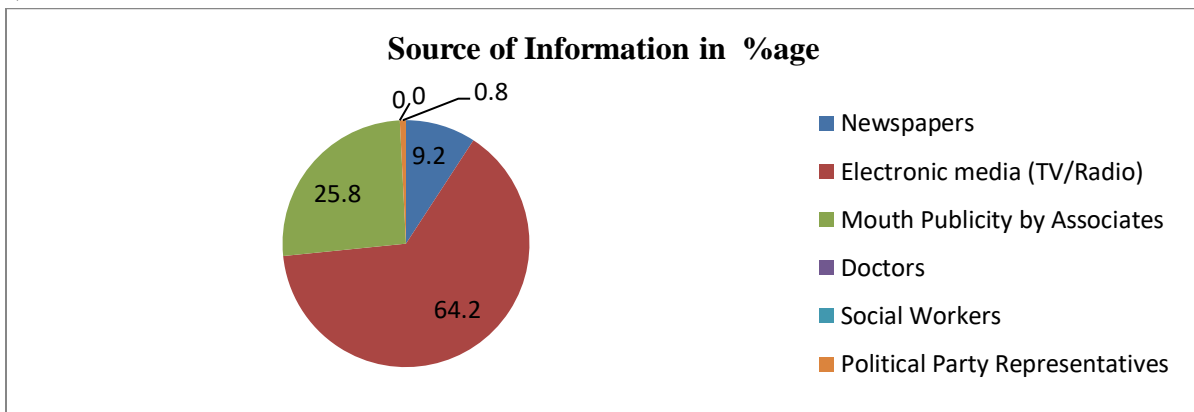
Majority i.e. 99.2% respondents out of total have reported to be aware of the App.

b) App Users Proportion:



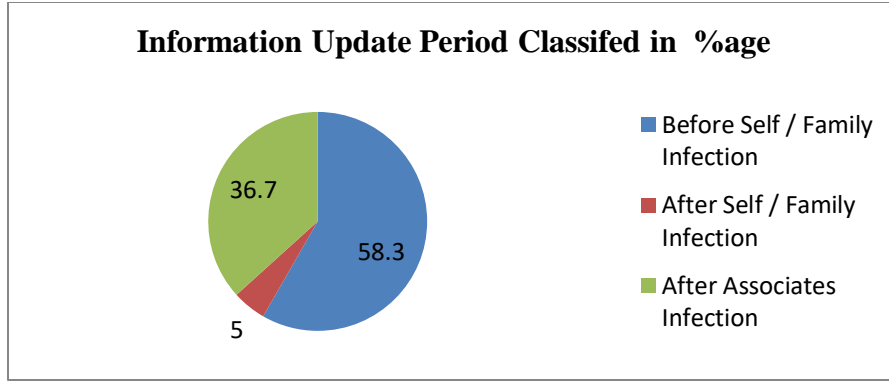
Majority i.e. 93.3% respondents are actually using the app on their smart phone.

c) Information Source:



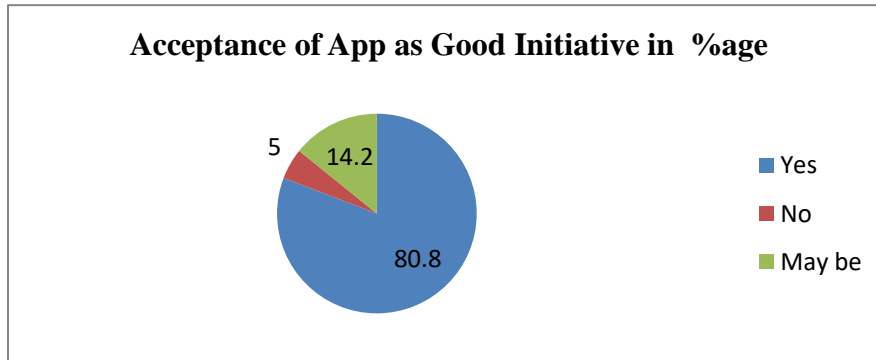
Highest number of respondents i.e. 64.2% have obtained App information first hand from electronic media like Television or Radio followed by 25.8% got the information through mouth publicity.

d) Information Update Period:



Maximum i.e. 58.3% respondents were fortunate enough to get information about the App before they or their family members got affected with COVID.

e) Perception about App:



Majority i.e. 80.8% respondents believe that the App is a good initiative by Government.

C) Perception Study

Perceptions were recorded on a range of scale as under:

1-Strongly Disagree, 2- Disagree, 3- Neutral, 4-Agree and 5- Strongly Agree.

Stmt. No.	Statement for Opinion	% SD	%D	%N	%A	%SA	Highest Response
C1	It seems the popularity of 'Aarogyasetu' app is as people are afraid of the deadly virus.	11.67	12.5	22.50	39.17	14.17	Agree
C2	It seems 'Aarogyasetu' app being like any other smart phone app is simple to download and install.	9.17	5	13.33	40.83	31.67	Agree

C3	It seems 'Aarogyasetu' app comes with a fundamental objective to protect individuals by acting as a tracking and alarming system against the infection.	12.50	8.33	15.83	38.33	25.00	Agree
C4	Apps like "Aarogyasetu" will help citizens monitor their health conditions, surroundings and secure themselves from potential danger of getting infected.	11.67	8.33	21.67	35.00	23.33	Agree
C5	Apps like 'Aarogyasetu' are initiatives for assisting citizens from the government end without any economic burden on them.	11.67	5.00	25.00	37.50	20.83	Agree
C6	Popularity of 'Aarogyasetu' app lies in its user friendliness and ease of usage.	10.83	10.83	25.00	34.17	19.17	Agree
C7	'Aarogyasetu' app is useful to plan your location movements by tracking virus affected hotspots or potential threat areas for infection.	7.50	15.83	20.00	35.00	21.67	Agree
C8	'Aarogyasetu' app helps spreading awareness about corona infection symptoms thus alarming an individual about his personal and family members health conditions.	8.33	11.67	23.33	39.17	17.50	Agree
C9	'Aarogyasetu' app alike to other mobile apps is heavily dependent on Internet connectivity thus limiting its usage in general public.	9.17	11.67	32.50	36.67	10.00	Agree
C10	The 'Aarogyasetu' app is playing a significant role in tracking the vaccination of citizens by providing useful information to them timely.	15.00	5.83	16.67	41.67	20.83	Agree
C11	Scope of 'Aarogyasetu' app can be extended far beyond the current usage of tracking and updating corona infected citizen data.	8.33	7.50	29.17	33.33	21.67	Agree
C12	The 'Aarogyasetu' app is encroaching privacy of citizens by tracking their public movements.	14.17	24.17	32.50	17.50	11.67	Neutral

Key Interpretations

C1. Highest i.e. **39.17%** respondents **Agreed** that people are scared of the deadly corona virus and hence wish to use 'Aarogyasetu' app for security.

C2. Maximum i.e. **40.83%** respondents **Agreed** that being a smart phone app like others, 'Aarogyasetu' app too is simple to download and use.

C3. Maximum i.e. **38.33%** respondents **Agreed** that 'Aarogyasetu' app helps by tracking and warning against the virus infections.

C4. Highest number of respondents i.e. **35%** **Agreed** that 'Aarogyasetu' App is useful in monitoring health and surroundings to prevent infection danger.

C5. Most of the respondents i.e. **37.50%** **Agreed** to the fact that 'Aarogyasetu' App is a government initiative helpful to citizens without economic burden.

C6. Highest i.e. **34.17 %** respondents **Agreed** that 'Aarogyasetu' App is user friendly and easy to use.

C7. Maximum respondents i.e. **35%** have **Agreed** that 'Aarogyasetu' App is a good aid to track hotspots and virus infected locations so as to assist travel plans and moves.

C8. Highest i.e. **39.17%** respondents **Agreed** that 'Aarogyasetu' App is helpful for spreading awareness and symptom related information to citizens.

C9. Maximum i.e. **36.67%** respondents **Agreed** that a major limitation to 'Aarogyasetu' App is its dependence on Internet connectivity.

C10. Highest respondents i.e. **41.67%** have **Agreed** that 'Aarogyasetu' App has a significant role in tracking citizen infection and vaccination data.

C11. Maximum i.e. **33.33%** respondents **Agreed** to the fact that scope of 'Aarogyasetu' App can be further intensified beyond corona infection tracking.

C12. Highest numbers of respondents i.e. 32.50% have preferred to stay **Neutral**, followed by **24.17%** respondents who **Disagreed** to 'Aarogyasetu' App to encroach their privacy.

CONCLUSION

With the widespread awareness and popularity of the 'Aarogyasetu' App the responsibility of government increases towards serving the society and caring the citizens for their safety and security while keeping in mind the fact that it is the user friendliness and features that makes any app more usable and so focus should be on enhancement of such technologies. On a positive note maximum of citizens are making use of the app and this can help government to reach far better levels of citizen welfare. The app can be an ideal example of how latest technology can be part of a common man's life thus enabling the good governance for administrators. Thus despite few challenges pertaining to internet connectivity infrastructure and confidentiality concerns, those could be eradicated with due care the 'Aarogyasetu' App seems to be a most successful venture by Indian government.

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