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#### AB Dhola

Ph.D., Scholar, Department of Agriculture Extension and Communication, CPCA, SDAU, Gujarat, India

#### RD Pandya

Retired Principle and Dean, NMCA, NAU, Gujarat, India

#### RB Rathod

Ph.D., Scholar, Department of Agriculture Extension and Communication, COA, JAU, Gujarat, India

#### VG Tala

Ph.D., Scholar, Department of Agriculture Extension and Communication, CPCA, SDAU, Gujarat, India

#### Corresponding Author:

#### AB Dhola

Ph.D., Scholar, Department of Agriculture Extension and Communication, CPCA, SDAU, Gujarat, India

## Relationship between profiles of the respondents with need perceived by the respondents about mobile phone

AB Dhola, RD Pandya, RB Rathod and VG Tala

### Abstract

The key area of agriculture that focuses on the empowerment of agricultural and rural development in India is telecommunications. Which into account ICT's (Information and Communication Technologies) utilization in rural areas. The term "ICT" refers to a variety of electronic and print media including mobile phones, internet, telephone, computer, radio and television. Mobile phone has given a new way of thinking and approach to farmers for making their own decision. So, in light of the significance of mobile phones, a study was carried out to know the relationship between profile of mobile phone owners and need perceived by respondents about mobile phone. The study was conducted in three districts (Surat, Navsari and Valsad) of South Gujarat. A simple randomly technique of lottery method was used to get 2 talukas each from all three districts. Out of 6 talukas, 25 respondents from each were selected randomly. Thus, 150 respondents were obtained for the present study. Out of the fifteen variables, gender, education, size of family, land holding, annual income, social participation, economic motivation, scientific orientation, innovative proneness, source of information, extension participation and group cohesiveness were found positive and significantly correlated with need perceived by farmers.

**Keywords:** Mobile phone, ICT, need perceived, knowledge, relationship

### 1. Introduction

Mobile phone is one of the major tools and sources for communication around the world, which rely on 3G/4G/5G mobile technology. It has immensely penetrated every field of life like education, business, commerce, and agriculture in the current age. Coverage of mobile phone and subscription were expanded day by day in developing countries. It was estimated that 80% of the population lives in the range of mobile phone networks. In this scenario, the mobile phone has shown great potential to facilitate communication by enabling the smooth exchange of knowledge between the various stakeholders in agriculture. A need is something that is necessary for a human to carry out desired activity in their life. However, one has to know how to distinguish from the wants. Knowledge is a body of understood information possessed by an individual that helps to adopt innovations very easily. Thus, here investigator has tried to find out the knowledge of respondents regarding mobile phones and then he explores the present study on the "Relationship between profile of mobile phone owners and need perceived by the respondents about mobile phone" with the following objectives.

### 2. Objectives

1. To study the profile of mobile phone owners
2. To ascertain the relationship between profile of mobile phone owners and need perceived by respondents about mobile phone

### 3. Methodology

Present study was conducted in three districts (Surat, Navsari and Valsad) of South Gujarat. A simple randomly technique of lottery method was used to get 2 talukas each from all three districts. Out of 6 talukas, 25 respondents from each were selected randomly. Thus, 150 respondents were obtained for the present study. The farmers of mobile phone owners were the respondents for the study. The name and mobile numbers were obtained from the record of KVK of respective district. Taluka wise classification was made on their reciprocation with KVK. An ex-post-facto research design was applied. Objective wise structural schedule was prepared and for data collection a personal contact method was followed.

## 4. Results and Discussion

### A. Profile of mobile phone owners

On the basis of extensive review of literature and discussions with the experts, some important personal, economic, social and psychological characters have been selected in the present study. The data of these characteristics were analyzed and presented in the table 1 with an object to draw a general picture of the respondents having mobile phone.

Table 1 depicted that more than half (55.34%) of the respondents belonged to middle age categories. The probable

reason might be that the parental occupation must have been shouldered by middle age group farmers and they have had considered the importance of mobile phone in their enterprise. Overwhelming majority (92.67%) of the respondents were male. This infers that the male were more active than women in agriculture. Most of the respondents (89.33%) had primary to secondary level of education. It is obvious from the results that the respondents as experienced / understood the significance of education as the means for improvement of overall living standard.

**Table 1:** Distribution of mobile phone owners according to their personal profile (n = 150)

Personal profile	Category	No.	Percent
Age	Young age	32	21.33
	Middle age	83	55.34
	Old age	35	23.33
Gender	Male	139	92.67
	Female	11	07.33
Education	Primary level	68	45.33
	Secondary level	66	44.00
	College and above level	16	10.67
Size of family	Small	58	38.67
	Medium	77	51.33
	Big	15	10.00
Land holding	Small land holding	46	30.67
	Medium land holding	80	53.33
	Large land holding	24	16.00
Occupation	Farming	122	81.33
	Farming + Other	28	18.67
Annual income	Lower annual income	13	08.67
	Medium annual income	97	64.66
	Higher annual income	40	26.67
Social participation	No membership	11	07.33
	Membership in one organization	63	42.00
	Membership in more than one organization	69	46.00
	Holding position in organization	07	04.67
Farming experience	Very low farming experience	02	01.33
	Low farming experience	32	21.33
	Medium farming experience	66	44.00
	High farming experience	37	24.67
	Very high farming experience	13	08.67
Personal profile	Category	No.	Percent
Economic motivation	Lower level of economic motivation	22	14.67
	Moderate level of economic motivation	105	70.00
	Higher level of economic motivation	23	15.33
Scientific orientation	Lower scientific orientation	26	17.33
	Moderate scientific orientation	100	66.67
	Higher scientific orientation	24	16.00
Innovative proneness	Low innovative proneness	22	14.67
	Moderate innovative proneness	106	70.66
	High innovative proneness	22	14.67
Source of information	Hardly assess the source information	19	12.67
	Frequently assess the source information	102	68.00
	Regularly assess the source information	29	19.33
Extension participation	Very low	39	26.00
	Low	48	32.00
	Moderate	25	16.67
	High	21	14.00
	Very High	17	11.33
Group cohesiveness	Poor cohesiveness	16	10.67
	Moderate cohesiveness	99	66.00
	Higher cohesiveness	35	23.33

Further, Slightly more than three-fifths (61.33%) of the respondents had medium to large family size. This infers that they might be believed in joint family tradition. The 84.00%

of the respondents had small to medium size of land holding. It might be due to divisions of land because of farmers living in separate family system. Whereas, 81.33% of the

respondents were belonged to farming category. The farmers of study area might have large family hence they have had only farming as an occupation. Less than two-thirds (64.66%) of the respondents were having their annual income between ₹ 50,001 to ₹ 1,00,000. The probable reason for low to medium annual income might be due to limited scope of diversification in their crops and market price fluctuations. In this situation the significance of mobile phone might be enormous. Majority (88.00%) of the respondents had membership in one and more than one organization. The probable reason might be that the farmers have felt village organizations as an important service provider and social contact-oriented hub due to existence of wide network of co-operative structures. More than two-thirds (68.67%) of the respondents had medium to high level of farming experience. This might be due to their higher dependency on farming occupation. Great majority (85.33%) of the respondents belonged to moderate to higher level of economic motivation categories. It could be due to the aspiration for higher returns from farming to have a better standard of living. For the purpose, the farmers were utilizing mobile phone to get real-time pricing information which helps farmers decide whether to sell, to hold and identify proper marketplace. Majority (84.00%) of the respondents belonged to moderate to lower level of scientific orientation. The reason for above finding might be that most of the farmers had belief in science and God at the same time. Another majority (85.33%) of the respondents had moderate to high level of innovative proneness. This might be due to their frequent contact with extension personals and scientists of Navsari Agricultural University to seek new innovations for their farming. The necessity and demand in the process of farming to have practical and feasible changes in various agronomical operations as well as human nature to get maximum profit might have made them with such mentality. Most (87.33%) of the respondents had regularly and frequently assessing the source of information. This might be due to availability of mobile phone. Two-fourths (41.90%) of the respondents were ranging from moderate to very high level of extension participation categories. It infers that the farmers might be not prone and aware about to advance functions of their mobile. While, overwhelming majority (89.33%) of the respondents were ranging in between moderate to higher level of group cohesiveness categories. It infers that the farmers might have good social participation and understood the advantage of group. Moreover, they might have developed WhatsApp groups for the specific purpose.

### B. Need perceived by respondents about mobile phone

A need is something that is necessary for a human to carry out desired activity in their life. However, one has to have knowledge about how to distinguish from the wants. With this understanding, the investigator has tried to know the knowledge about mobile phone.

### I. Knowledge about mobile phone

Knowledge is a body of understood information possessed by

an individual which helps to adopt new innovations very easily. The data in regards and categorized as; (i) very low (upto 2.6 score), (ii) low (2.7 to 5.2 score), (iii) moderate (5.3 to 7.8 score), (iv) high (7.9 to 10.4 score) and (v) very high (above 10.4 score).

Table 2 indicates that 41.33% of the respondents had high level of knowledge about mobile phone, followed by 40.00% of them had very high level of knowledge, 12.00% had moderate level of knowledge and 6.67% had low level of knowledge. However, not a single respondent was found in the category of very low level of knowledge about mobile phone.

**Table 2:** Distribution of respondents according to knowledge about mobile phone (n = 150)

Sr.	Categories	Frequency	Percentage
1.	Low level of knowledge	10	06.67
2.	Moderate level of knowledge	18	12.00
3.	High level of knowledge	62	41.33
4.	Very high level of knowledge	60	40.00
Total		150	100.00

It can be concluded that majority (93.33%) of the respondents had moderate to very high level of knowledge about mobile phone. The scientific orientation, extension participation and regularly to frequently assess the source of information might have influence on level of knowledge about mobile phone.

### II. Need perceived by farmers about mobile phone

Need perceived by farmers about mobile phone were collected through statements and questions. The data in regarding need perceived by the farmers about mobile phone was collected and categorized as; (i) perceived lower need (upto 10 score), (ii) perceived moderate need (11 to 14 score) and (iii) perceived highly need (above 14 score). The data are presented in table 3.

**Table 3:** Distribution of respondents according to need perceived by farmers about mobile phone (n = 150)

Sr.	Categories	Frequency	Percentage
1.	Perceived lower need	10	06.67
2.	Perceived moderate need	52	34.66
3.	Perceived higher need	88	58.67
Total		150	100.00

It is observed from the table 3 that nearly two-third (58.67%) of respondent's perceived higher need, followed by 34.66 and 6.67% of them had perceived moderate and lower need, respectively.

### C. Relationship between profile of the respondents and need perceived by them about mobile phone

The data manifested in table 4 and fig. 1 revealed that the occupation (0.1216) and farming experience (0.0539) were having non-significant correlation with need perceived by farmers about mobile phone.

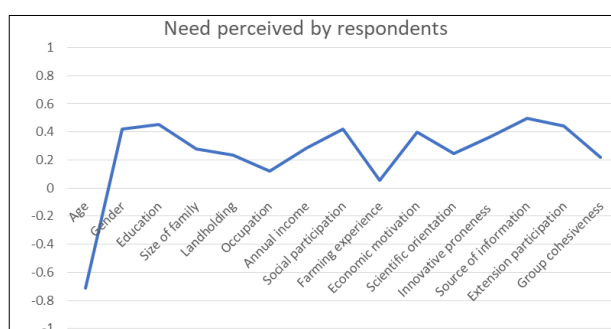
**Table 4:** Relationship between profile of the respondents with need perceived, type of information, use of mobile phone and attitude towards mobile phone (n = 150)

Sr.	Independent variable	Need perceived
1.	Age	-0.7094**
2.	Gender	0.4216**

3.	Education	0.4545**
4.	Size of family	0.2801**
5.	Land holding	0.2363**
6.	Occupation	0.1216 <sup>NS</sup>
7.	Annual income	0.2822**
8.	Social participation	0.4184**
9.	Farming experience	0.0539 <sup>NS</sup>
10.	Economic motivation	0.3991**
11.	Scientific orientation	0.2482**
12.	Innovative proneness	0.3664**
13.	Source of information	0.4954**
14.	Extension participation	0.4441**
15.	Group cohesiveness	0.2208**

(NS: Non-significant, \*Significant at 0.05 level of probability, \*\*Significant at 0.01 level of probability)

Same table also shows that the age (-0.7094\*\*) was found negatively highly significant correlation with need perceived by farmers about mobile phone.



**Fig 1:** Relationship between profile of respondents and need perceived by them

Further, table indicates that the gender (0.4216\*\*), education (0.4545\*\*), size of family (0.2801\*\*), land holding (0.2363\*\*), annual income (0.2822\*\*), social participation (0.4184\*\*), economic motivation (0.3991\*\*), scientific orientation (0.2482\*\*), innovative proneness (0.3664\*\*), source of information (0.4954\*\*), extension participation (0.4441\*\*) and group cohesiveness (0.2208\*\*) found positive and significantly correlated with need perceived by farmers.

## 5. Conclusion

Above results inferred that the gender, education, size of family, land holding, annual income, social participation, economic motivation, scientific orientation, innovative proneness, source of information, extension participation and group cohesiveness of respondents plays significant role in the need perceived by them about mobile phone. The age variable of mobile owners was negative and highly significant which infers that the respondents were understood the importance and role of mobile phone in present scenario.

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