

BASIC AGRICULTURAL AWARENESS AMONG RURAL ADOLESCENT BOYS

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ABSTRACT

The study was conducted to assess the existing knowledge of adolescent boys on agriculture along with some background characteristics. Two hundred boys from two different government schools of Gundi (with agricultural education) and Koth (no agricultural education) village of Dholka taluka were administered a questionnaire comprising questions related to agricultural aspects. Based on the findings of this study, the conclusion was drawn as the students studying agricultural education programme have medium level of knowledge about agriculture and the adaptability was higher in that students compared to those students who were studying in schools where there is no agriculture education. The intervention gave positive results on the knowledge level of respondents. More emphasis should be given by organizing intervention programme to those area of agriculture where the students had less knowledge for improving the knowledge level of youngsters.

Keywords : Agricultural awareness, Intervention, Rural adolescent

INTRODUCTION

The knowledge and perception of agriculture held by students and adults, often referred to as agricultural literacy, has received increasing emphasis in the literature. The need for agricultural literacy is evident when examining the changes that have occurred in agriculture in the India (Shafi *et al.*, 2021). The consuming public has little knowledge of where and how food is produced and consumer groups are raising questions about the safety of the food supply. (National Research Council, 1988)

Others (Mayer & Mayer *et al.*, 1974, Mawby, 1984, Nipp, 1988 and National Research Council, 1988) have cited the importance of agriculture and the need for the public to be informed. The value of literacy is important because, "People make sense of literacy as a social phenomenon, literacy lies at the root of their attitudes and their actions" (Barton, 1990). The pre secondary agricultural education programme can build a positive leader (Townsend, 1990). If you give younger students pre-secondary agriculture that you can develop a positive association with agriculture (Perritt and Morton, 1990). "The younger you start them the better they will become", implying we should be incorporating agricultural literacy concepts into the curriculum early in the educational process. Kuempel and Spivey, (1991) agreed with the concept of improving perceptions of agriculture programmes by introducing agriculture classes to pre-secondary students and incorporating agriculture into academic courses.

Horn and Vining, (1986) used a 45-item instrument to collect data about the basic agricultural knowledge possessed

by public school students in Kansas. They reported that fewer than 30 percent of the students correctly responded to "basic" questions. Similar findings were reported in a study of students from Virginia (Bowers & Kohl, 1986) and Oklahoma (Williams & White, 1991). Brown, (1991) found a positive change in both knowledge and perceptions about agriculture after middle school students in Missouri had received six to eighteen weeks of related instruction. Humphrey, (1992) studied the knowledge level and perceptions about agriculture of elementary education student teachers at the University of Missouri and found that their knowledge and perception scores were positive but varied widely. Brown and Humphrey reported a weak relationship between knowledge and perception scores.

It is logical to assume that students enrolled in agriculture courses have increased levels of literacy about agriculture. Data were not found to support this assumption or to document the contribution, if any, of the impact of local programs of agriculture on the perceptions about agriculture of students not enrolled in the program.

OBJECTIVES

- (1) To study the socio-economic status of adolescent boys
- (2) To study the awareness of adolescent boys regarding agricultural aspects
- (3) To study the impact of agricultural awareness interventions regarding the agricultural aspects of the adolescent boys

METHODOLOGY

Students of two different schools resides in Gundi and Koth village of Dholka taluka were selected. Total 200 students (100 boys from each school) were selected as respondents for assessing agricultural knowledge. The respondents were administered a questionnaire comprising questions associated with the background characteristics of the respondent and with eight sections of agriculture such as awareness regarding agriculture university, Seasonal crop cultivation, Major crops, Fertilizer, Plant protection, Animal husbandry, Farming equipment and general agricultural information. A pretest-posttest design was used for the study with intervention for a specific period.

The secondary and higher secondary government schools located within villages were selected, out of which the adolescent boys between the age group of 13 to 17 years from each school were selected. A pretest was conducted on the boys for knowing their general awareness skills and based

on their responses an intervention package was developed. This information, as a part of intervention was given to the boys. Post testing was done after two weeks to see the effects of intervention. Intervention in the areas of general awareness was provided to the boys in the schools. The information was given through lectures and discussions. The data were then statistically analyzed to see the effect of intervention on boy’s agricultural awareness.

RESULTS AND DISCUSSION

Table 1 showed the background characteristics of selected adolescent boys. Data revealed that more than fifty percent of boys were from nuclear family. 64% boys were belonging to farmers family and 50% respondents had animals at their home. 32% respondents had farming equipment. Majority of the respondents had higher level of mass media exposure which was an encouraging scope for them together information.

Table 1: Distribution of respondents according to their background characteristics

Sr. No	Background characteristics	Respondents		
		School 1 (Agril. Subject)	School 2 (No Subject)	Total
		n =100	n = 100	n = 200 f (%)
1	Family type			
a	Joint	46	47	93 (46.5%)
b	Nuclear	54	53	107 (53.5%)
2	No. of Family Member			
a	≤5	58	56	114 (57.0 %)
b	>5	42	44	86 (43.0%)
3	Having farm	69	59	128 (64.0%)
4	Having Animal	49	52	101 (50.5%)
5	Having farming Equipment	28	36	64 (32.0%)
6	Use of Mass Media			
a	Radio	48	50	98 (49.0%)
b	Television	78	85	163 (81.5%)
c	News paper	76	77	153 (76.5%)
d	Internet	68	79	147 (73.5%)
e	Mobile	87	95	182 (91.0%)
f	Krushhi Mela	60	61	121 (60.5%)
g	Agril. Exhibition	57	50	107 (53.5%)
h	Agril. Literature	55	48	103 (51.5%)

The data in Table 2 revealed that there was significant difference in knowledge about all the aspects related to agricultural aspects between pre and post intervention, as t

test found to be significant in all the cases at 0.01 level of significance.

Table 2: Comparison of pre and post intervention data of agricultural aspects

(n=200)

Sr. No.	Agricultural aspects	Mean		SEM	t-test
		Pre	Post		
1	Agricultural University	3.75 ±0.934	58.50 ±2.655	2.759	-19.843**
2	Seasonal Crops cultivation	59.33 ±2.706	97.33 ±0.683	2.663	-14.268**
3	Major Crops	59.31 ±2.186	96.375 ±0.695	2.207	-16.793**
4	Fertilizer	20.13 ±1.715	77.63 ±1.977	2.351	-24.457**
5	Plant Protection	2.666 ±0.863	50.833 ±3.053	3.132	-15.378**
6	Animal Husbandry	46.823 ±1.646	81.294 ±1.126	1.456	-23.667**
7	Farming Equipment	44.30 ±2.373	81.85 ±1.525	1.894	-19.831**
8	General Agriculture information	33.00 ±2.018	76.91 ±1.932	2.002	-21.938**
Overall		41.23 ±1.344	81.22 ±0.871	1.123	-35.585**

**p<0.001, Highly Significant

Table 3: Distribution of respondents according to their agricultural knowledge level on different sections of agriculture

(n=200)

Sr. No.	Agricultural Aspects	Knowledge level									
		Very Low		Low		Medium		High		Very High	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	Agricultural University	92.5	21	0	0	7.5	41	0	0	0	38
2	Seasonal Crops cultivation	21	0	16	0.5	0	0	27	7	36.5	92.5
3	Major Crops	15	0	13.5	0.5	12	1.5	31	6.5	28.5	92.5
4	Fertilizer	94	33.5	5	18	0	0	0	11	1	37.5
5	Plant Protection	94	33.5	5	18	0	0	0	11	1	37.5
6	Animal Husbandary	16	0.5	14.5	1.5	40	9	25	25.5	4.5	63.5
7	Farming Equipments	42.5	6.5	21	8	16.5	8	10	10.5	10	67
8	General Agriculture information	42.5	6.5	21	8	16.5	8	10	10.5	10	67
Overall		14	0	33	1	39	7	14	31	0	61

Table 3 comprised about the distribution of respondents according to their agricultural knowledge level in different sections of agriculture. Data revealed that majority of the respondents had very low to medium level of knowledge regarding agriculture and it was increased to high to very high level after intervention.

CONCLUSION

Based on the findings of this study, the conclusion was drawn as the students studying agricultural education

programme have medium level of knowledge about agriculture and the adaptability was higher in that students compared to those students who were studying in schools where there is no agriculture education. The intervention gave positive results on the knowledge level of respondents.

On the bases of findings following recommendations can be made. More emphasis should be given by organizing intervention programme to those area of agriculture where the students had less knowledge for improving the knowledge level of youngsters.

RECOMMENDATION

A positive knowledge of and perception about agriculture has been suggested as a prerequisite to the development of good policy decisions related to agriculture. More emphasis should be given by organizing intervention programme to those area of agriculture where the students had less knowledge for improving the knowledge level of youngsters.

CONFLICT OF INTEREST

The authors of the paper declare no conflict of interest

REFERENCES

- Barton, D. (1990) Developing a practice account of literacy from adult learner's perceptions of literacy and learning, Paper presented at the World Congress of Applied Linguistics, Thessaloniki, Greece, April 15-21, 1990 (ERIC Document Reproduction Service No. ED 325-811)
- Bowers, G.A. and Kohl, D.M. (1986) A study of 244 fourth grade teachers in Virginia for application to agriculture in the classroom. Report prepared for an honors seminar, Virginia Polytechnic Institute and State University, Blacksburg.
- Brown, W. B. (1991) The effectiveness of instruction about agriculture in the middle school. Doctoral dissertation, University of Missouri- Columbia.
- Horn, J. and Vining, B. (1986) An assessment of students' knowledge of agriculture. Manhattan, Kansas: Centre for Extended Services and Studies, College of Education, Kansas State University.
- Humphrey, J. K. (1992) Preservice elementary education majors knowledge of agriculture. Doctoral dissertation, University of Missouri Columbia.
- Kuempel, D. and Spivey, W., Jr. (1991) What a bean can do for you, *The Agricultural Education Magazine*, 63(1);16-17
- Mawby, R.G. (1984). Agricultural colleges must take the lead in ending ignorance about farming. *The Chronicle of Higher Education*, p; 72.
- Mayer, A. and Mayer, J. (1974) Agriculture, the island empire. *Daedalus*, m (3): 83-95.
- National Research Education in secondary schools (1988) Understanding agriculture: New directions for education, Washington, DC: National Academy Press.
- Nipp, T. L. (1988) Congress and the future of agricultural research, extension, and education. *Journal of Agricultural Production*, 1 (3); 187- 189.
- Perritt, D. and Morton, D. (1990) Pre-secondary agriculture: Preparing for the future, *The Agriculture Education Magazine*, 63(1); 14015
- Shafi, Mahammad R. Sk., Chauhan, N. B. and Vinaya Kumar H. M. (2021) Responsible factors to encourage dairy farmers' sons to avail training on animal husbandry. *Guj. J. Ext. Edu.* 32(1):202-205.
- Townsend, J. (1990) Pre secondary agricultural education, *The Agricultural Education Magazine*, 63(1); 6
- Williams. G. and White. J. D. (1991) Agricultural literacy in agriculture's heartland. *The Agricultural Education Magazine*, Q (8); 9- 10.

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