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**Shaping Future Agriculturalists: Does Agricultural Literacy and Demographic
Background Influence Student Views about Farm Policy?**

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Shaping Future Agriculturalists: Does Agricultural Literacy and Demographic Background
Influence Student Views about Farm Policy?

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Abstract

US food and agricultural policy can be a sensitive subject among numerous constituencies. Since university agricultural students may eventually become a part of these groups, does the level of agricultural literacy and personal backgrounds influence students' views of agricultural policy? The Food and Fiber System Literacy instrument and the Consumer Preferences for Farm Policy and the USDA Budget survey were administered to students enrolled in Introduction to Professional Leadership Skills (Intro) and in Agriculture and Government Programs (Policy) at Sam Houston State University (SHSU). A student's one-tailed t-test variances compared agricultural literacy between students in the two courses. Results indicated students enrolled in Policy were significantly more agriculturally literate than students enrolled in Intro ($p < 0.001$). Subsequently, students' level of agricultural literacy and demographic background were regressed on a series of seven Likert-type scale questions related to farm policy. Select demographic characteristics were significantly different on three of the seven questions. Based on the findings from the policy questions posed, students' academic experience, enrolled course, level of agricultural literacy, age, political affiliation and being raised around a family farm influenced their views regarding programs to ensure food supply, programs to preserve rural landscape and government interference in markets.



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INTRODUCTION

US food and agricultural policy can be a sensitive subject among numerous constituencies. Since university agricultural students may eventually become a part of these groups, does the level of their agricultural literacy and students' personal backgrounds influence their views of agricultural policy?

METHODS & PROCEDURES

- The Food and Fiber System Literacy instrument, and the Consumer Preferences for Farm Policy – USDA Budget Survey were administered to students enrolled in AGRI 1131: Introduction to Professional Leadership Skills (Intro) and AGBU 4386: Agriculture and Government Programs (Policy) at Sam Houston State University.
- Data was collected over multiple semesters, multiple years (n= 282).
- A one-tailed student t-test assuming unequal variances used to statistically compare agriculturally literacy between Intro and Policy.
- A series of student t-tests compared Intro and Policy views on the primary role of USDA.
- Select demographic characteristics were compared.
- Students' agricultural literacy and demographic backgrounds were regressed on a series of seven Likert-type scale statements related to farm policy.

- Farmers' incomes are too low relative to other U.S. households.
- Farm programs preserve a traditional lifestyle that has historical significance.
- Farm programs ensure a secure supply of food for U.S. citizens.
- Farm programs preserve the beauty of rural landscape.
- Farmers' incomes are too unpredictable due to weather, price risk, etc.
- I prefer less government interference in markets.
- Taxes are too high, and all government spending should be cut.

USDA Budget Allocations

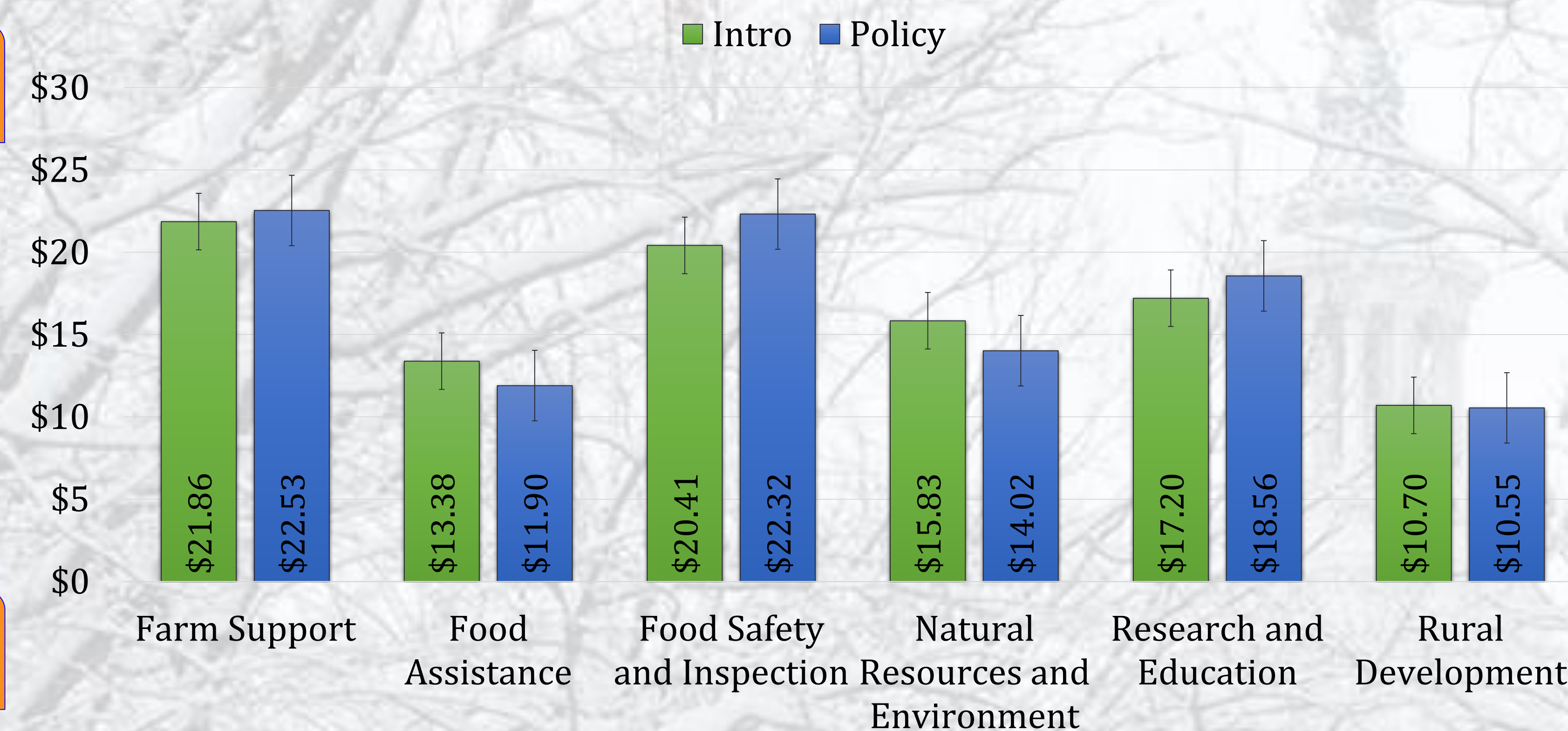
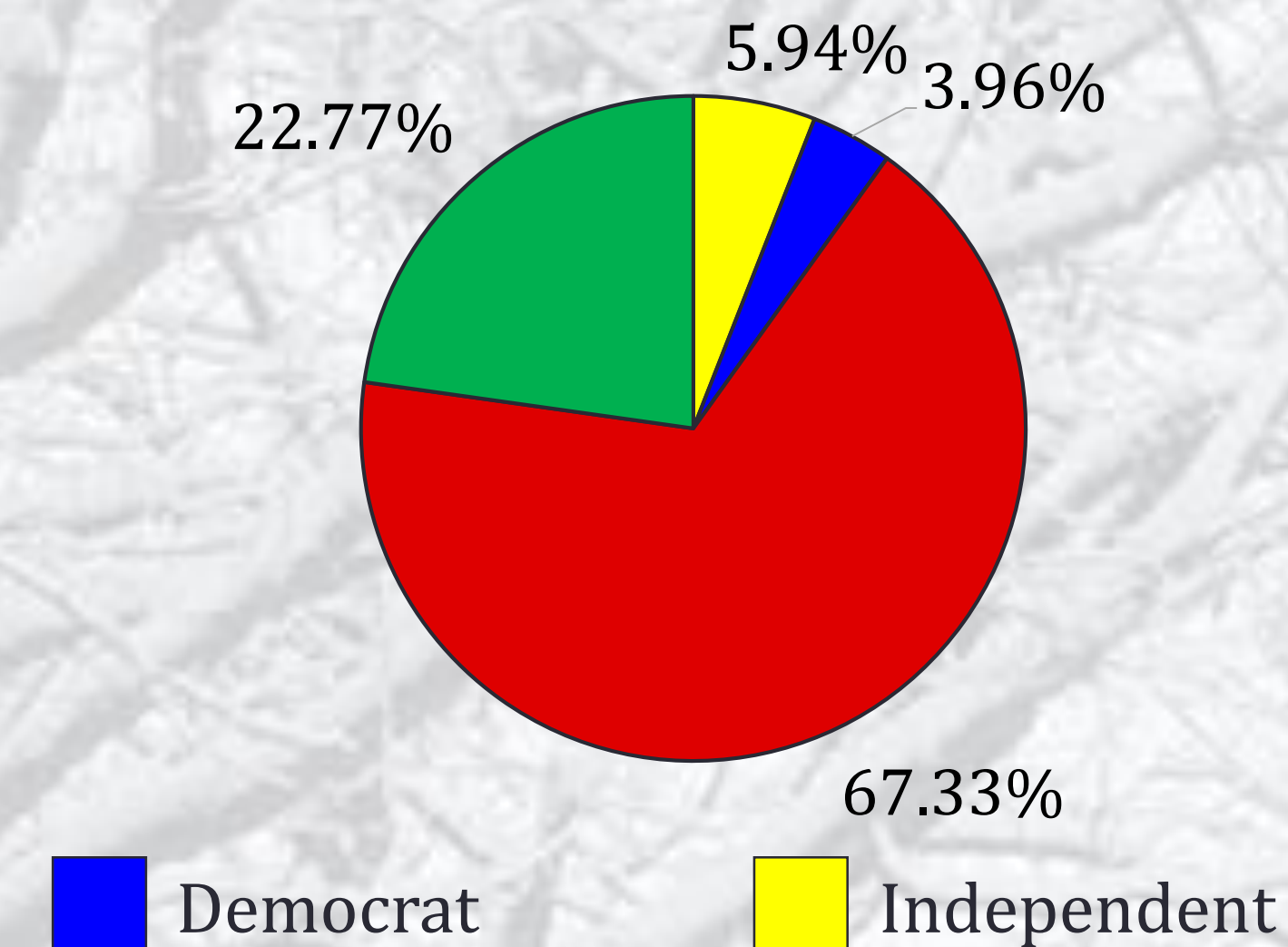


Figure 1. A comparison of how students in Intro and Policy allocated USDA's budget based on a \$100 scale. There was no significant difference.

Intro - Political Affiliation



Policy - Political Affiliation

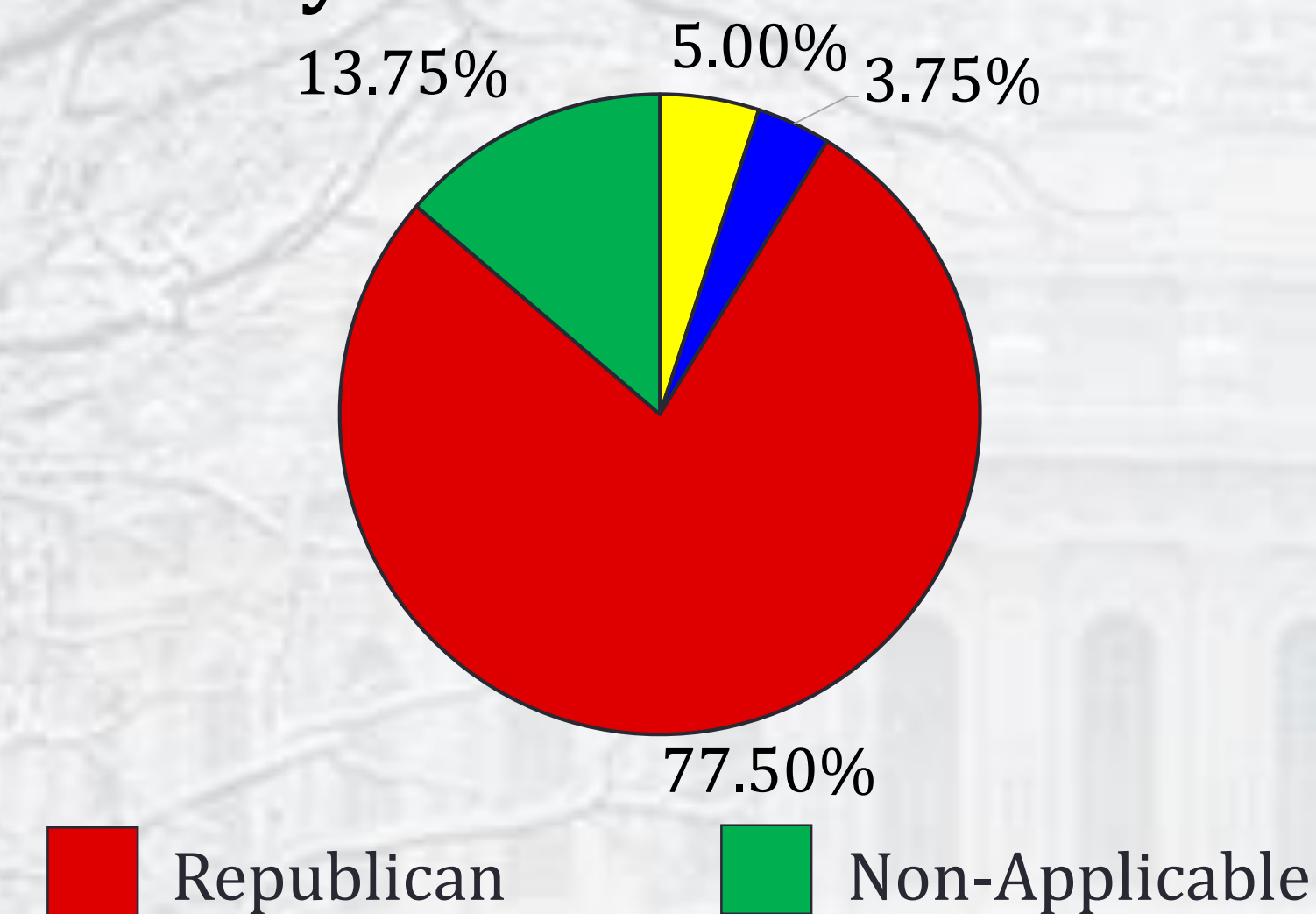


Figure 2. A comparison of political affiliation shows that students in Policy have a greater identification with the Republican Party than students in Intro.

Table 1. Three of the seven Likert-Type scale statements related to farm policy were significantly influenced by select explanatory variables.

	C. Farm programs ensure a secure supply of food for U.S. citizens.		D. Farm programs preserve the beauty of rural landscapes.		F. I prefer less government interference in markets.	
Variable:	Coefficients:	P-value:	Coefficients:	P-value:	Coefficients:	P-value:
Intercept	2.8601	0.0003	1.7706	0.0643	3.7859	7.49E-05
Course	-0.2429	0.1616	-0.7163	0.0008	-0.2864	0.1669
Score	0.0086	0.1169	0.0037	0.5777	0.0037	0.5717
Age	0.0225	0.4698	0.0624	0.1001	-0.0298	0.4218
Gender	0.3171	0.0164	0.0923	0.5627	-0.2749	0.0801
Independent	0.6928	0.0689	0.1594	0.7298	0.2772	0.5404
Republican	0.3293	0.2430	0.6098	0.0765	0.8693	0.0104
Non-Applicable	-0.0698	0.8224	0.1793	0.6359	0.4984	0.1808
Family Farm	0.3223	0.0153	0.2761	0.0864	-0.0387	0.8057

We express our thanks to Dr. Brenna Ellison (Univ. of Illinois) and Dr. Jayson Lusk (Oklahoma State Univ.) for allowing us to use the Consumer Preferences for Farm Policy – USDA Budget Survey.

RESULTS & IMPLICATIONS

- Students enrolled in Policy possessed higher agricultural literacy than students enrolled in Intro ($p < 0.001$) implying instructional effectiveness.
- Figure 1 illustrates that irrespective of differences in agricultural literacy between students in Intro and Policy, given the choice, they would allocate USDA's budget in a similar manner (i.e., no statistical difference).
- Demographically, Policy students identify as Republicans more than their Intro counterparts (Figure 2).
- Three of the seven Likert-type scale statements were significantly influenced by at least one of the explanatory variables. Regression results for these three questions are presented in Table 1.
- Women, political Independents, and students from family farms strongly support the statement that farm programs ensure food security for US citizens.
- Students in Intro, older students, students identifying as Republicans, and those from family farms believe farm programs preserve the beauty of rural landscapes.
- Male students and those students reporting themselves as Republicans prefer less government interference in markets.
- Interestingly, greater agricultural literacy among the students in this study had no impact statistically on their views related to farm programs.

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