City Streets vs Country Roads: Who Spends More Time with Supervised Agricultural Experiences?

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Introduction/Need for Research

Student teaching is a full-time position where educators put their skills to action by observing and teaching in a live classroom (240 Tutoring, 2024). Texas Tech University student teachers participate in students' Supervised Agricultural Experiences (SAEs) during their 17-week student teaching experiences. SAEs are methods in agricultural education that allow students to receive real-world career experiences in an area of agriculture (Texas FFA SAE Handbook, 2018). The agriculture teachers' role is to provide supervision of and guidance for the student's SAE program (The National Council for Agricultural Education, 2017). At Texas Tech, students must log the hours they spent supervising SAEs and are placed based on a variety of factors. Whether the area is rural or urban is not at the forefront of the process. Research into the differences in hours spent on SAE between rural and urban placements is necessary to provide insights to help create more effective preparation programs. This ensures that all student teachers, regardless of their geographical placement, receive opportunities for their personal growth and success. In Texas, students will participate in certain types of SAEs typically based on several factors such as regional agricultural practices, school resources, and personal interests. According to TheAET (2024), 41% of SAE journal entries were in the animal systems portion of the ANFR Standards meaning many students not only in Texas but nationally take part in entrepreneurship/ownership SAEs. Due to these factors, rural areas are expected to demonstrate a statistically significant higher number of hours spent in supervised agricultural experience programs compared to urban areas.

Theoretical Framework

For this study, we focused on the concrete experience portion of Kolb's experiential learning theory. This component relates to our everyday, direct, hands-on experiences, whether they occur in professional, personal, or educational settings (Kolb, 1984). Student teachers were directly involved in the students' SAEs but may vary from urban to rural settings. By focusing on the concrete experiences within the framework of Experiential Learning Theory, this study provided insight into the time spent on SAEs and how they differ from rural and urban areas.

Methodology

A weekly Qualtrics survey was sent via email to the last three cohorts of Texas Tech student teachers during their student teaching experience. This survey asked them to indicate the hours devoted to categories daily using a constant sum question format. After their student teaching experience, the data was analyzed using descriptive stats and t-tests. The survey did not ask whether their placement was considered a rural or urban area. Because of this, each student teaching placement was put into the World Population Review (2024) or the US Census QuickFacts (2023) to determine which area they qualified as. To determine which area the student teaching placement met the following criteria was used.

- Rural Area: Settlements with fewer than 2,000 housing units or ≤ 5,000 residents (U.S. Bureau of the Census, 2022).
- Urban Area: Densely developed areas with 2,000 or more housing units or more than 5,000 residents (U.S. Bureau of the Census, 2022).

An independent samples t-test was ran to determine if there is a significant difference between the means between groups (Field, 2013). This t-test used the variables of Rural (1), Urban (2), and Total SAE Observation Hours.

Results/Findings

Descriptive statistics were calculated for the Total SAE observation hours for both rural and urban groups. For the rural group, the mean for total SAE observation hours was (N=24) 188.88 and the standard deviation is 144.82. The mean for total SAE observation hours is (N=23) 192.35 and the standard deviation is 174.82. An independent samples t-test was conducted to compare the total SAE observation hours between the two groups (rural and urban). Levene's test yielded an f value of 0.29 with a significance (Sig.) level of 0.597. Since the significance level is greater than 0.05, we assume equal variance for the two groups. The results of the t-test revealed no significant differences between the means of the total SAE observation hours for the two groups ($t(45) = -0.074$, $p = 0.471$). With a p-value of 0.471, we do not have sufficient evidence to reject the null hypothesis. Therefore, the difference in the data in not statistically significant at the 0.05 significance level.

Conclusions

This study investigated the differences in hours spent on SAEs between student teachers in rural and urban areas. The findings from the independent samples t-test revealed no statistically significant differences in the mean hours dedicated to SAEs between the groups. This suggests that the amount of time allocated to SAEs does not differ significantly based on the student teachers' geographic location. These results contribute to our understanding of how SAE participation is distributed across different geographic contexts.

Implications/Recommendations/Impact on Profession

Further research, such as a longitudinal study to track the impact of SAE participation on student teacher retention, career satisfaction, and professional success in agricultural education. Another possibility was to gather perspectives from cooperating teachers on the benefits, challenges, and future directions of SAE programs and teacher preparation programs. By addressing these research gaps, the quality of SAE programs and teacher preparation programs for student teachers could be improved.

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