Utah Agricultural Teachers' Perceptions of Urban and Non-Traditional Agriculture Curriculum & SAEs: An Application of the Theory of Planned Behavior

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Ashlee Cromer, Dr. Kelsey Hall, Dr. Tyson J. Sorensen, Dave Francis, & Joshua Dallin

Introduction/Need for Research

- Little attention devoted to understanding how prepared agricultural education teachers are in implementing curriculum, Supervised Agricultural Experiences (SAEs), and information about careers in Food, Agriculture, Natural Resources, & Human Sciences (FANH) (e.g. urban agriculture, bioengineering, water quality, food security, climate change, & bioenergy).
- Agriculture teachers have indicated need for professional development in these areas of emerging careers & technology (Pettijohn, Sorensen, Hall, Dallin, & Francia, 2017).
- Purpose: Describe Utah agricultural education teachers’ perceptions of urban & non-traditional agriculture curriculum & SAEs.

Theoretical Framework

The Theory of Planned Behavior (TPB) (Ajzen, 1991)

Methodology

- Workshop Preparation: Developed lesson plans, worksheets, & PowerPoints about nutrition, genetics, & marketing of alternative/specialty animals in agriculture & adapted USU Extension’s curriculum about community supported agriculture in Utah.
- Agriculture education teachers attended Urban Agriculture-Farm and Feed Workshop & tour offered during summer conference.
- Administered retrospective pretest-posttest evaluation at end of workshop that included 28 Likert-scale items to measure four constructs of TPB.
- Cronbach’s alpha ranged from 0.83 to 0.92 for TPB constructs.

Findings

Demographic Information (42 respondents)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>21</td>
<td>52.5%</td>
</tr>
<tr>
<td>Male</td>
<td>19</td>
<td>47.5%</td>
</tr>
</tbody>
</table>

- Age ranged from 21 to 58, with a mean of 36.5 years
- Completed traditional teacher certification program (n = 29, 75%)

Type of Community Where Participants’ Schools Located

- Metro Urban Area (greater than 200,000 in population)
- Urban (greater than 50,000-199,999 in population)
- Urban Cluster (more than 2,500-49,999 in population)
- Rural (less than 2,500 in population)

Highest Level of Education Obtained

- Bachelor’s degree (n = 14, 37.8%)
- Some Graduate Work (n = 7, 18.9%)
- Master’s Degree (n = 15, 40.5%)
- Doctorate Degree (n = 1, 2.7%)

Table 1

<table>
<thead>
<tr>
<th>Construct</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward integration</td>
<td>5.13</td>
<td>0.58</td>
</tr>
<tr>
<td>Subjective norms influencing integration</td>
<td>4.41</td>
<td>0.93</td>
</tr>
<tr>
<td>Participants’ perceived behavioral control to integrate</td>
<td>4.72</td>
<td>0.77</td>
</tr>
<tr>
<td>Participants’ intention to integrate</td>
<td>5.01</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Note. Scale: 1 = strongly disagree, 2 =disagree, 3 = slightly disagree, 4 =slightly agree, 5 = agree, and 6 = strongly agree.

Table 2

<table>
<thead>
<tr>
<th>Construct</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude toward integration</td>
<td>5.08</td>
<td>0.57</td>
</tr>
<tr>
<td>Subjective norms influencing integration</td>
<td>4.40</td>
<td>0.96</td>
</tr>
<tr>
<td>Participants’ perceived behavioral control to integrate</td>
<td>4.73</td>
<td>0.75</td>
</tr>
<tr>
<td>Participants’ intention to integrate</td>
<td>5.04</td>
<td>0.72</td>
</tr>
</tbody>
</table>

Note. Scale: 1 = strongly disagree, 2 =disagree, 3 = slightly disagree, 4 =slightly agree, 5 = agree, and 6 = strongly agree.

Conclusions/Implications/Recommendations

- Their positive attitude & slight agreement that their subjective norms influence their decision to integrate would suggest they are willing to integrate urban & non-traditional agriculture curriculum & SAEs.
- Their slight agreement about their perceived behavioral control would indicate their ability to control & overcome obstacles affecting their integration.
- Suggest implementing workshop in other states & collecting more data using instrument to better predict agricultural education teachers’ intention to integrate urban & non-traditional agriculture curriculum & SAEs in the United States.
- Include quasi-experimental design to implement curriculum in classrooms, measuring students’ change in urban/non-traditional agriculture knowledge, participation in urban/non-traditional SAEs, and interest in FANH careers.

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