

**Personal Human Capital Needs of School-Based Agricultural Education Teachers in
Oklahoma**

Kayla N. Marsh
Graduate Teaching and Research Associate
458 Agricultural Hall, Stillwater, OK 74078
Oklahoma State University
405-714-8289
Kayla.marsh@okstate.edu

Christopher J. Eck, Ph.D.
Assistant Professor
457 Agricultural Hall, Stillwater, OK 74078
Oklahoma State University
405-744-8027
Chris.eck@okstate.edu

Bradley Coleman, Ph.D.
Assistant Professor
445 Agricultural Hall, Stillwater, OK 74078
Oklahoma State University
405-744-8025
B.coleman@okstate.edu

Research on the needs of school-based agricultural education (SBAE) teachers has been conducted for more than three decades, driven by historic attrition within the profession (DiBenedetto et al., 2018; Eck & Edwards, 2019). Identified gaps in their ability to integrate curriculum resources, access resources, and develop skills to support students' diverse needs within their everyday instruction, further exacerbating work-life balance and stress teachers face managing a complete program (Marsh et al., 2023a; Shoulders et al., 2021). Identified needs are recurring, making work-life balance and job satisfaction a major focus in SBAE research due to the overwhelming amount of work, dedication, and mental, physical, and emotional stress experienced by teachers (Doss et al., 2023; Phipps et al., 2008; Shoulders et al., 2021). Currently, the ability to provide SBAE teachers with the resources, content, curriculum, social and professional development needed that is currently limiting their personal human capital needs (i.e., managing stress, managing paperwork, and work-life balance) is lacking (Marsh et al., 2023b). Therefore, the need exists to explore the individual human needs of SBAE teachers to mitigate stress, increase job satisfaction, and improve retention. The purpose of this study was to identify the current level of SBAE teachers' personal human capital knowledge and the relevance of their career-specific human capital, ultimately allowing the prioritization of SBAE teacher needs.

Theoretical/Conceptual Framework

To evaluate the perceived needs of SBAE teachers, Maslow's Hierarchy of Needs from the Theory of Human Motivation (1943) was operationalized. Specifically, *Maslow's hierarchy for teacher needs* (Fisher & Royster, 2016) was overlaid on the *Three-Component Model of Agricultural Education*, which develops human capital in students through participation within SBAE programs by providing career experiences, leadership development, and student-centered learning in agricultural content (Eck et al., 2019; FFA, 2022). All of which was undergirded by SBAE teachers' human capital development to help them progress up the hierarchy of teacher needs to become for effective teachers (Eck et al., 2019).

Methods

As part of a larger study, a census approach was employed to reach all Oklahoma SBAE teachers ($N = 462$). To achieve this goal, data was collected in-person at 25 regional FFA degree checks across the state. In-person data collection was completed at Oklahoma FFA degree checks, in addition 55 mail surveys were sent to address non-respondents. Upon analysis of non-respondents, data was found to be homogeneous to original responses, resulting in a total of 329 completed instruments for data analysis. This study evaluated teacher personal human capital needs among Oklahoma SBAE teachers. Participants were primarily male ($n = 230$), traditionally certified (78.7%), ranged from early-career (37.08%), mid-career (34.65%), and late career (28.27%), and worked in both single teacher (59.6%) and multi-teacher programs (39.2%).

The questionnaire included one section with five items addressing teacher personal human capital needs. Each of these items used two 5-point Likert-type scales (1 = low agreement, 5 = high agreement). On the first scale, participants were asked to rate their current knowledge level of the item (perceived ability). On the second scale, participants were asked to rate the degree of relevance the item had to their job (perceived importance). The final section of the questionnaire included space for participants to share their personal characteristics. Data were transcribed from the paper instruments to Microsoft Excel© by a single research assistant prior to data being

imported and analyzed using SPSS version 28 and Microsoft Excel©. This study implemented the ranked discrepancy model (RDM) to assess current competencies of SBAE teachers across Oklahoma. This model was selected as an alternative to the Borich (1980) needs assessment model based on the findings of Narine and Harder (2021). Specifically, this method was selected because “instead of positive scores indicating a lack of competence, the RDM provides a negative RDS when training needs are greater (i.e., there are many individuals lacking sufficient ability and few individuals with an abundance of ability), which more clearly conveys that a problem exists that should be corrected” (Narine & Harder, 2021, p. 108). This analysis requires the consideration of positive ranks (PR), negative ranks (NR), and tied ranks (TR) to fully understand the needs of the participants, ranging from those deemed experts to others who are novices, resulting in a ranked discrepancy score (RDS) for each item (Narine & Harder, 2021).

Findings

Mean scores for each of the teacher personal human capital items identified a greater relevance to participants careers than their current knowledge level (see Table 1). RDS scores determined the greatest need to be managing stress (RDS = -31.91), followed by managing paperwork (RDS = -23.10), balancing work and personal life (RDS = -22.80), managing time (RDS = -22.80), and financial planning (-19.76) for SBAE teacher development.

Table 1

SBAE Teacher Personal Human Capital Needs

Item	Current Mean	Relevance Mean	RDS
Managing stress	3.58	4.26	-31.91
Managing paperwork	3.71	4.10	-23.10
Balancing work and personal life	3.60	4.04	-22.80
Managing time	3.71	4.07	-22.80
Financial planning	3.61	4.00	-19.76

Conclusions/Implications/Recommendations

All five of the personal human capital resulted in a negative RDS, suggesting that SBAE teachers lack the knowledge required to meet their own personal needs. Managing stress represents the greatest need by RDS score, aligning with current research suggesting that SBAE teachers have existing needs gaps related to handling stress and lack healthy coping mechanisms that would otherwise support their well-being and personal human capital development (Marsh et al., 2023_a; Marsh et al., 2023_b). The five items are found at the *Subsistence* level of *Maslow's hierarchy of needs for teachers* (Fisher & Royster, 2016, suggesting the need to further investigate the depth of SBAE teachers' personal human capital, including the supports, resources, and tools that can impact their reported levels of stress, wellness, and work-life balance. Considering the hierarchical level at which these items are found (i.e., subsistence), the need for professional development and preservice teacher training exists, as these needs left unsupported impact SBAE teacher's practice and reduce their overall effectiveness (Marsh et al., 2023_a; Marsh et al., 2023_b). This becomes increasingly important as we consider the ongoing needs of SBAE teachers (DiBenedetto et al., 2018), as Maslow (1943) identified the necessity to meet needs on a basic/personal level before an individual can progress on to higher order needs, ultimately impact teacher effectiveness and career attrition.

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