

Agricultural Educators and the Pandemic: An Evaluation of Work and Life Variables

Aaron J. McKim¹ and Tyson J. Sorensen²

Abstract

The global COVID-19 pandemic caused immediate and intense changes throughout education, including a reliance on remote instruction. For school-based agricultural education (SBAE) teachers, who rely on experiential and hands-on learning, the changes brought about by COVID-19 required a dramatic pivot in their work responsibilities. The changing work role faced by SBAE teachers was combined with new stresses, obligations, and routines in their life role(s), creating a unique and challenging time for work-life management. The current study spotlighted the changing work and life roles of SBAE teachers before and during COVID-19. Using a blend of the role-conflict and conservation of resources theories, we analyzed work interference with family, family interference with work, work hours, work and life salience, and work and life satisfaction during COVID-19 and, retrospectively, before COVID-19 among a national sample of SBAE teachers. Results illustrated significant changes in the variables studied in relation to COVID-19. These changes were branded the “work domain decline” and “job satisfaction slump” within the research. Critical questions also emerged in the form of research recommendations designed to inform SBAE scholarship which supports the success and satisfaction of SBAE teachers in the post-COVID-19 era.

Keywords: coronavirus; pandemic; remote instruction; role salience; role satisfaction; work-family conflict; work hours

Introduction

The novel coronavirus disease (COVID-19) that originated in China in December of 2019, has rapidly spread around the world. In March of 2020, The World Health Organization (WHO) declared the COVID-19 epidemic a pandemic (WHO, 2020). The pandemic sent billions of people across the globe into lockdown and self-isolation, including in the United States, a region severely affected by the pandemic (Khachfe et al., 2020). Considering the rising concern about the COVID-19 pandemic, public health experts and governments across the country imposed several state-wide regulations and recommendations that included social distancing, self-isolation, and quarantine. Efforts to reduce the spread of the COVID-19 virus prompted the widespread closure of schools and universities across the world (Sahu, 2020). By April of 2020, more than 150 countries had closed schools and educational institutions, impacting over 80% of the world’s student population (Sahu, 2020; Van Lancker & Parolin, 2020).

The educational system within the United States was severely impacted by the pandemic as state-mandated school closures were implemented throughout the country. Teachers in every discipline and in every state were forced to cease face-to-face instruction and switch, almost overnight, to remote instruction (Lindner et al., 2020). The far-reaching effects of these mandates as a result of the pandemic within the United States are unprecedented.

¹Aaron J. McKim is an Assistant Professor in the Department of Community Sustainability at Michigan State University, 480 Wilson Road Room 131, East Lansing, MI 48824, amckim@msu.edu

²Tyson J. Sorensen is an Assistant Professor of Agricultural Education in the Department of Applied Sciences, Technology and Education at Utah State University, 2300 Old Main Hill, Logan, UT 84322, tyson.sorensen@usu.edu.

Teachers with household and caretaking responsibilities have been particularly affected by the pandemic. As schools and daycares across the United States closed to facilitate social distancing, teachers with children have been tasked with working full-time jobs while also educating and providing care to their children, leading to additional strain during COVID-19 to manage and balance multiple life roles (Kantamneni, 2020). Literature shows that individuals, including school-based agricultural education (SBAE) teachers, who experience strain as a result of managing multiple life roles often experience a decrease in job satisfaction and increased intention to quit (Allen et al., 2000; Bruck et al., 2002; Sorensen et al., 2016a; Sorensen et al., 2017). With an ongoing shortage of qualified SBAE teachers nationwide, SBAE teacher retention is extremely important. Therefore, exploring the antecedents of job satisfaction (e.g., role conflict) among SBAE teachers is critical, especially amidst the changing dynamics of the COVID-19 pandemic. Currently, there are very few studies on COVID-19 in the educational literature as most literature available is directly related to medical studies (Sintema, 2020). Specifically, no literature currently exists exploring the impacts of COVID-19 on SBAE teachers. This study seeks to explore changes in attitude and the work-family interface as a result of the COVID-19 pandemic.

Theoretical Framework

We framed this research through the lens of the role conflict theory (Greenhaus & Beutell, 1985) and conservation of resources theory (Grandey & Cropanzano, 1999). The role conflict theory suggests individuals engage in various life roles, and psychological strain or role conflict occurs when individuals are unsuccessful at balancing commitments in each of those roles. The most common type of role conflict found in the literature pertains to the work and non-work domains of individuals and is often referred to as time-based work-family conflict (Greenhaus & Beutell, 1985). Time-based work-family conflict (WFC) is bi-directional, that is, conflict can take the form of work interference with family (WIF) or family interference with work (FIW). Time-based WFC occurs when multiple roles compete for a finite amount of time. COVID-19 forced teachers across the country to alter their daily activities and time spent engaged in the work domain by combining the work and non-work (e.g., family) domains into one. According to the role-conflict theory, combining domains should enable individuals to more easily meet the demands of various life roles and, therefore, reduce the amount of WFC on individual experiences. Yet, it is unknown if that assumption holds true with the unique nature of the COVID-19 pandemic.

Foundational to the role conflict theory is the scarcity hypothesis, which posits limited time and energy resources expended in one role deplete resources available for other roles (Grandey & Cropanzano, 1999). This scarcity of time and energy leads to WFC and diminished role quality in the domain receiving fewer resources (Gutek et al., 1991; Marks, 1977). Conservation of resources theory suggests individuals seek to build and protect resources such as energies (e.g., time), conditions (e.g., marital status, parental status, tenure), and personal characteristics (e.g., self-esteem, satisfaction) within their life roles (Grandey & Cropanzano, 1999). Time in one life role has the potential to be lost or threatened, especially when increased obligations alter the time commitment in other life roles (Grandey & Cropanzano, 1999). As a result, individuals often seek to protect time resources in order to avoid psychological stress, dissatisfaction, and attrition within life roles (Grandey & Cropanzano, 1999). For SBAE teachers, the resource of time must be protected to increase satisfaction and reduce stress within all life roles. The demanding nature of the SBAE teaching profession (Murray et al., 2011; Torres et al., 2008) coupled with the unique teaching responsibilities as a result of the COVID-19 pandemic has the potential to threaten teachers' scarce resource of time and, as a result, may cause dissatisfaction with their various life roles. While little is known about the impacts of COVID-19 on SBAE teachers, the present study includes an examination of variables associated with the resource of time and SBAE teachers' job satisfaction in the context of the COVID-19 pandemic.

Literature Review

COVID-19 and Education

Despite some benefits of remote instruction amidst a pandemic (Basilaia & Kyavadze, 2020), literature seems to point to negative consequences (Sintema, 2020). Experts suggest the COVID-19 pandemic is the greatest challenge the education system has ever faced and has caused the greatest disruption in educational opportunity in a generation (Daniel, 2020). There are many challenges and consequences associated with shifting immediately from face-to-face to remote instruction with little to no time to prepare. For example, many teachers and school districts lack the preparation for remote instruction and access to equipment to do so successfully (Ahmady et al., 2020; Sintema, 2020). Remote teaching is different from face-to-face teaching and requires training of teachers to be effective, which most teachers have not received (Ní Shé et al., 2019). Furthermore, many parents and students lack the technological resources and knowledge for effective teaching and learning at home, creating issues of equity and widening the learning gap between children from lower-income and higher-income families (Ahmady et al., 2020; Sahu, 2020; Van Lancker & Parolin, 2020). Resources such as families' time, income, and social capital are distributed across families differently, impacting the kinds of support families are able to provide for their children's learning, further disadvantaging students with fewer resources in relation to their peers (Rosigno et al., 1999)

Other challenges to the education system related to COVID-19 and the immediate full shift to remote instruction have been assessment and evaluation issues. Assessments for courses designed to be lab-based or face-to-face (Raaheim et al., 2019; Kearns, 2012) as well as providing necessary school support services for students, such as counseling and student activities, have not seamlessly transitioned to remote platforms (Lee, 2020). Further, some studies have shown school closures and home confinement can have negative effects on the physical and mental health of students (Brazendale et al., 2017). As the pandemic continues to force educators to create and deliver content with social distancing in mind, unprecedented consequences of these changes and challenges will continue to mount (Sahu, 2020).

SBAE is not immune to the challenges brought about by the COVID-19 pandemic and the resulting changes to the education system. SBAE has a long-standing history and tradition of providing authentic and relevant instruction and assessment to students through practical contextualization, experiential learning, and lab-based approaches (Newcomb et al., 2004; Phipps et al., 2008; Talbert et al., 2007). The shift to remote instruction does not seem to align with the three-component model (i.e., classroom and lab instruction, FFA, and SAE) espoused as the premier delivery model for SBAE (National FFA Organization, 2020). For example, skill-based lab instruction without a face-to-face component can be extremely difficult for SBAE teachers trying to get students to master certain skills. Supervised Agricultural Experience (SAE) programs are difficult when stock shows are cancelled, student job placements and internships are halted, supervisory visits from the teacher are prohibited, and schools restrict access to school labs and facilities. Similarly, with social distancing regulations in place, most FFA activities and events across the country were cancelled or modified from their intended purpose, such as state FFA conventions, career and leadership development events, end of year chapter banquets, local fundraising activities, and more. Despite the absence of literature showing the impacts of COVID-19 on SBAE, it is clear SBAE teachers have faced unique challenges and opportunities. This study seeks to initiate literature exploring the impacts of COVID-19 on SBAE.

Work Characteristics among School-Based Agricultural Educators

Teaching agriculture is a demanding profession that typically requires working more hours than a standard work week (Torres et al., 2008). Research suggests SBAE teachers across the country spend an average of 55 to 60 hours per week engaged in work-related activities (Murray et al., 2011; Sorensen et al., 2017). The time commitment associated with being an SBAE teacher leaves little time to devote to other life roles (Murray et al., 2011; Straquadine, 1990). As a result, SBAE teachers experience moderate to high levels of psychological strain and WFC (Crutchfield et al., 2013; Murray et al., 2011; Sorensen et al., 2017). Since COVID-19 has likely influenced the way SBAE teachers allocate time to their teaching practice, we included work hours as an important variable in this analysis.

Individuals tend to invest more time and energy into roles they consider to be important to them, allowing less time and energy for other roles (Greenhaus & Beutell, 1985). Role salience, therefore, is an important determinant of WFC (Cinamon & Rich, 2002). WFC increases when either work or family roles are more salient and central to a person's specific life role (Greenhaus & Beutell, 1985). Role salience has been shown to significantly influence WFC in both directions (i.e., WIF and FIW). Despite the negative outcome of WFC, Noor (2004) also found role salience significantly increases job satisfaction among workers.

Research in other disciplines has shown excessive time constraints in one or more life roles can increase WFC and result in job dissatisfaction (Allen et al., 2000; Boles, et al., 2001; Bruck et al., 2002; Kossek & Ozeki, 1998). Furthermore, unexpected changes and lack of continuity in the workplace can significantly influence one's job satisfaction (Howard & Frink, 1996; Leana & Barry, 2000). Despite changes in education system in recent years, as well as the heavy workloads and moderate levels of WFC among SBAE teachers, studies dating back over three decades continue to indicate SBAE teachers are largely satisfied with their jobs (e.g., Cano & Miller, 1992; Chenevey et al., 2008, Grady & Burnett, 1985; Kitchel et al., 2012). However, as the COVID-19 pandemic has drastically changed the teaching practice, we suggest job satisfaction is a variable worthy of analysis in the context of the COVID-19 pandemic.

While various life roles (e.g., work, family, leisure, spiritual, etc.) exist, work and family roles have traditionally received most of the attention in research because work and family are the principal components of people's lives, and a great deal of time and energy is often spent by individuals trying to manage the responsibilities of these two roles. Research indicates SBAE teachers experience psychological strain more from work interfering with family than family interfering with work (Foster, 2001; Murray et al., 2011; Sorensen et al., 2016b). Predictors of WFC among SBAE teachers include work salience, family-supportive work culture, work hours per week, and number of teachers in the SBAE program (Sorensen et al., 2017). WFC, specifically WIF, has also been shown to be a significant negative predictor of job satisfaction and a significant positive predictor of turnover intentions among SBAE teachers (Sorensen et al., 2016a; Sorensen, et al., 2017).

Role conflict (e.g., WFC) is a relevant and timely construct to study among SBAE teachers because the direct impact of the COVID-19 pandemic on teachers and families in both the work and family domains. During the pandemic, teachers have been considered essential employees, despite having to carry out their full-time work duties in a different location and in a different way. The burden placed on teachers with childcare responsibilities to accomplish full-time teaching from home and full-time caregiving at home has no doubt been great, especially among single parents (Kantamneni, 2020). The expectations on some, including teachers, to manage domestic family needs while also managing full-time careers may be extremely difficult and suggests many are likely prioritizing family and home role responsibilities over work role responsibilities (Kantamneni, 2020). With the COVID-19 pandemic

influencing the work and family roles of SBAE teachers, this study seeks to explore variables of the work-family interface in the context of the pandemic.

Purpose and Objectives

The COVID-19 pandemic has presented an unprecedented set of challenge for educators, including those in SBAE (Daniel, 2020). While the pandemic has impacted every facet of our world, the disruption to the nexus of work and life roles is paramount. Therefore, the purpose of this study is to explore work and life-related variables before and after COVID-19 among a national sample of SBAE teachers. To achieve this purpose, the following objectives were established:

1. Compare work interference with family (WIF) and family interference with work (FIW) among SBAE teachers before and during COVID-19.
2. Compare work hours among SBAE teachers before and during COVID-19.
3. Compare job and life salience among SBAE teachers before and during COVID-19.
4. Compare job and life satisfaction among SBAE teachers before and during COVID-19.

Methods

This exploratory analysis of work and life variables before and during COVID-19 was completed using survey research methods. Data reported in the current study are part of a larger research project analyzing COVID-19 and the work experiences of SBAE teachers.

Population, Sampling, and Data Collection

All SBAE teachers during the 2019-2020 school year were considered as the population of the study (approximate $N = 13,500$). The National FFA Organization houses the most comprehensive frame of SBAE teachers; therefore, a simple random sample of 790 SBAE teachers was obtained from the National FFA Organization. The sample frame included the first name, last name, and email address of SBAE teachers. In accordance with Dillman (2007), up to five email invitations to complete the survey were sent to potential respondents. Throughout distribution of the survey, 23 emails bounced due to incorrect or outdated contact information, resulting in a revised sample frame of 767. Emails were sent in May and June of 2020, during the height of COVID-19 based restrictions in the United States. A total of 142 SBAE teachers provided useable responses to the survey, a 18.51% response rate ($n = 142$). The response rate obtained for this study is similar to recent national studies using the National FFA frame (e.g., Hile, 2019; Moser & McKim, 2020). Non-response bias was checked by comparing the work and life variables of the final 30 respondents ($n = 30$) to those who answered earlier ($n = 112$) using an independent t -test. Results from the comparison indicated no statistically significant differences (i.e., p -values ranged from .112 to .799); therefore, non-response bias was not considered an issue in the current study (Lindner et al., 2001; Miller & Smith, 1983). As limited contact information was provided on the sample frame, we were unable to conduct a more robust non-response bias evaluation (e.g., survey data collection via phone from a random sample of non-respondents).

Instrumentation

The survey was structured so each item was analyzed retrospectively (i.e., before COVID-19) and at the time of data collection (i.e., during COVID-19). For example, respondents were asked to report their average weekly work hours before COVID-19 and amidst COVID-19 regulations. The constructs of interest included WIF, FIW, job salience, life salience, job satisfaction, and life satisfaction. All of the constructs were measured on a five-point scale ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*). The WIF construct included three questions (e.g., “my work

kept/keeps me from my family activities more than I would like”) evaluating time-based conflict arising from the work domain and negatively impacting the family domain. Similarly, the FIW construct included three questions (e.g., “I missed/miss work activities due to the amount of time spent on family responsibilities”) measuring time-based conflict arising from the family domain and negatively impacting the work domain. The WIF and FIW constructs originated in research by Carlson et al. (2000) and have been used SBAE research (Crutchfield et al., 2013; Sorensen et al., 2016b; Sorensen et al., 2017). The job salience construct was comprised of six questions (e.g., “work was/is considered central to my life”) measuring the importance respondents placed on their job as SBAE teachers. Life salience also included six questions (e.g., “my personal life goals were/are family-oriented”) measuring the importance of the life/family domain for respondents. The job and life salience constructs were adopted from existing research (Noor, 2004) and have been used in previous research in SBAE (Sorensen et al., 2017). Job satisfaction was measured using five questions (e.g., “most days I was/am enthusiastic about my work”) targeting the level of enjoyment individuals experience from their role as SBAE teachers. Life satisfaction was derived from the Satisfaction with Life Scale (Diener et al., 1985) and included 10 questions (e.g., “I liked/like my family life better than the average person”) foregrounding the perceptions respondents held of their life/family role(s). The job and life satisfaction constructs used in the current study were adopted from previous research outside (Brayfield & Rothe, 1951; Judge et al., 2000; Pavot & Diener, 2008) and within SBAE (Blackburn et al., 2017; Sorensen et al., 2016a).

In addition, work hours were measured for both the regular work week and weekend hours before and during COVID-19. Regular work week was defined as Monday through Friday with respondents reporting their average hours worked in a week during the school year. Weekend hours were measured as the total weekend hours worked in a month during the school year. This method of measuring work hours mirrors an existing approach (Sorensen et al., 2016a).

Pilot Testing and Reliability

The entire instrument was pilot tested in April and May of 2020 among 47 current SBAE teachers in Michigan and Utah who were not included in the random sample for the study. Results of the pilot test suggested the constructs were reliable with Cronbach’s alpha estimates ranging from .71 to .89. Post-hoc reliability analyses also supported the reliability of constructs with Cronbach’s alpha estimates ranging from .78 to .88 (Fraenkel & Wallen, 2000; Nunnally & Bernstein, 1994).

Data Analysis

All data were retrieved from Qualtrics, a survey management website, and downloaded into an SPSS file. Within SPSS, appropriate items were reverse-coded, respondents providing unusable data were removed, and construct items were transformed into a new variable for analysis. To complete objectives one, two, three, and four, a paired-sample *t*-test was conducted comparing the before COVID-19 responses to the during COVID-19 responses. Construct averages, standard deviations, *t*-test results, and effect sizes are reported in the Findings section. For this analysis, effect sizes thresholds were established as “small effect,” Cohen’s *d* = .20; “medium effect,” Cohen’s *d* = .50; and “large effect,” Cohen’s *d* = .80 (Cohen, 1988).

Limitations

This study includes three relevant limitations. First, the retrospective nature of the “before COVID-19” data may not be as accurate as actually surveying respondents before COVID-19 restrictions occurred. Of course, authors were unaware of COVID-19 restrictions before they happened; therefore, a retrospective approach was the only option. The second limitation is the relatively low

response rate (i.e., 18.51%) obtained for the survey. Upon reflecting on the cause of the low response rate, two possibilities emerged. First, the survey was part of a larger mixed-methods project exploring the impact of COVID-19 on SBAE teachers and seven open-ended questions were placed at the beginning of the survey. Potentially, respondents opted not to complete the survey when seeing the open-ended questions at the start of the survey. The second possibility is reduced response rate due to “screen fatigue,” brought about by SBAE teachers working remotely and entirely online during COVID-19. It is hypothesized that screen fatigued teachers opted to complete only job-dependent tasks on the computer; thus, neglecting to respond to surveys. The final limitation of this study is the self-reported nature of survey responses which relies on the truthfulness of respondents.

Description of Respondents

On average, respondents had taught SBAE for 12.91 ($SD = 10.47$) years, which included the 2019-2020 school year. Respondents included SBAE teachers from 40 states and one respondent from Puerto Rico. The most well-represented states were Ohio ($f = 9$), Oklahoma ($f = 7$), California ($f = 6$), and Illinois ($f = 6$). The majority of respondents were married (73.60%) followed by single respondents (12.00%), divorced respondents (7.20%), and respondents not married but in a committed relationship (5.60%). In total, 77.60% of respondents had a spouse or partner who worked full or part time. In addition, respondents averaged 1.56 ($SD = 1.57$) individuals (e.g., children, elderly) for whom they were responsible for as a parent or caregiver.

Findings

In the first research objective, work interference with family (WIF) and family interference with work (FIW) were compared before and during COVID-19. Respondent perceptions of WIF were 0.79 points lower during the pandemic when compared to before COVID-19, a statistically significant ($t = 7.52$; p -value $< .001$) difference, suggesting COVID-19 had a “large” effect (Cohen, 1988) on the WIF perceived by SBAE teachers. Alternatively, FIW was 0.09 points lower during COVID-19 than before the pandemic, a difference that was not statistically significant ($t = 1.34$; p -value = .183).

Table 1

WIF and FIW Before and During COVID-19

Compared Variables	Before COVID		During COVID		t	p -value	Cohen's d
	Mean	SD	Mean	SD			
Work Interference with Family (<i>WIF</i>)	3.62	0.83	2.83	1.00	7.52	$< .001$	0.86
Family Interference with Work (<i>FIW</i>)	2.71	0.80	2.62	0.87	1.34	.183	0.11

Note. Response options ranged from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) with higher scores representing more WIF or FIW.

The second research objective foregrounded SBAE teacher work hours before and during COVID-19. On average, respondents reported working 20.89 fewer weekday hours per week during COVID-19 than before the pandemic. The difference in weekday work hours was a statistically significant ($t = 14.85$; p -value $< .001$), “large” difference (Cohen, 1988). Transitioning to weekend work hours, respondents reported doing work-related tasks 5.15 fewer weekend hours per month during the pandemic than before COVID-19. The difference in weekend work hours was a statistically significant ($t = 5.32$; p -value $< .001$), “medium” difference (Cohen, 1988).

Table 2*Work Hours Before and During COVID-19*

Compared Variables	Before COVID		During COVID		<i>t</i>	<i>p</i> -value	Cohen's <i>d</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>			
Weekday Work Hours (<i>per Week</i>)	49.50	11.87	28.61	12.82	14.85	<.001	1.69
Weekend Work Hours (<i>per Month</i>)	11.37	9.86	6.22	6.61	5.32	<.001	0.61

Note. Weekday work hours included average hours worked Monday through Friday. Weekend work hours included average hours worked on Saturday and Sunday. In concert with existing research in agricultural education on work-life balance (Sorensen et al., 2017), respondents provided weekday work hours *per week* while weekend work hours were provided *per month*.

In the third research objective, the job and life salience of SBAE teachers were analyzed before and during the pandemic. Job salience was 0.44 points lower during COVID-19 than before the pandemic, a statistically significant ($t = 8.51$; p -value < .001), “medium” difference (Cohen, 1988). Life salience, on the other hand, was 0.18 points higher during the pandemic when compared to before COVID-19. The difference in life salience was also statistically significant ($t = 4.57$; p -value < .001) but the difference was “small” (Cohen, 1988).

Table 3*Job and Life Salience Before and During COVID-19*

Compared Variables	Before COVID		During COVID		<i>t</i>	<i>p</i> -value	Cohen's <i>d</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>			
Job Salience	3.48	0.75	3.04	0.73	8.51	<.001	0.59
Life Salience	4.01	0.68	4.19	0.57	4.57	<.001	0.29

Note. Response options ranged from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) with higher scores representing more salience.

In the fourth, and final, research objective, attention turned to job and life satisfaction. With regard to teaching agriculture, respondents rated their job satisfaction 0.96 points lower during COVID-19 when compared to before the pandemic. The difference observed in job satisfaction was a statistically significant ($t = 11.13$; p -value < .001) “large” difference. Life satisfaction during COVID-19 was 0.26 points lower than prior to the pandemic, a statistically significant ($t = 4.43$; p -value < .001) “medium” difference.

Table 4*Job and Life Satisfaction Before and During COVID-19*

Compared Variables	Before COVID		During COVID		<i>t</i>	<i>p</i> -value	Cohen's <i>d</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>			
Job Satisfaction	4.15	0.59	3.19	0.77	11.13	<.001	1.40
Life Satisfaction	3.98	0.58	3.72	0.67	4.43	<.001	0.41

Note. Response options ranged from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*) with higher scores representing higher satisfaction.

Conclusions and Discussion

The COVID-19 pandemic caused one of the most significant disruptions in the history of education (Daniel, 2020). For subjects reliant on experiential and lab-based instruction, like SBAE (Newcomb et al., 2004; Phipps et al., 2008; Talbert et al., 2007), the transitions from face-to-face instruction to remote learning brought about by COVID-19 were made even more challenging. Teachers were tasked with completely changing their work role while simultaneously adapting to completely restructured life roles. In the current study, we sought to illuminate the changes SBAE teachers experienced in their work and life roles due to COVID-19 through an evaluation of work and life interference, role salience, and role satisfaction.

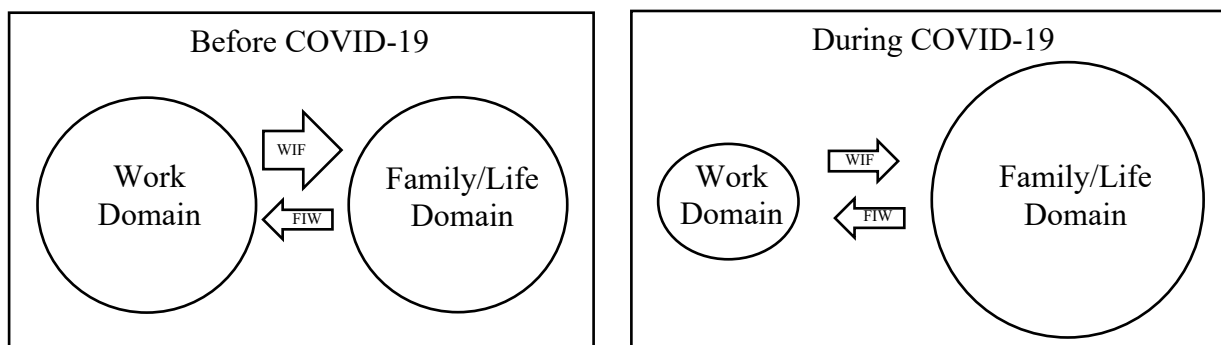
To organize this discussion, three key take-aways are highlighted. The three take-aways are titled (a) Work Domain Decline, (b) Job Satisfaction Slump, and (c) Resources Reconsidered.

Work Domain Decline

As the literature review highlighted, the work domain of SBAE teachers includes a wide range of elements that contribute to job satisfaction (Sorensen et al., 2016b). In the current study, we focused on work hours, WIF, and work salience. Within each of these characteristics, a statistically significant decline was observed from before COVID-19 to during COVID-19. Data from this research indicate teachers experienced a 42.20% decline in their weekday work hours and a 45.29% decline in their weekend work hours during COVID-19. Similarly, WIF declined by 21.82% during COVID-19. The decline in WIF is most likely caused by the decline in work hours, as time-based WIF is an indicator of time allocated in the work domain restricting time desired within the family domain. With regard to work salience, a 12.64% decline was observed during COVID-19 while life salience rose by 4.50%. These data suggest COVID-19 shifted SBAE teachers time and emotional attention away from the work role into the family/life domain (see Figure 1).

Figure 1

Work and Life Domains Before and During COVID-19



Job Satisfaction Slump

Existing research tells us unexpected changes in the workplace can dramatically decrease job satisfaction (Howard & Frink, 1996; Leana & Barry, 2000). The COVID-19 pandemic certainly presented an unexpected change in the work norms for SBAE teachers, including a new reliance on

remote instruction. Therefore, it is not surprising to see job satisfaction decline by 23.13% during COVID-19. Importantly, this magnitude of SBAE teacher job satisfaction decline contrasts the typically high job satisfaction observed among individuals in the profession (Cano & Miller, 1992; Chenevey et al., 2008, Grady & Burnett, 1985; Kitchel et al., 2012). The decrease in job satisfaction is of the utmost concern as job satisfaction is closely linked to retention in the teaching profession (Allen et al., 2000; Bruck et al., 2002; Sorensen et al., 2016a; Sorensen et al., 2017).

The dramatic decline in job satisfaction suggests teachers value the elements of their job lost amidst the pandemic-based restrictions. For example, in-person instruction, offering hands-on learning opportunities, FFA gatherings, and career and leadership development events are just a few of the lost elements that comprise the work of an SBAE teacher. Lindner et al. (2020) suggested the lack of hands-on learning in SBAE activities due to COVID-19 pose restrictions to learning and potential threats to job satisfaction. The significant decrease in job satisfaction we found in this study is important to existing research in SBAE exploring the work obligations of SBAE teachers in relation to job satisfaction. These data suggest reducing work hours without attention to *what* is being eliminated or restructured is not a sustainable solution given the expected decline in job satisfaction. Further, these findings suggest the relationship between work obligations and job satisfaction may not be unidirectional (i.e., more work obligations equal lower job satisfaction). Instead, a cyclical model of work expectations and job satisfaction needs to be considered in which certain work expectations increase job satisfaction which, in turn, cause teachers to pursue additional work obligations. As the current study highlights, however, the crux of the relationship is the *nature* of the work obligations as opposed to the *amount* of work assigned to SBAE teachers.

Resources Reconsidered

The conservation of resources theory was included as a foundational framework for this study. Within this theory, individuals are thought to build and protect resources within the roles (e.g., work, family) that make up their life (Grandey & Cropanzano, 1999). We leveraged this theory to explore the distribution of time between the work and life roles of SBAE teachers before and during the COVID-19 pandemic. The findings from this study help to inform the theory by highlighting how a dramatic shift impacting the work and life domains yields an opportunity for individuals to reallocate their time between multiple life domains. Further, evidence suggest a world-wide health concern, like the COVID-19 pandemic, will likely result in individuals dramatically moving time from the work domain into the family/life domain. Building upon the conservation of resources theory, the role-conflict theory suggests the unification of work and life roles alleviates the potential for work-family conflict (Greenhaus & Beutell, 1985). The merger of work and life roles caused by the COVID-19 pandemic provides a unique test of this hypothesis. The findings from this study support this hypothesis; specifically, as work and life roles were combined during COVID-19, WIF and FIW decreased for SBAE teachers.

While this research contributes to a broader understanding of both the conservation of resources and role-conflict theories, revisiting the findings in light of the theories illuminates an opportunity to reconsider the resources of interest when analyzing work and life roles. Specifically, conservation of resources theory suggests resources extend beyond time to include energy, conditions (e.g., marital status, parental status), and personal characteristics (e.g., self-esteem). Findings from the current study support a shift in how the resource of time changed for SBAE teachers during COVID-19; however, it is likely additional resources (e.g., energy, conditions, personal characteristics) were also reallocated to preserve the work and life roles of SBAE teachers.

Recommendations

The three take-aways introduced and described in the previous section inform the recommendations emerging from this work. Specifically, the work domain decline implies the need for continued research on the work domain of SBAE teachers in the post-COVID-19 era. The question being, will there be a return to pre-COVID-19 levels of WIF, work hours, and work salience, or has COVID-19 caused lasting changes in the work domain for SBAE teachers? The answer to this question will inform the potential need to reshape the discipline to fit the perspective of work held by teachers. For example, if the number of hours SBAE teachers work remains lower, what implications will this have on SAE programs, FFA activities, and building community relationships? Furthermore, because of the timing of data collection of this study, it is important to continue to examine these same variables as the COVID-19 pandemic continues on. School districts have made adjustments and prepared for a variety of instructional delivery methods in the 2020-2021 school year and beyond. The research questions for this study need to continue to be explored as the pandemic persists so a longitudinal picture can be established related to the impacts of COVID-19 on SBAE.

The second take-away, job satisfaction slump, foregrounds the enjoyment SBAE teachers experience from their work. Research is needed to answer if the job satisfaction of SBAE teachers will rebound after COVID-19. Additionally, it is expected that schools will continue to slowly return to in-person instruction with early phases omitting some features of a “traditional” classroom (e.g., small group labs, close collaboration, events requiring travel). As these phases of re-opening occur, evaluating the job satisfaction of teachers, especially in relation to remote or face-to-face learning, may help to uncover specific elements of the work role which relate to higher or lower levels of job satisfaction among SBAE teachers. Additionally, research is needed exploring if COVID-19 has caused a transition in the way teachers view their jobs (e.g., fear of getting sick due to exposure to students, additional requirements associated with sanitizing workplace) leading to a change in their satisfaction. The final thread of recommended research is on the sustainability of reduced job satisfaction. COVID-19, global pandemics, and the corresponding restrictions may cause a return to remote instruction for SBAE teachers. In this scenario, we would expect to see a similar level of job satisfaction observed in the current study. How long can SBAE teachers remain committed to their job when they are unsatisfied with the approach to instruction? Research is critically needed in this area to understand the potential impact of pandemics on the retention of SBAE teachers.

The final take-away, resources reconsidered, foregrounded the need to consider the distribution of resources beyond time. We recommend research exploring the preservation of energy, conditions, and personal characteristics in the post-COVID-19 era. Research on these areas is critical to understanding the diversity of factors which influence satisfaction and retention in the multitude of roles held by SBAE teachers.

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