

Teacher Emotional Exhaustion in the Age of COVID-19

Colby Gregg
The Ohio State University
Gregg.186@osu.edu

Katrina Swinehart Held
Central State University
Swinehartheld.1@osu.edu

Justin Pulley
The Ohio State University
Pulley.25@osu.edu

Stephanie Joliff
The Ohio State University
stephanie.jolliff@ridgemont.k12.oh.us

Amanda Bowling
Assistant Professor
The Ohio State University
Bowling.175@osu.edu

Tracy Kitchel
Professor and Senior Associate Dean
The Ohio State University
Kitchel.2@osu.edu

Department of Agricultural Communication, Education, and Leadership
200 Agricultural Administration Building
2120 Fyffe Road, Columbus, OH 43210
(614)292-6909

Introduction

On March 13, 2020, Ohio's Governor announced that when the final bell rang on March 16, all K-12 buildings would close for three weeks to curb the spread of COVID-19. As the three-week break for in-person learning turned into the remainder of the school year and into the fall semester for some, Ohio School Based Agricultural Education (SBAE) teachers experienced challenges delivering content through remote platforms. Research supports the shift from lecture and modeling-based instruction to integrating technology (Kiray, 2016). However, due to the novelty of the trauma of the COVID-19 pandemic, there is a lack of research examining how factors can influence a teacher's experience during such an event (Hydon et al., 2015).

Theoretical Frame

We utilized the lens of emotional exhaustion (EE) to explore the impacts of the COVID-19 pandemic that impacted American education beginning in March 2019. EE is defined as a feeling of physical and emotional fatigue that manifests as low energy, and is considered one of the three attributes of burnout (Maslach, et. al., 1996). Along with EE, we are examining teacher self-efficacy (TSE), based in Bandura's (1977) theory of cognitive behavior, and includes concepts uniquely related to classroom instruction (Tschannen-Moran & Hoy, 2001). External supports that might be considered influential for TSE and EE include support from colleagues, supervisors, friends, and family and professional development as a mode of shifting professional knowledge (Croom, 2003; Maslach, et. al, 1996; McKim & Velez, 2016). To examine this role of professional development within technology, technical pedagogical content knowledge (TPACK) can be used to examine the articulation between technical knowledge, content knowledge, and pedagogical knowledge (Koehler & Mishra, 2005; Mishra & Koehler, 2006).

Methodology

The purpose of this study was to examine teacher levels of TSE, TPCK, and EE, as well as their perceptions of administration responses to the COVID-19 pandemic. This research aligns with Research Priority 3 of the AAAE National Research Agenda (Stripling & Ricketts, 2016) and was guided by the following objectives.

1. Describe how Ohio SBAE teachers perceived administration support in response to school closings amid governor's orders in March of 2020.
2. Describe Ohio SBAE teachers' TSE, TPCK, and EE before the 20-21 school year.
3. Describe *ex post facto* teacher EE from February 2020 and compare it to current levels.

The instrument for this study utilized summated rating scales from previously published studies measuring TSE ($\alpha = .9$) (Tschannen-Moran & Hoy, 2001), TPCK ($\alpha = .95$) (Kiray, 2016), and EE ($\alpha = .95$) (Maslach et al., 1996). The EE scale was used twice – once to measure present levels, and again asking teachers to reflect and report answers from before their schools closed due to COVID-19 (8 months earlier). Finally, two new scales seeking to measure SBAE teacher perceptions of administrator's supports ($n = 6$, $\alpha = .94$) and expectations ($n = 5$, $\alpha = .8$) amid COVID-19 were used. These scales were developed through a pilot study sent to 102 SBAE teachers in the state of Illinois which received a response rate of 46% ($n = 47$). Factors were extracted by using principal axis factoring with a direct oblimin rotation, and all factor loadings were above .50, the threshold to be considered "good" (Comrey & Lee, 1992). In the final study, a simple random sample of Ohio SBAE teachers were selected, with the survey receiving a 24%

response rate ($n = 52$). All scales reported reliable Cronbach's alphas of .85 or greater, and the average participant was 39 years old ($M = 38.67$, $SD = 9.89$), had taught for 13 years ($M = 12.67$, $SD = 8.56$), and completed 26 hours of technology related professional development ($M = 26.33$, $SD = 28.2$).

Results

Objective one was to report perceived administration support in response to school closings. Using a five-point scale from 1 (not at all) to 5 (a great extent), participants described that their administrators exhibited supportive actions often ($M = 3.26$, $SD = .95$) and supportive expectations sometimes ($M = 2.07$, $SD = 1.36$). Objective two was to describe TSE, TPCK, and current EE levels. TSE, on a nine-point scale from none (1) to a great deal (9), was reported as quite a bit ($M = 6.73$, $SD = .85$); and teacher TPCK, on a five-point scale from do not know at all (1) to know very well (5), showed teachers moderately knowing how to use technology to enhance instruction ($M = 3.5$, $SD = .71$). The final scale for objective two was measured by summing participant scores on 9 symptoms of EE ranked from never (0) to every day (7) with participants reporting high (≥ 27 ; Maslach et al., 1996) levels of EE ($M = 34.75$, $SD = 12.81$). Objective three was to describe *ex post facto* levels of EE from before school closings using an identical EE scale and was also considered high ($M = 29.4$, $SD = 12.91$). A paired samples *t*-test was conducted to compare EE levels, and showed that even though both levels of EE were considered high, current EE scores were significantly higher than pre-COVID EE, showing a medium effect size, $t_{51} = 4.23$, $p < .001$, $d = .45$.

Conclusions

Regarding objective one, Ohio SBAE teachers perceived support from their school administrators both in actions and expectations following school closings from COVID-19. Administrative support has been ranked in the past as the most prominent issue facing SBAE teachers (Boone & Boone, 2007), and has been shown to be a component of job satisfaction impacted by COVID-19 (McKim & Sorensen, 2020). Conclusions for objective two were that teachers held high levels of both EE and TSE, and moderate levels of TPCK before the 20-21 academic year. Finally, findings for objective three show that while teachers reported high perceived EE from before the pandemic, their EE significantly increased over the first 6 months of the COVID-19 pandemic. Many of these findings align with other research conducted that indicate how this unprecedented shift in their professional life impacted teacher beliefs in their professional abilities and job satisfaction (McKim & Sorensen, 2020).

Implications/ Recommendations/ Impact on Profession

The data collected in this study support the implication that up to Fall 2020, SBAE teacher's EE increased, even though teachers felt support from their school administrators. We recommend that further research into EE and administrator support be conducted to learn more about the relationships between these variables and potentially discover ways to decrease teacher EE. Moving forward, we recommend that more opportunities be offered for SBAE teachers and administrators around building teacher TPCK, managing EE, and supporting teachers through actions and expectations. By furthering inquiry around this topic, we have an opportunity to investigate how best to support SBAE teachers in times of monumental uncertainty.

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