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## Occupational Therapy Educators' Self-Efficacy to Teach in a Blended Curriculum

#### Abstract

Educational trends have influenced occupational therapy education as evidenced by the adoption of new teaching methods such as blended learning. Blended learning is a combination of both synchronous and asynchronous learning that occurs online as well as portions of the learning occurring in a brick-andmortar. As more occupational therapy programs design their curriculum to include blended learning, it is essential to understand occupational therapy educators' self-efficacy related to their skills and capabilities to teach in such an innovative format. Little is known regarding occupational therapy educators' self-efficacy to teach in a blended curriculum. This qualitative study aimed to examine the perceptions of occupational therapy educators' self-efficacy when teaching in a blended curriculum. The theoretical framework for this study was Bandura's self-efficacy theory. Ten occupational therapy educators teaching in a blended curriculum were interviewed for this study. Content analysis, descriptive, in vivo, and pattern coding were used to code and analyze the data. Four themes emerged that may contribute to an enhanced self-efficacy when teaching in a blended curriculum: a) Personal agency enhances performance in teaching, b) university resources support growth as an educator, c) feedback as an opportunity for reflection and growth, and d) coping to overcome frustration teaching in a blended curriculum. Results of the study may provide university leaders insight on creating structured professional and mentoring programs that focus on educational learning theories and instructional design, training on educational technology, and providing feedback from peers and supervisors to promote reflection and behavior change which may lead to enhanced self-efficacy as a blended learning educator.

#### **Keywords**

Occupational therapy, blended learning, self-efficacy

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## Occupational Therapy Educators' Self-Efficacy to Teach in a Blended Curriculum

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#### **ABSTRACT**

Educational trends have influenced occupational therapy education as evidenced by the adoption of new teaching methods such as blended learning. Blended learning is a combination of both synchronous and asynchronous learning that occurs online as well as portions of the learning occurring in a brick-and-mortar. As more occupational therapy programs design their curriculum to include blended learning, it is essential to understand occupational therapy educators' self-efficacy related to their skills and capabilities to teach in such an innovative format. Little is known regarding occupational therapy educators' selfefficacy to teach in a blended curriculum. This qualitative study aimed to examine the perceptions of occupational therapy educators' self-efficacy when teaching in a blended curriculum. The theoretical framework for this study was Bandura's self-efficacy theory. Ten occupational therapy educators teaching in a blended curriculum were interviewed for this study. Content analysis, descriptive, in vivo, and pattern coding were used to code and analyze the data. Four themes emerged that may contribute to an enhanced self-efficacy when teaching in a blended curriculum: a) Personal agency enhances performance in teaching, b) university resources support growth as an educator, c) feedback as an opportunity for reflection and growth, and d) coping to overcome frustration teaching in a blended curriculum. Results of the study may provide university leaders insight on creating structured professional and mentoring programs that focus on educational learning theories and instructional design, training on educational technology, and providing feedback from peers and supervisors to promote reflection and behavior change which may lead to enhanced self-efficacy as a blended learning educator.

#### Introduction

In recent years, occupational therapy education has been evolving due to educational technology trends such as blended learning. Blended learning is a combination of both synchronous and asynchronous learning that occurs online as well as portions of the learning occurring in a brick-and-mortar setting (Christensen Institute, 2020). As a result, there has been an increase in occupational therapy programs that include blended learning in their curriculum (Belarmino & Bahle-Lampe, 2019). As more occupational therapy programs design their curriculum to include blended learning, it is essential to understand occupational therapy educators' self-efficacy related to their skills and capabilities to teach in such a format. Yoo (2016) discussed that teacher quality and sustainability are correlated with higher self-efficacy. Therefore, teacher self-efficacy can be closely related to student success and higher student outcomes (Gurley, 2018; Martini et al., 2019).

The impact of technology on education has influenced curricula particularly related to the use of blended learning throughout higher education. According to Cooper et al. (2020), "blended courses in higher education continue to increase along with the demands for them, and many researchers consider blended learning to be the emerging default course design" (p. 2). This statement is evident given the recent events with the corona virus pandemic and its impact on education. Blended learning requires educators to be competent in using face-to-face and online learning strategies to facilitate successful student learning experiences. As blended learning continues to grow in the higher education sector, occupational therapy programs are embracing online and blended formats for content delivery. This shift in pedagogy approaches requires occupational therapy educators to be confident in their skills and have the self-efficacy to navigate these teaching methods.

#### **Literature Review**

## **Blended Learning and Occupational Therapy Education**

Occupational therapy educators have been using online and blended formats consistently since the mid-1990s, with the first online occupational therapy course dating back to 1980 (Belarmino & Bahle-Lampe, 2019). Gee et al. (2017) reported that more occupational therapy programs were shifting towards incorporating more online or blended courses within their curriculum. Giles and Janes (2020) stated, "educators must acknowledge that technology is a large component of students' daily occupations and, therefore, consider how to integrate technology into the learning environment" (p. 191). Cabatan et al. (2019) found that adaptability is a key factor that contributes to the success of an occupational therapy educator in the academic environment. Occupational therapy educators transitioning from the clinic to the academic setting expressed a lack of confidence and overall feelings of unpreparedness in the educational environment (Foy, 2017; Stoykov et al., 2017).

As noted in the literature, educators who teach in a blended curriculum assume various roles and use multiple teaching strategies. For example, the Belarmino and Bahle-Lampe (2019) study revealed that occupational therapy educators experienced a shift in how they taught content online versus face-to-face teaching. One such shift was assuming the role of a facilitator in delivering content versus providing direct instruction, such as in a traditional lecture. The shift from delivering a traditional lecture to assuming the role of facilitator requires using different pedagogical strategies, such as selecting and using technology tools that will allow the occupational therapy educator to deliver information in a blended learning environment. Gee et al. (2017) emphasized the importance of occupational therapy educators having the knowledge to select and align the appropriate technology tools with the content being delivered. As the continued shift in how content is taught in occupational therapy programs, it is imperative to examine the views of occupational therapy educators as it relates to their capabilities and self-efficacy to teach in a blended curriculum.

## **Theoretical Framework**

Bandura's self-efficacy theory (1977) was used to view and examine occupational therapy educators' self-efficacy regarding teaching in a blended curriculum. Self-efficacy theory explains an individual's beliefs regarding their capabilities in performing activities or tasks. Individuals with higher self-efficacy tend to be more persistent and engage in opportunities regardless of the risks. Higher self-efficacy in an individual usually results in positive and better outcomes when partaking in current or new tasks (Bandura, 1977). Bandura also claimed that self-efficacy is closely linked to external experiences and outcomes. If the person experiences success and is rewarded for their achievement, their self-efficacy will be greater. These positive experiences shape the individual and give the individual a greater sense of their capabilities and reinforce their positive self-efficacy (Bandura, 1977). Bandura also discussed that an individual who experiences failure would usually attribute the failure to having low capabilities, resulting in decreased self-efficacy.

Teaching and learning do not occur in isolation, so it is vital to understand the concepts that shape and influence a person's self-efficacy. Bandura (1977) stated, "expectations of personal efficacy are based on four major sources of information: "performance accomplishments, vicarious experience, verbal persuasion, and physiological states" (p. 195). Performance accomplishments are based on the individual's ability to master experiences (Bandura, 1977). Having a sense of repeated success with tasks enhances the individual's self-efficacy and gives the individual the ability to face new challenges. Vicarious experience is having the opportunity to observe others performing a similar task. Observing others allows the individual to see how others persist and are successful with a task. It also gives the observer the ability to watch an individual overcome failure to complete a task or activity. Verbal persuasion can be described as feedback provided to individuals regarding their performance with a particular task. Bandura (1977) argued that verbal persuasion alone is not enough to foment and sustain self-efficacy but can contribute to and influence a person's view regarding their performance. Finally, physiological state refers to how a person can manage, handle,

and overcome challenges (Bandura, 1977). For example, an anxious or nervous individual teaching in a blended format may feel insecure and may not have the coping ability to persist and overcome feelings of insecurity.

As blended learning increases within the higher education landscape, occupational therapy educators must possess a sense of self-efficacy to teach within this everdeveloping teaching style. Looking at the four sources of self-efficacy (Bandura, 1977) and the skills required to teach in a blended learning environment can shed light on how universities, administrators, and supervisors might support the success of occupational therapy educators. In their review of the literature regarding self-efficacy and teaching, Morris et al. (2017) argued for the need to have studies that focus on isolating the four sources of self-efficacy and using research designs "that better contribute to the understanding of the sources" (p. 825). Likewise, Jonker et al. (2018) discussed that an educator's perceived self-efficacy could influence their ability to adapt and change, such as teaching in a blended curriculum.

This study was intended to gain insight into how occupational therapy educators' performance accomplishments, vicarious experiences, verbal persuasion, and physiological states influenced and shaped their teaching self-efficacy. The constructs in self-efficacy theory were key elements of the interview guide. The knowledge gained from this study may enhance the occupational therapy educator's ability to teach in a blended curriculum, thus achieving a greater sense of self-efficacy and ultimately lead to a more significant impact on student learning.

## **Problem and Purpose**

A lack of understanding regarding one's capabilities can impact an instructor's self-efficacy and decrease teaching performance in a blended environment (Cocca et al., 2018; Luongo, 2018; Yildiz & Erdem, 2018). There is sparse information in occupational therapy literature regarding occupational therapy educators' experiences teaching in a blended learning curriculum. Occupational therapy educators (particularly those who have transitioned from clinical practice to academia) may not have formal training in educational learning theories or pedagogy (Cabatan et al., 2019). As such, their self-efficacy may be limited (Cocca et al., 2018). Examining occupational therapy educators' self-efficacy might explain how occupational therapy faculty view their capabilities to teach effectively in a blended learning format. The purpose of this study was to examine occupational therapy educators' experiences teaching in a blended learning curriculum and the influence of blended learning on educator self-efficacy.

### Methodology

## **Research Design and Rationale**

Prior to implementation, the study protocol was approved by the university's Institutional Review Board. All participants provided informed consent to participate in the study. This qualitative interview study sought to explore the research question: "How do occupational therapy educators view their self-efficacy regarding teaching effectively in

a blended curriculum?" Because self-efficacy is expressed through understanding the individuals' experiences in terms of the four constructs described by Bandura (1977), a basic qualitative approach brought awareness to the phenomenon in a practical way (Caelli et al., 2003).

## Sampling

This study employed both convenience and purposeful sampling from a potential pool of over 90 full and part-time faculty working at a university with multiple campuses across the United States. To promote maximum variation, purposeful sampling (Patton, 2015) was employed in recruiting ten participants with various years and types of teaching (e.g., face -to-face, online, blended) experience. Further, purposeful sampling was used to recruit participants who had differing years and types of experience in academia. The faculty's range of expertise provided rich and robust data that gave insight into self-efficacy and teaching in a blended curriculum.

#### Recruitment

Occupational therapy leadership within each program facilitated recruitment by emailing the recruitment flyer to occupational therapy faculty, and potential participants emailed the researcher to express interest in participating. Inclusion criteria required that participants had one or more years of experience teaching in a blended learning curriculum which helped to enhance reflection about experiences and self-efficacy. Participants were excluded from the study if they only taught in a traditional face-to-face program, did not possess an occupational therapy credential, were adjunct instructors, or who had less than one year of teaching experience. Once it was determined that participants met inclusion criteria, informed consent was obtained, and an interview was scheduled. Ten participants agreed to participate and all ten were ultimately invited to an interview via Zoom technology. Because saturation was attained, ten participants were adequate for data analysis, therefore, subsequent recruitment efforts were not required.

## **Participants**

Table 1 is a visual representation of the participants' (n=10) demographic information depicting the participants' experience level as occupational therapy educators. Five participants had clinical doctorates in occupational therapy (OTDs), three had PhDs and two participants had master's degrees in occupational therapy. Two of the participants were at the associate rank, five were at the assistant professor rank, and three were at the instructor level. Most participants (n=8) had experience teaching in a traditional face-to-face program before teaching in a blended curriculum. Participants 6 and 10 had only taught in a blended program and had no prior teaching experience. Participants taught in various entry-level occupational therapy programs (Master's & Doctoral or day vs. weekend programs).

Table 1

Participant Demographics

Participant Number	Years as an OT	Total Years Teaching	Highest Level of Education	Years Teaching in a Face-to-Face Curriculum	Years Teaching in a Blended Curriculum
1	20	8	PhD	7	4 months
2	11	4	Post- professional OTD	1	3
3	33	13	PhD	6	7
4	31	14	Post- professional OTD	10	4
5	29	20	Post- professional OTD	8	12
6	5	3 ½	Master's	0	3 ½
7	11	5	Post- professional OTD	3	2
8	31	23	PhD	21	2
9	23	6	Post- professional OTD	3	3
10	13	5	Master's	0	5

## **Data Collection**

Bandura's (1977) theory of self-efficacy provided the theoretical framework for this study and the content of the qualitative interview guide (see Table 2). Four main constructs compose self-efficacy: performance accomplishments, vicarious experience, verbal persuasion, and physiological state (Bandura, 1977). Based on these constructs, an interview guide was developed to include questions about how a person viewed their self-efficacy when teaching in a blended curriculum. Prior to implementing the study, the interview guide was pilot tested with two occupational therapy educators who had experience in a blended curriculum which led to revision of the interview guide. Table 2 depicts interview questions aligning with the four constructs in self-efficacy theory.

 Table 2

 Interview Questions Addressing Self-Efficacy Components

Self-Efficacy Components	Interview Questions
Performance	Tell me a little about how you came to teach in occupational therapy.
Accomplishments	Were you a contributing faculty or adjunct faculty before teaching full-time?
	Why were you motivated to teach occupational therapy?
	Tell me about your teaching experience?
	How long have you been teaching?
	Have you taught in a blended curriculum?
	Have you taught face to face?
	What skills do you believe you possess that have helped you to teach within a blended learning environment?
	Did you do anything to prepare? If so, what kinds of things did you do to prepare? For example, did you shadow someone?
	Can you tell me about any barriers that you may have experienced
	teaching in a blended environment?
	Can you give examples of some barriers?
	How did you overcome these barriers?
Vicarious Experience	What factors do you feel have contributed to shaping your skills and capabilities to teach in a blended environment?
·	Have you observed others teach in a blended environment?
	Have you observed others teaching face-to-face?
	Does your university provide resources to support your development as an instructor in a blended curriculum?
	Can you give examples of the types of resources provided?
Verbal Persuasion	Can you tell me how effective receiving verbal feedback on your
	performance has or has not shaped your self-efficacy?
	Student feedback
	Supervisor feedback
Physiological State	Have you ever felt inadequate or not prepared to teach in a blended environment?
	Can you describe or give examples of how you coped when you felt inadequate or not prepared?
	How did you overcome these feelings of inadequacy or
	unpreparedness?

All interviews were conducted virtually using the Zoom platform which enabled video/audio recording of the interviews. Participants were informed that the interview would be recorded, transcribed, and kept secure in a password-protected computer. Additionally, they had the opportunity to voice any concerns regarding the study and the procedures before starting the interview. Interviews lasted approximately 60 minutes and the researcher took field notes to record observations such as non-verbal

communication. After the interview, the participants and the researcher engaged in a debrief of the process. Participants were reminded that the recording would be transcribed and sent back to them for verification. Participants were encouraged to contact the researcher if any questions or concerns arose during the study. Transcriptions occurred immediately following each interview which assisted in determining that saturation was reached. Saturation of interview data emerged by the fifth participant; however, to ensure saturation was reached, data collection continued until the tenth interview. At this point, when saturation was clear, data collection was concluded.

As a final step of ensuring accuracy of data, member checking consisted of sending an electronic copy of each participant transcript to their email. Participants were asked to review the accuracy of their transcript and were given the opportunity to meet and discuss their interview. Three out of the ten participants engaged in a follow up meeting in which participants affirmed the accuracy of the transcripts. The other seven participants affirmed the accuracy of their transcript via email and did not make an appointment to verbally discuss the interview data.

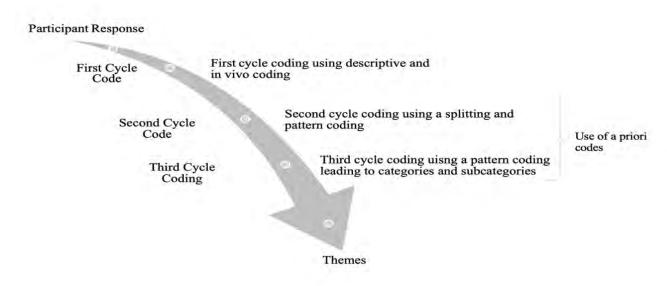
## **Data Analysis**

Prior to data analysis, all recordings used Zoom features to complete a verbatim transcription. After receiving the transcription, the primary investigator (PI) viewed/listened to the recordings and edited to remove transcription errors. Corrected transcriptions were then entered into Dedoose's (2018) qualitative data analysis (QDA) software to assist with organizing and analyzing data.

The analysis employed the use of a "content analysis" approach that Patton (2015) described as analyzing the "text" to identify and cross-reference participant responses with concepts or themes from the data (p. 541). In addition to using Patton's approach to data analysis, data were analyzed as described by Saldaña (2016) using "first, second, and third cycle coding" to arrive at themes as illustrated in Figure 1. First cycle was open-ended and used descriptive and in vivo coding to identify and organize any patterns among the data gathered. Second and third cycle coding employed a priori coding to identify if the four concepts of self-efficacy apply to the data.

Figure 1

Transitioning from Coding to Themes



## Strategies for Trustworthiness During Data Collection and Analysis

To enhance trustworthiness, researchers engaged in various practices to ensure credibility, transferability, dependability, and confirmability (Patton, 2015; Ravitch & Carl, 2016). To overcome bias in the study, it was essential to provide a thick description of the phenomenon, identify a clear interview protocol, and cross-reference the interviewees' responses (Fusch et al., 2018; Roller & Lavrakas, 2018). Credibility was enhanced by a) ensuring the literature saturation and cross-referencing the data with past results (Fusch et al., 2018) and b) bracketing, using an audit trail, and reflexive journaling to minimize researcher bias and peer debriefing to minimize researcher bias. These strategies were used to minimize researcher bias because the first author teaches in a blended curriculum.

Dependability was facilitated by using a pilot tested interview guide during data collection, as well as member checking and peer debriefing during data analysis. Peer debriefing consisted of weekly meetings with an expert in qualitative research on a weekly basis during the data analysis phase to review and affirm preliminary findings. Additionally, this peer-debriefer coded several interviews ensuring dependability of the findings. Confirmability was first facilitated through pilot testing the interview guide and adding additional probing questions. Additional confirmability strategies included member checking, supporting interview quotations for each theme, and theoretical triangulation according to constructs in self-efficacy theory. Transferability was enhanced via attempts to enroll a diversity of participants who had differing levels of clinical and educational experience. The use of rich thick descriptions about the participants and their experiences helped with transferability as well as confirmability.

#### Results

The study focused on answering the following research question: How do occupational therapy educators view their self-efficacy regarding teaching effectively in a blended curriculum? First cycle coding revealed 22 codes in which "feedback" was the most frequent comment. Second and third cycle coding (see Figure 1) employed apriori analysis applying self-efficacy theory to the data. Finally, four themes emerged: (a) personal agency enhances performance in teaching, (b) university resources support growth as an educator, (c) feedback as an opportunity for reflection and growth, and (d) coping to overcome frustrations teaching in a blended curriculum. All data were accounted for, and no discrepant cases or non-confirming data impacted the study results.

Table 3 describes *Sources of Self Efficacy* that became evident during first and second cycle coding. First cycle coding included in vivo and descriptive analysis generating words and phrases relevant to the research question. Second cycle coding employed "splitting" the data and converging codes and patterns (Saldaña, 2016) to cross reference findings with self-efficacy theory. Saldaña (2016) described splitting as scrutinizing the data at a granular level. The data were split by extrapolating participants' data reflective of the four sources of self-efficacy. Splitting the data assisted in identifying any granular details that directly reflected the four sources of self-efficacy.

After second cycle coding, a third cycle of coding was performed which included a review of the data, referring back to the theory of self-efficacy, and a review of the literature; two broad categories, and five subcategories emerged (see Table 4). These two broad categories were internal and external factors that influenced self-efficacy, and the subcategories were 1) personal agency, 2) barriers to teaching, 3) university resources and supports, 4) feedback, and 5) emotional regulation. Finally, revisiting self-efficacy theory and research, pattern coding was implored to further refine the categories and arrive at themes. Saldaña (2016) defined pattern coding "that identifies similarly coded data...organizes the corpus into sets, themes or constructs and attributes meaning to that organization" (p. 296). Once third cycle coding was concluded, the following themes emerged:

- · Personal agency enhances performance in teaching
- · University resources support growth as an educator
- · Feedback as an opportunity for reflection and growth
- · Coping to overcome frustrations teaching in a blended curriculum

Table 3
Sources of Self-Efficacy from First and Second Cycle Coding

Sources of Self- Efficacy	First Cycle Coding	Second Cycle Coding
Performance Accomplishments	I wanted to teach Prior experience Skills and capabilities Preparation Began doctorate program Blended learning experience Formal education	Personal Agency Prior experience Blended learning experience I wanted to teach Preparation Skills and capabilities Began doctorate Formal education
Vicarious Experience	Professional development Limited support Observing others Mentorship Technology	University Resources Professional development Technology Mentorship Observing others Limited support
Verbal Persuasion	Feedback Team teaching support	Feedback Team teaching support (peer feedback) Student feedback Supervisor feedback
Physiological State	Feelings of inadequacy and failure Barriers to teaching Coping strategies Solutions Problem-solving	Emotional Regulation Feelings of inadequacy and failure Coping strategies Problem-solving Solutions Acclimating to university culture Barriers to teaching Scheduling Unusual event: COVID

Table 4

Third Cycle Coding: Internal and External Factors influencing Self-Efficacy

Sources of Self-Efficacy	Internal Factors	External Factors
Performance	Subcategories Personal Agency	Subcategories Barriers to Teaching
Accomplishments	Prior experience	Scheduling
	Blended learning	Technology
	experience	
	I wanted to teach	
	Preparation Skills and capabilities	
	Began doctorate	
	Formal education	
Vicarious Experiences		University Resources and
		Supports
		Professional development
		Mentorship
		Observing others Limited support
		Coping strategies
		Solutions
		Acclimating to university culture
Vanhal Danasaaian		E dl d-
Verbal Persuasion		Feedback Peer feedback
		Student feedback
		Supervisor feedback
Physiological State	Emotional Regulation	
. <b>.</b>	Feelings of inadequacy and	
	failure	

## **Themes**

As mentioned previously, four themes emerged from the study. Table 5 describes the themes, the relationship to self-efficacy theory, and sample participants' quotes.

Table 5

Themes: A Reflection of the Sources of Self-Efficacy

Emergent Themes	Relationship to Self-efficacy Theory Constructs	Participant Quotes
Personal Agency Enhances Performance in Teaching	Performance Accomplishments	"I started just doing traditional face to face you know lectures and PowerPoints and that kind of stuff. I don't know how it would be like if this is your first-time teaching in a blended curriculum." (Participant 1)
University Resources Support Growth as an Educator	Vicarious Experience	"I would have loved training, we lacked training opportunities at the timeI went and enrolled in a Ph.D. program." (Participant 3)
Feedback as an Opportunity for Reflection and Growth	Verbal Persuasion	"I really like getting feedback, even when it's negative. But once you get over the initial feeling it really energizes me to move forward and make some changes." (Participant 6)
Coping to Overcome Frustrations Teaching in a Blended Curriculum	Physiological State	"There's a lot of inadequate feelings this isn't the right thing for me." (Participant 2)  "Sometimes just technology not
		working properly can be frustrating." (Participant 4)

## Theme 1: Personal Agency Enhances Performance in Teaching

Many participants discussed that their personal agency allowed them to overcome barriers to teaching in a blended curriculum. Bandura (1997) defined agency as "acts done intentionally" (p. 3). Many participants (n=8) used their prior teaching experience and subject matter knowledge to overcome their inexperience with blended learning. Seven of the participants discussed that their previous experience in traditional face-to-face teaching helped them when transitioning and teaching in a blended curriculum. Two of the participants had no prior teaching experience but referred to their experiences as an online student, which helped them transition to teaching in a blended curriculum. Participant 3 shared that she had no experience with blended learning and enrolled in a Ph.D. program in education to learn and effectively teach in a blended curriculum.

Another aspect of personal agency that arose from the data was personal attributes of skills and capabilities. For example, five participants stated that being "flexible" and "organized" made them feel that they were effective when teaching in a blended curriculum. In comparison, the other five participants mentioned: "communication," "creativity," and "lifelong learning" as skills and capabilities that have contributed to their success teaching in a blended curriculum.

## Theme 2: University Resources Support Growth as an Educator

The second theme was university resources and support. Subthemes of mentorship and professional development were viewed as essential aspects of the participants' growth for teaching in a blended curriculum. Eight of the ten participants indicated wanting more time to engage in formal mentorship relationships. The participants viewed mentorship as a crucial support in bettering their effectiveness teaching in a blended curriculum. For example, Participant 2 stated, "I kind of wish I would have received mentorship because I don't think there would have been as big of a learning curve." Similarly, Participant 9 shared "I think we certainly need a formalized mentorship program," Participant 4 asserted, "There were no mentors when I started, I think I was a mentor to a mentee because I had the educational background, but I didn't have a mentor, and I didn't observe anyone."

A second subtheme under university support was professional development in which all ten participants felt that this resource played a big part in building their confidence to teach in a blended curriculum. For example, Participant 5 described her experience as taking advantage of professional development opportunities in her statement: "Having more training on technology, improved my lens and helped me be more successful." Conversely, Participant 3 indicated not having as much university support when she began her teaching career and noted "I would have loved training. We lacked training opportunities at the time, so I enrolled in a Ph.D. program."

## Theme 3: Feedback as an Opportunity for Reflection and Growth

The third theme that arose from the data was feedback from colleagues and students as a contributor to self-efficacy. According to self-efficacy theory, feedback is referred to as verbal persuasion (Bandura, 1977). Verbal persuasion enhances self-efficacy regarding performance. All participants discussed feedback and how it impacted their ability to teach in a blended curriculum. Nine participants mentioned receiving feedback from colleagues and students but not necessarily from their supervisor. Participant 6 described her experience with feedback: "I really like getting feedback; even when it's negative; it energizes me to move forward and make changes." Conversely, Participant 5 shared that the credibility of the person providing feedback matters. For example, she stated, "I have been teaching for 10 years and the person giving me feedback should have more experience." Participant 9 described her experience with student feedback as "When I receive specific feedback, I think about what that means, what I did, and then I'll change it [learning activities]." Participant 2 described her experience with feedback as an opportunity for growth.

Participants noted that colleague feedback was valuable in enhancing their teaching. Further, they expressed that the person providing the feedback should be someone they could trust who possesses extensive experience teaching instead of a new faculty member giving feedback. Lastly, student feedback was seen as an opportunity to self-reflect on one's ability to teach and improve upon the types of activities to engage students in a blended learning environment.

Theme 4: Coping to Overcome Frustrations Teaching in a Blended Curriculum

The final theme was frustration teaching in a blended curriculum. Physiological state
refers to how a person can manage, handle, and overcome challenges and can
influence a person's sense of efficacy and impact the person's ability to persist and
overcome challenges (Bandura, 1977). Participant 6 described her experience as "the
time commitment is unbelievable ... I mean, it's not uncommon to work 60 hours a
week." Similarly, Participant 4 stated, [Frustration] "also has to do with faculty not
having enough time." She also noted, "sometimes technology not working properly can
be frustrating." Participant 10 described their feelings of frustration with "fluctuating
class size and technology as challenging." Finally, participants mentioned that being
prepared, communicating with faculty, organization, flexibility, and seeking help were
ways of overcoming frustration when teaching in a blended curriculum. Participants
discussed that being prepared, relying on their skills such as flexibility and organization,
as well as asking for assistance from colleagues were coping strategies to assist in
overcoming feelings of frustration.

#### **Discussion**

Analysis of the findings identified four main themes regarding how occupational therapy educators viewed their self-efficacy regarding teaching effectively in a blended curriculum. These themes were (a) personal agency enhances teaching performance, (b) university resources support growth as an educator, (c) feedback as an opportunity for reflection and growth, and lastly (d) coping to overcome frustrations teaching in a blended curriculum. The results indicated the four sources of self-efficacy were interdependent and influenced each other. In addition, the analysis confirmed findings from previous studies on self-efficacy by Barton and Dexter (2020), Dickenson (2016), Weston (2018), and Yada et al. (2019).

## **Personal Agency Enhances Teaching Performance**

This theme focused on performance accomplishments as a main source of self-efficacy. The results of this study confirmed past research studies in that occupational therapy faculty reported relying on past and current experiences as an educator and as a clinician in overcoming barriers and failures to effectively teach in a blended curriculum. Bandura (1977) claimed that self-efficacy is closely linked to external experiences and outcomes. If the person experiences success and is rewarded for their achievement, their self-efficacy will be greater. These positive experiences shape the individual and give the individual a greater sense of their capabilities and reinforce positive self-efficacy. Also, participants discussed the importance of being prepared and relying on their knowledge of the content to overcome barriers and be successful teaching in a blended curriculum. This finding is similar to Pearman et al. (2021) in which "self-

efficacious teachers are described as having a strong knowledge base in their content" (p. 85). Participants felt confident in their abilities to teach in a blended curriculum by having a thorough understanding of the content they were teaching. Relying on prior knowledge regarding the content, allowed the participants to be effective teaching in a blended curriculum.

Many participants attributed their ability to be flexible and organized to their success teaching in a blended curriculum. This finding is similar to Cabatan et al. (2019) in which adaptability was a key factor contributing to success of an occupational therapy educator. Participants noted that being organized and flexible helped them address student needs by adapting their teaching to enhance student learning. Findings of this study were consistent with the Belarmino and Bahle-Lampe (2019) study, which revealed that occupational therapy educators experienced a shift in how they taught online content versus face-to-face teaching. Having the ability to be flexible allows the occupational therapy educator to shift from different teaching strategies while meeting the needs of the students.

## **University Resources Support Growth as an Educator**

The results from this study revealed that vicarious experience and verbal persuasion were important to enhancing the occupational therapy educators' self-efficacy to teach in a blended curriculum. Mentorship and professional development were cited as important resources and support in influencing self-efficacy to teach effectively in a blended curriculum. Many of the participants discussed wanting a formal mentorship program in which they could shadow and learn from an experienced faculty member when they first started teaching in a blended curriculum. This is similar to a study by Ismail et al. (2021) in which a mentoring program can enhance a mentee's self-efficacy. Results in this study are similar to Dickenson's (2016) study, in which modeling can be helpful for the individual with limited experience and confidence in their skills.

An important finding from this study was related to characteristics a mentor should possess. Participants discussed that mentors should possess extensive experience and should be someone who is trustworthy. These results are similar to the arguments made by Bandura (1977) that using models who are similar regarding the person and the situation is more influential than those models who are different. It is important that when establishing a formal mentorship program, selecting mentors who possess characteristics that are valued by the mentee should be taken into consideration.

All ten participants mentioned professional development was a valuable resource that enhanced their effectiveness teaching in a blended curriculum. Participants discussed attending workshops regarding educational technology tools and how to use them in the learning environment and varying pedagogy strategies. These findings support those of Giles and Janes (2020) in which, "educators must acknowledge that technology is a large component of students' daily occupations and, therefore, consider how to integrate technology into the learning environment" (p. 191). Participants of this study found that professional development not only helped them become more knowledgeable regarding technology, but they also learned about various pedagogies to facilitate teaching in a

blended learning environment. Martin et al. (2019) recommended creating professional development programs that address the needs of faculty teaching online such as course design. Having professional development programs with an emphasis on blended learning would support the needs of occupational therapy faculty teaching in a blended curriculum. Participants in the study also mentioned wanting to have more hands-on opportunities during professional development sessions to assist in their learning. Results are similar to those by Weston (2018) in which participating in a clinical instructor program focused on pedagogy, instructional strategies, and preparing to be a clinical instructor-led to an enhanced sense of self-efficacy.

## Feedback as an Opportunity for Reflection and Growth

According to Bandura (1977) verbal persuasion alone is not enough to foment and sustain self-efficacy but can contribute to and influence a person's view regarding their performance. The results from this study demonstrated that occupational therapy educators relied on colleagues' feedback as a way to brainstorm and problem solve issues that would arise when teaching in a blended curriculum. Feedback from colleagues can be viewed as a catalyst for self-reflection allowing the individual to appraise their teaching abilities resulting in modification and adaptation to their teaching. Unlike the Barton and Dexter (2020) study in which verbal persuasion was valuable in the beginning stages of learning a new task, the results from this study demonstrated that most participants benefited from ongoing feedback even after they felt comfortable teaching in a blended environment. Perhaps this can be attributed to the participants wanting to brainstorm about learning activities versus needing verbal feedback regarding their teaching performance. Regardless, participants felt that feedback from colleagues was valuable when teaching in a blended curriculum. However, the results from this study also revealed that the individual providing the feedback should be someone with extensive expertise and a trustworthy source. This is similar to Bandura's (1977) research in which the person providing feedback is regarded as an expert.

Finally, feedback from students also prompted self-reflection which resulted in modifications to their teaching. Although feedback (e.g., verbal persuasion) from students was not always held in high regard, most participants mentioned that feedback from students allowed them to reflect on their communication style, the choice of learning activities, and exploring various pedagogical strategies. Participants implied that verbal persuasion without self-reflection may limit the potential to enhance self-efficacy; therefore, faculty need opportunities for self-reflection via a) formal mentorship programs; b) faculty development activities; and c) informal peer discussions. Figure 2 illustrates the process of how verbal persuasion prompts self-reflection, ultimately leading to an enhanced self-efficacy for teaching in a blended curriculum. Clearly, this finding warrants further study to explore the impact of verbal persuasion combined with reflection and their influence on self-efficacy.

Figure 2

Verbal Persuasion as a Catalyst for Self-Reflection



## Coping to Overcome Frustrations Teaching in a Blended Curriculum

Physiological state can influence a person's sense of efficacy and impact the person's ability to persist and overcome challenges. Physiological state refers to how a person can manage, handle, and overcome challenges (Bandura, 1977). The results from this study revealed that many of the participants experienced frustration when teaching in a blended curriculum. Time commitment and scheduling caused the most frustration amongst the participants as well as technology not working properly when teaching in a blended learning curriculum. The results of this study did not reveal if feelings of frustration impacted the participants' self-efficacy. This aligns with Yada et al. (2019) who noted that physiological state appears not directly to have an impact on the individuals' self-efficacy but "rather mediates self-efficacy through cognitive processes" (p. 21). This supports the participants' responses in which they discussed using strategies such as being prepared, communicating with faculty, organization, flexibility, and seeking out help as ways of overcoming their feelings of frustration when teaching in a blended curriculum.

#### Limitations

This study's limitations were recruiting enough occupational therapy faculty teaching in a blended curriculum. However, ten participants volunteered to be in the study, and data saturation was noted after the fifth participant. In addition, findings by Guest et al. (2006) discussed that six to 12 interviews appear to meet saturation. Therefore, the number of participants for this study fell within this range. However, the sample size may limit the transferability of the study.

A second limitation of the study was the setting in which the participants were recruited. The participants were recruited from one university with multiple campuses across the United States, which may impact the transferability of findings. As with many studies, volunteer bias may have impacted results, in that, participants who had stronger opinions/experiences with blended learning may have agreed to participate in the study.

A final limitation was the interview questions used to gather data. Even though the interview questions were piloted and modified based on feedback, there may have been a bias towards barriers of self-efficacy. To mitigate this potential bias, rigorous methods were used during the final stage of analysis where the researchers identified both barriers and facilitators as well as comparing findings to the literature.

## **Implications for Occupational Therapy Education**

The results of this study affirmed prior and current findings regarding the theoretical constructs of the self-efficacy theory (Bandura, 1977). In addition, the results revealed that performance accomplishment is a foundational building block for self-efficacy. Participants in this study shared strategies that helped them influence self-efficacy that might assist other educators. For example, many participants described that they relied on prior experience in teaching, as a clinician, their knowledge of the content, flexibility, organization, and being prepared as strategies to overcome barriers to teaching in a blended curriculum. Based on the study results, vicarious experience, verbal persuasion, and physiological state assisted educators in further refining the ability to accomplish a task. Feedback from students was seen as valuable but not held in the same esteem as feedback from their peers. Nevertheless, results indicate that student feedback was a catalyst for self-reflection and a change agent for improving learning activities and enhancing teaching ability in a blended curriculum.

The results of this study are promising. However, further research on verbal persuasion is recommended to explore its impact as a catalyst for self-reflection and its influence on self-efficacy. In particular, feedback from supervisors and how it can impact a person's perceived self-efficacy in teaching in a blended curriculum would be of interest. Second, further research focusing on vicarious experience and its impact on self-efficacy would be beneficial. For example, participants from this study mentioned that it is essential that the person providing feedback should be someone they could trust and have extensive expertise. Studying the characteristics of those who are exemplars and who can serve as models would extend the literature on this source of self-efficacy.

A third recommendation would be to replicate this study with other universities that have an occupational therapy program with a blended curriculum that have unique characteristics. For example, universities that are private versus public and those that are for-profit versus non-profit. It would be interesting to see if universities with these varying characteristics have varying levels of resources and support that may impact self-efficacy of occupational therapy faculty.

#### **Future Research**

Future research into the different types of professional development opportunities to enhance and support a person's self-efficacy is warranted. For example, studying the effects of a formalized certification program in online and blended learning and the impact on self-efficacy compared to in-house professional development provided by universities would shed light on how to best structure professional development programs. Finally, this study used a basic qualitative design to gain insight into occupational therapy educators perceived self-efficacy in teaching in a blended

curriculum. Using a different methodology approach, such as mixed methods, could objectively measure self-efficacy complemented by personal experience and provide a more comprehensive understanding of how higher education institutions can enhance and support self-efficacy in faculty.

#### Conclusion

This qualitative study aimed to examine the perceptions of occupational therapy educators' self-efficacy to teach in a blended curriculum. The literature speaks to occupational therapy educators' lack of preparedness, self-confidence, difficulty managing various academic roles and responsibilities, and a lack of instructional methods for teaching (Belarmino & Bahle-Lampe, 2019; Cabatan et al., 2019; Gee et al., 2017). The focus of this study was to gain insight and examine how self-efficacy might be enhanced and supported for teaching in a blended curriculum. In addition, examining occupational therapy educators' self-efficacy led to an understanding of how occupational therapy faculty viewed their ability to teach effectively in a blended format.

The question that this study sought to explore was "How do occupational therapy educators view their self-efficacy regarding teaching effectively in a blended curriculum?" Four main themes emerged from the data. These themes were (a) personal agency enhances teaching performance, (b) university resources support growth as an educator, (c) feedback as an opportunity for reflection and growth, and (d) coping to overcome frustrations teaching in a blended curriculum. The themes from this study demonstrated an interdependence between performance accomplishments, vicarious experience, verbal persuasion, and physiological state. This interdependence allows the individual to refine their teaching abilities to be effective when teaching in a blended curriculum. One cannot forget the external factors that may support or limit self-efficacy. This study revealed that occupational therapists relied on their past experiences teaching in traditional face-to-face programs. They also relied on their clinical expertise to overcome barriers and feelings of frustration.

Findings show that university resources and support (such as professional development) enhanced the occupational therapy faculty's teaching ability. Many of the participants thought that having a formal mentoring program might be beneficial in enhancing one's self-efficacy to teach in a blended curriculum. This finding supports those of Martin et al. (2019) who recommends creating professional development programs that address the needs of faculty teaching online.

Finally, the American Occupational Therapy Association (AOTA, 2018) published the Occupational Therapy Education Research Agenda document. This agenda urged the occupational therapy profession to add to the body of literature regarding pedagogies, learning theories, innovative instructional methods, and faculty development resources to ensure the quality and future of occupational therapy education. The results from this study provide insight into how occupational therapy educators view their self-efficacy to teach in a blended curriculum. In addition, the study results revealed that professional development and formal mentorship are essential elements in enhancing and supporting occupational therapy educators' self-efficacy in teaching in a blended

curriculum. In conclusion, the results of this study have the potential to influence administrators, supervisors, and directors regarding curriculum design and support for faculty in meeting the demands of current educational trends, such as blended learning.

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