# Teachers' Self-Efficacy, Psychological Wellbeing, and Apprehensions during the COVID-19 Pandemic in Belize

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## Abstract

This quantitative study investigated teachers' self-efficacy beliefs regarding remote teaching, psychological well-being, and apprehensions during the COVID-19 pandemic in Belize. It also identified factors related to teachers' self-efficacy to facilitate remote teaching during the COVID-19 pandemic in Belize. A quantitative descriptive cross-sectional survey and correlational research designs were applied using an online survey that included items on the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001), psychological well-being, apprehensions, and demographics. Data were collected from 311 teachers and analyzed using IBM SPSS 23 statistical software. The results indicated that teachers had a medium level of self-efficacy, decreased mental health, and heightened apprehensions. Further analysis revealed that teachers' self-efficacy was negatively related to their psychological well-being and apprehensions. These findings support continuous professional development programs that address teachers' self-efficacy, psychological well-being, and apprehensions. Doing so will equip teachers to better serve their students and support student achievement.

Keywords: COVID-19, pandemic, teachers' self-efficacy, well-being, apprehensions, Belize

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## Introduction

The COVID-19 pandemic had a global impact, and schools were no exception. In response to this, the Government of Belize developed and implemented several policies and protocols across schools nationwide. A National Oversight Committee (NOC), co-chaired by the Prime Minister and the Leader of the Opposition, was formed in March 2020 (Government of Belize, Press Office, 2020). The NOC implemented several policies intended to minimize the spread of the virus, such as travel restrictions in and out of Belize, social gatherings initially limited to 100 persons, then to 10 persons, and school closures (Flowers, 2020). Schools were first closed on March 20, 2020, for 14 days, but this was then extended as the seriousness of the coronavirus was better understood. Due to the closure, most preschools and primary schools used learning packages as they lacked Internet connectivity (M.O.E., 2020). Most secondary schools utilized a blended approach with online classes for those who had access, as in most schools in the urban areas, and learning packages for those who did not, as in the case of most schools in the Toledo district (MoECST, 2021). Reportedly, 92% of secondary schools had Internet connectivity, which was higher in urban than rural schools (MoECST, 2021). The Ministry of Education reached out to schools, especially rural ones, with a radio program. The schools that had access to the Internet used digital learning platforms, such as Google Classroom, Zoom, Microsoft Teams, and Moodle, for online classes, and most schools utilized WhatsApp to communicate with parents and teachers (MoECST, 2021). Most teachers generally reported having access to reliable Internet and a computer for online delivery. In a Teacher Readiness survey, the younger teachers (18-30 years) and those teaching in higher education sectors reported higher levels of comfort using technology as compared to older teachers (41 - 50 years) and those teaching in the lower education sectors (MoECST, 2021).

Schools in Belize were opened only for distance education during the 2020–2021 school year. The Ministry of Education also assisted teachers with professional development in digital learning platforms (MoECST, 2021), revised the Primary School Curriculum, and introduced the 2020-2021 Abridged Curriculum for teachers to use when planning learning packages or online sessions. The 2020–2021 school year instruction focused on the priority learning outcomes contained in the Abridged Curriculum and the learning recovery sessions (MoEYSC, 2020). The Ministry of Education outlined literacy and numeracy and the child's holistic development as the focus for instruction across the preschool to secondary school levels for that school year (MoECST, 2021). Therefore, Mathematics and Language Arts were taught daily while the other subjects were facilitated once per week. Schools were encouraged to use short reading passages to teach content across subject areas (MoEYSC, 2020). Implementing online teaching and remote learning packages to facilitate learning for Belizean students during the COVID-19 pandemic brought about many challenges for teachers who remained resilient in meeting the demands of Belize's Ministry of Education (Channel 5 Belize, 2020). Teachers' level of preparedness to facilitate online teaching and provide remote teaching and learning varied. Although anxious and stressed by other factors, primarily due to the restrictions, the Belizean teachers saw a need for continued education. They did what they were called to do though their effectiveness and quality of teaching may have been compromised.

Several studies (including Jakubowski & Sitko-Dominik, 2021; and Rabaglietti et al., 2021) showed that teachers' psychological well-being and apprehensions were negatively affected by the pandemic due to their abrupt shift to remote teaching and learning, a transition which teachers were generally unprepared for. A study conducted in Poland revealed that teachers' levels of stress, anxiety, and even depression increased during the first as well as second waves of the COVID-19 pandemic (Jakubowski & Sitko-Dominik, 2021). Similarly, teachers' apprehensions about delivering online and remote teaching and learning also increased (Rabaglietti et al., 2021). A study conducted by Rabaglietti et al. (2021) in Italy focusing on the relationship between distance learning (specifically, the time and logistical difficulties of online teaching) and perceived stress found that teachers' stress levels were affected by remote learning. This was partially due to teachers' lack of training in delivering online instruction. Rabaglietti et al. (2021) show a direct relationship between teachers' self-efficacy and their challenges with remote teaching. It was found that teachers' self-efficacy decreased with the increased difficulties of online and remote teaching.

Extended school closure, loss of jobs, death in the family, and teachers working from home delivering online and remote instructions while providing caretaking responsibilities in Belize may have contributed to teachers' increased stress levels, affecting their psychological well-being. In addition, students not having

access or equal access to online platforms and remote teaching-learning opportunities, as well as, their fears and that of their students and families contracting the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), may have, in a parallel way, contributed to their apprehensions. A sudden shift to providing remote teaching and learning to minimize disruption to their students' education may have negatively affected their self-efficacy in providing effective teaching and learning opportunities.

#### **Research Purpose**

The effects created by the pandemic dilemma on teachers were the impetus for this study. It was essential to understand how the COVID-19 pandemic impacted teachers' self-efficacy, psychological well-being, and apprehensions, especially during the early stages of the pandemic. Hence, this study had a two-fold purpose. First, to investigate teachers' self-efficacy beliefs regarding remote teaching, their psychological well-being, and levels of apprehension during the COVID-19 pandemic in Belize. Second, to identify factors related to teachers' self-efficacy regarding remote teaching during the COVID-19 pandemic in Belize. Thus, the following research questions were explored:

- 1. What were teachers' levels of self-efficacy regarding remote teaching during the COVID-19 pandemic in Belize?
- 2. How was teachers' psychological well-being during the COVID-19 pandemic in Belize?
- 3. What were teachers' levels of apprehension about returning to face-to-face instruction during the COVID-19 pandemic in Belize?
- 4. What combination of factors was significantly related to teachers' self-efficacy beliefs regarding remote teaching during the COVID-19 pandemic in Belize??

This quantitative study allows us to understand how the lives of teachers were affected during the early stages of the COVID-19 pandemic as they worked from home during school closure. This study is unique as it explored teachers' self-efficacy beliefs in delivering remote teaching in tandem with their psychological well-being and apprehensions. It also explored any combination of teachers' self-efficacy beliefs with psychological well-being and apprehensions, gender, age, educational attainment, and experience facilitating remote teaching during the early stages of the COVID-19 pandemic. For this study, remote teaching and learning were used as an overarching term to include a shift from face-to-face teaching in a physical classroom to a digital space accessed remotely, either through learning online (synchronously or asynchronously) or through the use of learning packages or any combination of both online and learning packages. Other studies more commonly explored teachers' self-efficacy beliefs in isolation and with other elements, such as teachers' use of technology. Therefore, this study adds a new perspective to the body of knowledge by looking at these elements in tandem, especially during the COVID-19 pandemic. We conjecture that the level of teacher's self-efficacy diminished during the pandemic due to the abrupt shift in delivering remote teaching and learning. Additionally, we believe that the teacher's psychological wellbeing was negatively affected by the pandemic due to the COVID-19 restrictions and increased stress levels working from home. Furthermore, we believe that there was an increase in apprehensions faced by our teachers during the pandemic. Finally, we also conjecture that there were interconnections among these factors, self-efficacy, well-being, and apprehensions, ultimately affecting educational outcomes. Lessons learned during the pandemic inform us on what can be done to better support teachers to improve their overall well-being, teaching dispositions, and skills should school closures, or a similar crisis, reoccur.

## **Review of Related Literature**

#### Teacher's Self-Efficacy

Extant literature suggests that a teacher's self-efficacy has powerful effects on educational outcomes in addition to teacher's behaviors and efforts, persistence, enthusiasm, commitment, instructional behavior, openness to new ideas, teacher retention, and student achievement, motivation, and self-efficacy beliefs (Tschannen-Moran and Woolfolk Hoy, 2001). A lack of clear and consistent understanding of self-efficacy has kept researchers from developing an appropriate measuring tool (Tschannen-Moran and Woolfolk Hoy, 2001). Notably, Bandura's 1977 work offers a criterion adopted herein for a proxy measurement of self-efficacy: performance accomplishments, vicarious experiences, and verbal persuasion. For this study, self-efficacy is described as one's belief in his or her ability to succeed at a specific task, where strong self-efficacy

is primarily impacted by performance accomplishments (Bandura, 1977). Vicarious experiences also affect self-efficacy, where observation of the successful practice of others increases beliefs in achieving success (Bandura, 1977). A study by Allouh et al. (2021) confirmed the positive correlation between vicarious experience and teachers' self-efficacy. It showed that teachers who attended professional development workshops and training programs for online teaching outside of work hours were more motivated. Another factor that impacts efficacy is verbal persuasion, which is vocal support that helps to increase belief in one's ability to overcome challenges (Bandura, 1977). Allouh et al. (2021) also confirmed that teachers were highly influenced by the vocal support from their school officials, supervisors, and colleagues. In retrospect, Tschannen-Moran and Woolfolk Hoy (2001) solidified the belief that examining a teacher's self-efficacy must be taken seriously to create impactful changes in how teachers are prepared and supported. Hence, the impetus for this study is to examine teachers' self-efficacy beliefs during the COVID-19 pandemic. Such data could inform school leaders, instructional coaches, and colleagues about better supporting teachers after the pandemic, not only during challenging times.

#### The Effects of Teacher's Self-Efficacy on Remote Teaching and Learning

There is evidence to suggest that teachers' perceived self-efficacy impacts the success of remote teaching and learning (Cardullo et al., 2021) and their self-esteem (Cataudella et al., 2021), which can, in turn, affect students' self-esteem and learning processes (Cataudella et al., 2021). Cataudella et al. (2021) contend that high self-esteem and self-efficacy levels of teachers lead to higher teacher job satisfaction and lower stress levels. This study further showed that as teachers transitioned from face-to-face to distance learning, their self-esteem and self-efficacy in instructional strategies decreased (Cataudella et al., 2021). However, no significant differences were noted for self-efficacy in classroom management and student engagement (Cataudella et al., 2021).

Teachers perceived a general drop in their success in shifting to remote teaching, particularly for early career teachers with less than five years of teaching experience (Kraft & Simon 2020). Mid-career teachers (teachers with five to fifteen years of experience) struggled to balance work and home demands during the pandemic, presumably because of parental responsibilities, as many of them had children at home (Kraft & Simon, 2020). Late-career teachers with more than fifteen years of teaching experience reported being less comfortable using online teaching tools (Cataudella et al., 2021; Kraft & Simon, 2020).

In contrast, a similar study in Qatar by Allouh et al. (2021), which explored public primary school teachers' self-efficacy beliefs with online learning during the COVID-19 pandemic, revealed high levels of self-efficacy in online teaching. Their study showed no significant differences between self-efficacy, gender, and age in delivering online learning, except that teachers with more years of experience reported higher levels of self-efficacy (Allouh et al., 2021). They suggested that this may result from more experienced teachers being well-versed in the subject matter and having more variations in teaching techniques (Allouh et al., 2021). However, similar studies, such as Robina and Anderson, 2010, Sokal et al., 2020, and Wong, 2003, all cited in Allouh et al. (2021), conducted on teachers' self-efficacy levels with online teaching, where both females and males were shown to have higher levels (Allouh et al., 2021). As for age, they cited that other studies did not consider teachers' self-efficacy with online teaching that found that younger teachers experienced higher levels of self-efficacy levels with online teachers (Allouh et al., 2021). Therefore, the findings on teachers' self-efficacy levels concerning online teaching during the COVID-19 pandemic are contradictory much like the relationships between teachers' self-efficacy levels, age, and gender.

#### The Effects of Self-Efficacy in Using and Integrating Technology

A techno-pedagogical study by Gomez et al. (2021) specifically explored teachers' self-efficacy as a factor in teachers' confidence level in using and integrating technology in K-12 urban classrooms. Their study revealed that although most participating teachers had training in technology integration, teachers experienced a reasonable level of confidence in integrating technology into their classroom practices. However, their study also revealed that although technology usage was widespread, technology integration in education could have been more up-to-speed or extensive, as expected (Gomez et al., 2021). The

inadequacy in teachers' technology-integration preparedness became even more evident during the COVID-19 pandemic when technology usage was necessary to provide remote learning or hybrid instruction. This added to the stresses and challenges many teachers experienced during the pandemic as they had limited knowledge of using technology to instruct via the online platform (Gomez et al., 2021; Rabaglietti et al., 2021).

Furthermore, the study by Gomez et al. (2021) also pointed out that knowing the use of technology did not necessarily translate into its use or effective integration in the classroom. However, this study asserted that self-efficacy would be necessary to use and integrate technology in the classroom. Hence, their study pointed out that it was essential to determine teachers' level of efficacy as they were now required to use technology and integrate technology in their instruction to deliver online and remote instructions.

A similar study was conducted by Cardullo et al. (2021), which examined the relationship between factors in the extended Technology Acceptance Model (TAM) and teachers' self-efficacy in delivering remote teaching during the pandemic. The TAM model was based on users' acceptance and use of technology, where perceived usefulness and ease of using technology would influence how and when that specific technology was used. This study alluded to teachers' self-efficacy influencing how they integrate technology into their instructions. They revealed that the teacher's level of self-efficacy needed to be improved in using technology to teach, and they needed proper support and resources to deliver online instructions. They also needed assistance to motivate and engage students in online instructions.

### The Level of Support on the Successful Delivery of Remote Teaching and Learning

Cardullo et al. (2021) identified that many teachers were learning about the various online platforms while providing instruction during the COVID-19 pandemic. This reality faced by many teachers was due to the sudden shift to online teaching. An implication of that study suggests that teachers must feel that their instructional technology needs are met before focusing on providing quality remote instruction to their students. Hence, they recommended that teachers be given the opportunities to learn about the various platforms to develop confidence in their use before providing teaching-learning support to their students and to better meet the required standards set by the state.

Other studies (Kraft & Simon, 2020; Leacock & Warrican, 2020) further substantiate the need for teachers to be adequately supported to deliver remote instruction successfully as they claim that those teachers who worked at schools they deemed as supportive during the COVID-19 pandemic reported a sense of success in remote teaching. Leacock and Warrican (2020) further addressed the response to the pandemic by the Eastern Caribbean Joint Board of Teacher Education (JBTE) and highlighted coping strategies teachers needed to transition from face-to-face to online instruction. Areas that the Board deemed necessary as it relates to the COVID-19 pandemic included:

- providing training opportunities for teachers to use different instructional modalities to engage students in learning;
- having instructional resources accessible in various modes; and
- providing support and guidance to teachers and students, including counseling services.

Hence, from the research literature explored, it is evident that the success of remote teaching and learning is not only dependent on teacher's self-efficacy and their attitudes toward the use of technology in the classroom (Cardullo et al., 2021), but is also dependent on the level of support provided for teachers to improve their well-being and develop the necessary skill set required to offer alternative pedagogical approaches (Kraft & Simon, 2020; Leacock, & Warrican, 2020). Nonetheless, several studies (including Cardullo et al., 2021; and Leakcock & Warrican, 2020) revealed that despite the challenges in online and remote teaching that teachers encountered, they embraced it as it was a relatively safe way to provide instruction to support teaching and learning when in-person teaching was not possible.

#### Teachers' Apprehensions and Psychological Well-being

Several studies point out that teachers' psychological well-being was affected by the sudden shift to online and remote instruction (Kraft & Simon, 2020; Ozamiz-Etxebarria et al., 2021). Ozamiz-Etxebarria et al.

(2021) showed that teachers' adaptation to online teaching increased their stress levels, leading to anxiety, depression, and sleep disturbances, especially in females. This study contends that information and communication technologies increased during the COVID-19 pandemic, leading to tension, anxiety, exhaustion, and decreased job satisfaction. This, in turn, leads to increased sick leaves, absenteeism, and poor work performance.

The sudden shift to delivering online and remote instructions created many other challenges regarding teachers' apprehensions (Kraft & Simon, 2020). Teachers were concerned about students' limited engagement in learning and student learning loss due to the differential access to technology and learning support, especially in high-poverty homes and schools serving minorities during the pandemic (Kraft & Simon, 2020). Dolighan and Owen (2021) surveyed teachers in Ontario, Canada, at the beginning of the transition to online learning due to the COVID-19 pandemic in March 2020. They emphasized that teachers' stress and anxiety, resulting from an imposed transition to online teaching, could cause lower positive intrinsic motivation, affecting their teaching self-efficacy. Panisoara et al. (2020) posit that to support teachers in the emergency transition to online teaching, their mental health and well-being should be considered through the exploration of the potential impact of occupational stress on self-efficacy. Other studies further revealed teachers' apprehensions about returning to the classroom in the reopening of schools (Kraft & Simon, 2020; Ozamiz-Etxebarria et al., 2021). Ozamiz-Etxebarria et al. (2021) affirmed that even after six months of online teaching, teachers in Spain were not satisfied with the safety guidelines provided by the government for reopening schools.

Furthermore, Ozamiz-Etxebarria et al. (2021) and Jakubowski and Sitko-Dominik (2021) revealed that teachers above forty-seven years of age showed more stress and anxiety. These teachers' experience was related to their comfort level with technology (Jakubowski and Sitko-Dominik, 2021; Ozamiz-Etxebarria et al., 2021), and their cognitive levels also declined (Jakubowski and Sitko-Dominik, 2021). The anxious experience of younger teachers was due to job instability (Ozamiz-Etxebarria et al., 2021). Additionally, teachers with greater responsibilities for the health of young children had the highest scores on anxiety since they feared that students would get infected with SARS-CoV-2 (Ozamiz-Etxebarria et al., 2021). Adding to this, Jakubowski and Sitko-Dominik (2021) point out that because teachers have been working from home, the lines that separate their personal lives from their professional ones have been blurred, which could also be deemed as negatively affecting their well-being. As with the study by Ozamiz-Etxebarria et al. (2021), it was also found that teachers with more responsibilities at home had increased stress levels. This increased stress level seems especially true for women who were the primary caretakers of their children at home. The study by Ozamiz-Etxebarria et al. (2021) suggests that teachers' mental health should be safeguarded for quality teaching to increase as well as for the advancement of the well-being of students.

Boekaerts and Pekrun (2016) further showed a strong interconnection among self-regulatory strategies, positive emotions, motivation, and self-efficacy. An adequate emotional regulation strategy is catalytic since it leads to positive emotions, influencing positive motivation and, ultimately, self-efficaciousness (Boekaerts & Pekrun, 2016). Although the study by Boekaerts and Pekrun (2016) was conducted with students, it showed that self-efficaciousness positively affected learning, achievement, and overall wellbeing. Such a study implies that teachers with enhanced self-regulatory strategies could better regulate their emotions. Better emotional regulation strategies then would positively affect their motivation and self-efficaciousness, yielding higher productivity and overall well-being.

## Method

A quantitative research method with a descriptive cross-sectional survey design was applied to determine teachers' levels of self-efficacy regarding remote teaching, psychological well-being, and levels of apprehension during the COVID-19 pandemic in Belize. Additionally, a correlational research design was applied to identify factors related to teachers' self-efficacy regarding remote teaching during the COVID-19 pandemic in Belize. This study's population comprised teachers from K-12 in Belize ( $N \approx 5,207$ ; Males = 1,414 and Females = 3,793).

#### Instrumentation

To collect the data for this study, an online survey was developed and administered to teachers across the country of Belize in 2021. The instrument consisted of six sections. Section One included items that collected data about teachers' demographic profiles, including gender, level of work, educational attainment, age, location, and ethnicity. Section Two had items using a 5-point Likert-type scale (1 = None at all to 5 = A great deal) that measured teachers' experience in facilitating remote learning pre-COVID-19. Section Three contained items using a 6-point Likert-type scale (1 = Extremely uncomfortable to 6 =Extremely comfortable) that measured teachers' levels of comfort in using technology to facilitate remote learning at the start of the COVID-19 pandemic and at the time they took the survey. Section Four included the Teachers' Sense of Efficacy Scale, which measures teachers' Overall Efficacy (12 items), and subscales of Efficacy in Student Engagement, Efficacy in Instructional Strategies, and Efficacy in Classroom Management (Tschannen-Moran & Woolfolk Hoy, 2001). The Teachers' Sense of Efficacy Scale has good internal consistency reliability with Cronbach's alphas of .939, .864, .888, and .886 for the overall scale and subscales, respectively (Tschannen-Moran & Woolfolk Hoy, 2001). Section Five included items using a 5point Likert-type scale (1 =Never to 5 = Always) that measured how often teachers' mental health was not good during the COVID-19 pandemic. The last section of the instrument included items that measured teachers' apprehensions to return to school for face-to-face instruction. These items were measured using a 5-point Likert-type scale (1 = Not at all worried to 5 = Extremely worried).

#### **Participants**

The participants for this study were 311 teachers from across Belize. This sample was representative of the population of K-12 teachers with a 95% confidence level and 5.4% margin of error. Of the 311 teachers who participated in the study, 26.7% were males and 73.3% were females. The majority of the teachers worked at the primary school (55.9%) level. Teachers' levels of educational attainment included associate's (40.2%), bachelor's (43.7%) and master's (16.1%) degrees. The majority of the teachers were between 25 to 34 (38.3%) and 35 to 44 (34.4%) years old. Regarding location, most teachers were from the Belize (23.2%) district. The representation of teachers from across the other districts was similar, ranging from 12.2% in Stann Creek to 17.4% in Orange Walk. For ethnic representation, most teachers self-identified as Mestizo (43.7%) and Creole (19.9%). Several teachers self-identified as Garifuna (11.9%) and Maya (10.9%). Only a few teachers self-identified as Multi-Ethnic (6.1%), East Indian (2.6%), Hispanic (2.6%), others (1.6%) and Asian (0.6%).

#### Data Analysis

The data were analyzed using IBM SPSS version 23 statistical software. To determine teachers' levels of self-efficacy, regarding remote teaching, psychological well-being, and apprehensions during the COVID-19 pandemic in Belize, descriptive statistics were computed. Additionally, to identify factors related to teachers' self-efficacy regarding remote teaching during the COVID-19 pandemic in Belize, a multiple linear regression analysis was conducted.

## Results

The first research question sought to determine teachers' levels of self-efficacy beliefs regarding remote teaching, during the COVID-19 pandemic in Belize. To answer this question, descriptive statistics were computed with the data collected from the Teachers' Sense of Efficacy Scale, which measured teachers' Overall Efficacy, and subscales of Efficacy in Student Engagement, Efficacy in Instructional Strategies, and Efficacy in Classroom Management (Tschannen-Moran & Woolfolk Hoy, 2001). As presented in Table 1, the results revealed that, on average, teachers' levels of self-efficacy beliefs regarding remote teaching, during the COVID-19 pandemic in Belize were 5.80 (SD = 1.58) in Student Engagement, 5.96 (SD = 1.79) in Classroom Management, 6.46 (SD = 1.54) in Instructional Strategies, and 6.08 (SD = 1.48) in overall self-efficacy. Teachers' levels of self-efficacy beliefs regarding the COVID-19 pandemic in Belize were fight regarding remote teaching, during the COVID-19 pandemic in Strategies overall (M = 6.46, SD = 1.54) and at both the primary (M = 6.37, SD = 1.66) and high school (M = 6.59, SD = 1.38) levels. Also, compared to primary school teachers, high school teachers reported higher levels of self-efficacy beliefs regarding remote teaching, during the

COVID-19 pandemic in Belize for Instructional Strategies (M = 6.59, SD = 1.38), Classroom Management (M = 6.14, SD = 1.69), and Overall (M = 6.14, SD = 1.31). Since the Teachers' Sense of Efficacy Scale is measured on a 9-point scale, on average, teachers' levels of self-efficacy beliefs regarding remote teaching, during the COVID-19 pandemic in Belize, were at the medium levels.

Table 1. Descriptive Statistics of Teachers' Self-efficacy												
	Р	'rimary	l	High School				Total				
Self-efficacy Dimensions	n	Μ	SD	WM	n	М	SD	WM	n	М	SD	WM
Student Engagement	174	5.88	1.67	65%	137	5.71	1.44	63%	311	5.80	1.58	64%
Instructional Strategies	174	6.37	1.66	71%	137	6.59	1.38	73%	311	6.46	1.54	72%
Classroom Management	174	5.81	1.86	65%	137	6.14	1.69	68%	311	5.96	1.79	66%
Overall	174	6.02	1.60	67%	137	6.14	1.31	68%	311	6.08	1.48	68%
M = Mean, SD = Std. Deviation, WM = Weighted Mean												

The focus of the second research question was to determine how teachers' psychological well-being was during the COVID-19 pandemic in Belize. To capture the data for this research question, teachers were asked to rate how often their mental health was not good during the COVID-19 pandemic (Poor mental health results from stress, anxiety, and depression). The descriptive statistics presented in Table 2 revealed that the majority of teachers (72.7%) reported that their psychological well-being deteriorated during the COVID-19 pandemic in Belize. Further, more female (74.1%) than male (68.7%) teachers reported that their psychological well-being deteriorated during the COVID-19 pandemic in Belize.

Table 2. How often was Teachers' Mental Health not good during COVID-19										
	Male Female Overall									
	n	%	n	%	n	%				
Never	8	9.6%	9	3.9%	17	5.5%				
Rarely	18	21.7%	50	21.9%	68	21.9%				
Sometimes	44	53.0%	114	50.0%	158	50.8%				
Most of the time	13	15.7%	50	21.9%	63	20.3%				
Always	0	0.0%	5	2.2%	5	1.6%				
Total	83	100.0%	228	100.0%	311	100.0%				

The third research question sought to determine teachers' levels of apprehension about returning to faceto-face instruction during the COVID-19 pandemic in Belize. The descriptive statistics presented in Table 3 revealed that the majority of teachers reported high levels of apprehension about returning to school for face-to-face instruction during the COVID-19 pandemic. Specifically, 53.7% of teachers were very to extremely worried about getting infected, while 78.2% were very to extremely worried about their students getting infected and 81.9% of teachers were very to extremely worried about their family getting infected with COVID-19 upon returning to school for face-to-face instruction.

Table 3. Teachers' Apprehensions about Returning to Face-to-Face Instruction										
	Not at all Worried		Slightly Worried		Moderately Worried		Very Worried		Extremely Worried	
	n	%	n	%	n	%	n	%	n	%
Worried about getting infected with COVID-19	18	5.8%	53	17.0%	73	23.5%	62	19.9%	105	33.8%

Worried about students getting infected with COVID-19	2	0.6%	18	5.8%	48	15.4%	77	24.8%	166	53.4%
Worried about family getting infected with COVID-19	3	1.0%	18	5.8%	38	12.2%	70	22.5%	182	58.5%

The final research question sought to determine if teachers' self-efficacy beliefs regarding remote teaching during the COVID-19 pandemic in Belize is significantly related to the combination of their psychological well-being, apprehensions, gender, age, educational attainment, experience facilitating remote teaching pre-COVID-19 and comfort level with using technology to facilitate remote learning at the start of the COVID-19 pandemic and during the pandemic. To answer this research question, a multiple linear regression was computed. The results of that analysis indicated teachers self-efficacy beliefs regarding remote teaching during the COVID-19 pandemic in Belize was significantly related to the combination of their psychological well-being, apprehensions, gender, age, educational attainment, experience facilitating remote teaching pre-COVID-19 pandemic in Belize was significantly related to the combination of their psychological well-being, apprehensions, gender, age, educational attainment, experience facilitating remote teaching pre-COVID-19 and comfort level with using technology to facilitate remote learning at the start of the COVID-19 and comfort level with using technology to facilitate remote learning at the start of the COVID-19 pandemic and during the pandemic (R = .393, p < .01). However, the 10 predictors only explained about 16% of the variance in teachers' overall self-efficacy ( $R^2$ =.155, F(10,300) = 5.496, p < .01).

Further, as presented in Table 4, of the ten predictors, only three significantly predicted teachers' overall Self-efficacy—i.e., Psychological well-being ( $\beta$  = -.227, p < .05), Experience facilitating remote teaching pre-COVID-19 ( $\beta$  = .205, p < .05) and Comfort level with using technology to facilitate remote learning during COVID-19 ( $\beta$  = .182, p < .05). Thus, teachers' self-efficacy beliefs regarding remote teaching during the COVID-19 pandemic in Belize were negatively affected by their psychological well-being in that for every one point increase in deterioration of teachers' psychological well-being, their self-efficacy beliefs decreased by .227 points. However, teachers' self-efficacy beliefs regarding remote teaching during the COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by their pre-COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 pandemic in Belize were positively impacted by the pre

Table 4. Multiple Linear Regression Coefficients										
	Unstandardiz									
Model	В	Std. Error	t	Sig.						
(Constant)	4.571	.731	6.249	.000						
Psychological Well-being	227	.102	-2.222	.027						
Apprehensions - Self	.097	.084	1.145	.253						
Apprehensions - Students	056	.121	467	.641						
Apprehensions - Family	017	.120	141	.888						
Gender	.136	.186	.732	.465						
Age	001	.096	008	.994						
Educational Attainment	055	.123	445	.656						
Experience FRL Pre-COVID-19	.205	.071	2.869	.004						
Comfort FRL at the Start of COVID-19	.147	.075	1.954	.052						
Comfort FRL Now	.182	.079	2.287	.023						
Dependent Variable: Overall Self-Effica	ıcy									

## Conclusions

This study revealed that teachers' self-efficacy in facilitating remote teaching was medium on average (using a 9-point scale). Contrary to other studies (Cataudella et al., 2021; Kraft & Simon, 2020), teachers' comfort level with facilitating remote learning increased during the pandemic. Such a result can be explained using Bandura's Theory of Performance Accomplishment (Bandura, 1977), where teachers' self-efficacy beliefs to deliver remote instruction may be attributed to their personal mastery experiences in using technology. In other words, as teachers were forced to transition to remote teaching, they gained more confidence and

mastery in using technology. Furthermore, teachers' educational level positively affected their self-efficacy, which may result from their more advanced preparation in subject matter, variation in teaching techniques, and perhaps in techno-pedagogical skills.

The COVID-19 pandemic adversely impacted most teachers' psychological well-being, with 72% of teachers experiencing poor mental health. The results are consistent with other studies (Ozamiz-Etxebarria et al., 2021; Kraft& Simon, 2020), which showed that teachers' psychological well-being was affected by the sudden shift to online and remote instruction where teachers' adaptation to online teaching increased their stress levels, leading to anxiety, depression, and sleep disturbances. Jakubowski and Sitko-Dominik (2021) also point out that because teachers worked from home, the lines separating their personal lives from their professional ones were blurred, negatively affecting their well-being. Ozamiz-Etxebarria et al. (2021) found that teachers with more responsibilities at home had increased stress levels.

This study revealed that most teachers experienced high levels of apprehension about returning to face-toface instruction, similar to other studies (Kraft & Simon, 2020; Ozamiz-Etxebarria et al., 2021). Most teachers were worried about their students (78%) and families (81%) getting infected with COVID-19. The results are similar to Ozamiz-Etxebarriaet et al. (2021), who found that teachers with greater responsibilities for the health of young children had the highest scores on anxiety since they feared that students would get infected with the SARS-CoV-2.

Teachers' self-efficacy and psychological well-being were negatively related. Teachers' self-efficacy beliefs regarding remote teaching during the COVID-19 pandemic in Belize were negatively affected by their psychological well-being. Consequently, a deterioration in teachers' psychological well-being resulted in a decrease in their self-efficacy beliefs. This is consistent with the study by Dolighan and Owen (2021), who found that Canadian teachers' stress and anxiety caused by an imposed transition to online teaching could cause lower positive intrinsic motivation, affecting their teaching self-efficacy.

Finally, teachers' self-efficacy beliefs regarding remote teaching during the COVID-19 pandemic in Belize were positively impacted by their experience facilitating remote teaching pre-COVID-19 and their comfort level with using technology to facilitate remote learning during COVID-19. These results are consistent with the extant literature, which asserts that teachers' experience with stress and anxiety was related to their comfort/confidence level with technology (Gomez et al., 2021; Jakubowski & Sitko-Dominik, 2021; Ozamiz-Etxebarria et al., 2021; Rabaglietti et al., 2021). This suggests that the more comfortable teachers were with technology usage and integration, the less stressed or anxious they were to facilitate remote learning.

## Recommendations

The COVID-19 pandemic disrupted education all over the world, and Belize was no exception. In the process of adapting teaching and learning approaches during the COVID-19 pandemic to best meet student's needs, teachers experienced psychological discomfort (Ozamiz-Etxebarria et al., 2021). Consequently, as the findings of this study support, it is prudent for policymakers to address teachers' psychological well-being and apprehensions. Schools are to be made as safe as possible for face-to-face instruction so as not to cause additional trauma to teachers. Information sessions are to be planned and conducted to sensitize teachers on the importance of vaccinations to mitigate teachers' apprehensions and improve their psychological well-being. Professional support ought to be provided for teachers who have experienced trauma to help them overcome their apprehensions and improve their psychological well-being to serve their students better.

School officials and supervisors, subsequently, must be prepared to support teachers who have experienced trauma to help them overcome their apprehensions upon returning to face-to-face instruction. School leaders and instructional coaches are to provide support and continuous professional development for teachers to develop their self-efficacy. This is necessary since teachers' self-efficacy can have powerful effects on educational outcomes (Tschannen-Moran and Woolfolk Hoy, 2001). Teachers can be supported and encouraged to attend techno-pedagogical workshops and training to enhance their skills in integrating technology into instruction, preferably outside of school hours, which is strongly supported by Cardullo et al.'s (2021) study. Kraft and Simon (2020) and Leacock and Warrican (2020) further substantiate the need

for teachers to be adequately supported to deliver remote instruction successfully as they claim that those teachers who were employed at schools they deemed as supportive during the COVID-19 pandemic reported a sense of success in remote teaching. Furthermore, teachers can be given opportunities to observe successful teaching that models integrating technology effectively into the learning process, which can increase their self-efficacy beliefs. This is supported by Bandura (1977), who asserts that observation of the successful practice of others increases beliefs in achieving success. While integrating technology into the teaching-learning process, they should be encouraged and possibly incentivized to address the verbal persuasion Bandura (1977) refers to as a vital factor influencing efficacy. Finally, teachers should be supported with adequate resources to integrate technology in education for remote instruction.

Lastly, teachers must seek support to improve their psychological well-being to serve their students better. This recommendation is supported by Ozamiz-Etxebarriaet et al. (2021), who suggested teachers' mental health should be safeguarded so that quality teaching increases along with the well-being of students. Teachers must continue developing techno-pedagogical skills to be prepared to teach students via varied modalities, which enhance diverse presentations and experiences of the content. This will be beneficial to teachers, whose psychological well-being will be safeguarded as well as students' learning, whether in challenging times or regular schooling.

## **Competing Interests**

The authors declare that they have no conflict of interest.

## Acknowledgments

The authors wish to thank all the teachers who completed the online survey that made this study possible and their undergraduate students who assisted with the data collection by reaching out to their peers and other students, who are also teachers, in support of this research project.

## Funding

No funding was received by any of the authors to support this research project or in the execution of this research study.

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