People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
Ibn Khaldoun University of Tiaret
Faculty of Letters and Languages
Department of English



Investigating University Teachers' Resilience During COVID-19

A case study of EFL teachers at Ibn Khaldoun University of Tiaret

A dissertation submitted to the Department of English in partial fulfilment of the requirements for the Master's degree in Didactics of English as a Foreign Language

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Academic Year 2022/2023

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Declaration

We, Harrouche Ilyes and Khaldia Mostefai, declare that our dissertation intitled

"Investigating University Teachers' Resilience during COVID-19" contains no materials that

have been submitted previously in whole or part for the award of any other degree or diploma

except where otherwise indicated. This dissertation is our own work.

Date: June 2023

Ilyes Harrouche

Khaldia Mostefai

Dedication

To my grandparents Mimouna and Ahmed; you are what keeps our family united. May Allah prolong your lives.

To my parents Khaldia and Ahmed; I will always be dependent on you regardless of how old I am.

To my wife and the love of my life, Bochra; your love, patience, and understanding are the reasons why I feel blessed every day.

To my lovely sister Romaissa; there can never be a better sister than you.

To my adorable niece Taline; your presence brings me immense happiness, and I am proud to be your uncle.

To my older brother and best friend Abdennour; thank you for always being there for me through thick and thin. I wouldn't trade you for the whole world.

To my younger brother and companion Yasser; your name should be synonymous to kindness and innocence.

To my brother Hadjoudja; may Allah guide you, protect you, and bring you back safely.

To my aunt and second mother Fatiha; I will do anything to bring back the days when you were always next to us.

To my uncle Meddah; my childhood memories cannot be complete without your presence.

To my uncle Hadj; nothing hurts more than missing the old you.

To my dear friends, in alphabetical order, Ahmed Ayadi, Aziz Boubabouri, Baghdad Abed, Benwali Hebri, Houssam Hadjar, Mustapha Ouargli, Said Boutebba, Nasro Fatmi, Nasro Gherbi, and Toufik Hallouz; thank you for your unwavering friendship, support, and for being a constant source of laughter and joy in my life.

To my friends at work Chems Eddine Mimoun, Abdelillah Sifi, Khaled Bouzekri, Mohamed Hattab, Chahda Labadia, Chakib Belouad, and Abdessalam Ounis; you have been instrumental in my professional growth.

To the administration of Hope Training Centre, Tiaret for providing me with a launch pad for my career, at a time when I had no experience or diploma.

And last but not least to my students, both kids and adults; thank you for being my inspiration and for reminding me why teaching is a beautiful profession.

Dedication

I hold this gratitude in the deepest corners of my heart, thanks to the unwavering dedication and love of my extraordinary mother. Throughout my life, she has been my guiding light, always there to provide encouragement, support, and a gentle push forward. Her unwavering belief in my abilities and her relentless motivation have been the driving forces behind my pursuit of this research. I humbly offer my heartfelt thanks to my precious close friends, supportive friends and classmates, mentors and advisors, participants and volunteers, loving family, Without each and every one of you, this work would not have been possible. Your contribution and support have shaped me into the person I am today, and for that, I am eternally grateful

Khaldia Mostefai

Acknowledgements

We would like to express our sincere gratitude to the following individuals and institutions for their invaluable support and contributions to this research project:

First and foremost, we are deeply grateful to our supervisor, Dr. Naima Sahli, for her guidance, expertise, and patience throughout the research process.

Our sincere gratitude also goes to the chairwoman of the board of examiners, Dr. Khaldia Boughena, and the examiner, Dr. Hiba Bensalah, who dedicated their time and expertise to read, evaluate, and provide invaluable feedback for our dissertation.

We would also like to extend our gratitude to the participants who took part in this study, for their time and willingness to share their experiences.

Additionally, we would like to express our appreciation to the administration staff, the cleaning ladies, and the security agents at the Department of English, Faculty of Letters and Languages, Ibn Khaldoun University of Tiaret for helping us navigate our daily academic lives as smoothly as possible.

Finally, we would like to thank the teachers Mohamed Amine Dekkiche, Amine Ayada, Djilali Mouri, Khaled Brahim, Rayhane Houari, Mohamed Soudani, Ahmed Mehdaoui, Bilal Fasla, Noureddine Chebli, Latifa Chikhi, and the late Mohamed Amine Bouzerkata (may Allah grant him mercy), for their exceptional professionalism and kindness. Their dedication to teaching and their willingness to go above and beyond their responsibilities have had a lasting impact on us, and have helped us to grow both academically and personally.

Abstract

Higher education has been one of the most disrupted domains during the COVID-19 pandemic. This study examined the resilience levels of EFL teachers of Ibn Khaldoun University; the challenges they faced; and coping strategies they used during the COVID-19 pandemic through quantitative and qualitative analysis of data collected using a questionnaire and a semi-structured interview. Results revealed moderate resilience among participants, with higher scores observed in those with more teaching experience. Teachers faced challenges in adapting to remote teaching but employed coping strategies, such as embracing technology and seeking support, while expressing the need for resources, training, and recognition of their efforts. This study recommends providing teachers with technological resources, training opportunities, and emotional support from colleagues and supervisors, while recognising their efforts during challenging times. These recommendations aim to support and enhance the resilience of university teachers in navigating future crises. It is important to acknowledge the limitations of this study, including the reliance on self-report measures, potential sampling biases, and the context-specific nature of the findings, which may limit generalizability.

Keywords: COVID-19; university teachers; resilience; coping strategies; CD-RISC

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List of Acronyms

EFL: English as a Foreign Language

the CD-RISC questionnaire: The Connor Davidson + Brief Resilience Scales

General Introduction

This research study focuses on an important aspect of teachers' well-being, namely their resilience during the COVID-19 pandemic. The COVID-19 crisis has had a profound impact on the education sector worldwide, with sudden shifts to online teaching and new challenges emerging for teachers as they navigate this new landscape. The importance of understanding and supporting teachers' resilience during this time cannot be overstated.

The objective of this study is to investigate the ways in which teachers demonstrated resilience in the face of the challenges presented by the pandemic. Teachers worldwide have had to rapidly adapt their teaching practices to accommodate the move to online instruction and have had to find new ways to connect with their students during this time of social distancing and isolation. This study will provide insights into how teachers coped with these changes and identify strategies that can be used to support their resilience.

The COVID-19 pandemic has presented a unique challenge to the education sector, with schools closing and students and teachers having to adjust to online learning. The abrupt transition has had a profound effect on the welfare of educators, who have been confronted with the challenges of adapting to unfamiliar teaching approaches and technologies, all while coping with the pressures and uncertainties brought about by the pandemic. Understanding the resilience of teachers during that time is crucial for supporting their well-being and for ensuring that students receive high-quality education.

This study aims to answer the following research questions and hypotheses:

Research Question 1: How did teachers demonstrate resilience during the COVID-19 pandemic?

Hypothesis 1: Teachers demonstrated resilience during the COVID-19 pandemic by adapting their teaching practices to the online environment and finding new ways to connect with their students, despite the challenges presented by the pandemic.

Research Question 2: What strategies did teachers use to cope with the challenges of online teaching and social distancing?

Hypothesis 2: Teachers used a variety of coping strategies to deal with the challenges of online teaching and social distancing, including self-care practices, seeking social support, and leveraging technology to enhance their teaching effectiveness.

Research Question 3: How can support be provided to teachers to enhance their resilience during such a time?

Hypothesis 3: Teachers can be supported in enhancing their resilience during the COVID-19 pandemic through access to mental health resources, professional development opportunities, and collaboration with peers to share best practices and strategies for effective online teaching.

The investigation of these research questions and hypotheses will contribute to the literature on teacher well-being and resilience, and will provide important insights into the ways in which teachers can be supported during times of crisis. The study will also explore the specific challenges faced by teachers during the COVID-19 pandemic and will identify best practices for managing these challenges.

To answer these research questions, this study employs two data collection methods: a questionnaire and semi-structured interviews. The participants of this study are EFL teachers at Ibn Khaldoun of Tiaret, providing a diverse perspective on the challenges faced by teachers during the COVID-19 pandemic.

This dissertation consists of three chapters. The first chapter will provide a literature review about resilience in the context of teaching, providing a definition of resilience and exploring the role of resilience in promoting teacher well-being. The second chapter will examine the specific challenges faced by teachers during the COVID-19 pandemic and will identify strategies used by teachers to demonstrate resilience. The final chapter will present

the research methodology and data analysis, including a description of the study participants, the data collection methods used, and the analysis of the data obtained, as well as the conclusions of the study and recommendations for supporting teachers' resilience during the COVID-19 pandemic.

Overall, this study is an important contribution to the understanding of teacher well-being and resilience during times of crisis, and will provide valuable insights into the ways in which teachers can be supported during the ongoing COVID-19 pandemic. The findings of this study will be relevant not only to educators and education policymakers, but also to the wider public as the impacts of the COVID-19 pandemic continue to be felt globally.

Through a thorough exploration of the challenges faced by teachers during the pandemic, this study will identify practical strategies that can be implemented to support teachers and promote their resilience. By investigating the factors that contribute to teachers' resilience, the study will also help to identify areas where further support is needed to help teachers manage the stresses and challenges of the current situation.

Furthermore, the results of this research will make a valuable addition to the existing scholarly literature concerning the well-being and resilience of teachers, with a specific focus on crisis scenarios. Through empirical evidence, this study will shed light on the tactics employed by teachers to address the obstacles associated with online instruction and social distancing. It will also assess the efficacy of various support mechanisms in fostering teacher resilience.

In summary, this research study will provide valuable insights into the ways in which teachers are demonstrating resilience during the COVID-19 pandemic, and the strategies that can be used to support their well-being and promote their resilience. The study will have

important implications for education policy and practice, as well as for the wider public, as it seeks to identify best practices for supporting teachers during times of crisis.

Chapter 1: Exploring

Teacher Resilience:

Literature Review and

Frameworks

1.1 Introduction

Teaching is a challenging profession that requires individuals to cope with stress and adversity in order to maintain their well-being and provide high-quality education to their students. For that reason, the importance of understanding and supporting teachers' resilience during this time cannot be overstated. Resilience, defined as the ability to cope with stress and adversity, is crucial for teachers in order to maintain their well-being and provide high-quality education to their students.

Thus, this chapter will provide a review of the existing literature on resilience in the context of teaching, with a focus on the role of resilience in promoting teacher well-being. The chapter will define resilience and explore the factors that contribute to teacher resilience, including personal characteristics, social support, and organisational factors. Additionally, the chapter will explore the ways in which resilience is relevant to the specific challenges faced by teachers during the COVID-19 pandemic, and will lay the groundwork for the subsequent chapters by providing a comprehensive overview of the current state of knowledge on this topic.

1.2 Definition of Resilience

In this section, we will delve into the concept of resilience and its definition in general, as well as its specific application within the context of teaching

Resilience is defined as the capacity of individuals to adapt, recover, and thrive in the face of adversity, challenges, or significant life stressors (APA, 2015). It encompasses the ability to bounce back from difficult experiences, setbacks, or traumatic events, while maintaining a sense of well-being and functioning. Resilience is not about avoiding or eliminating hardships, but rather about developing inner resources and skills to effectively deal with and overcome them. It involves utilising personal strengths, coping mechanisms, and support systems to navigate through difficult circumstances, learn from experiences, and

grow stronger in the process. Resilience is a dynamic process that can be fostered, nurtured, and enhanced through self-awareness, self-care, social connections, and the development of positive coping strategies.

Defining Resilience in the Context of Teaching

Resilience is a concept that has gained attention in recent years, particularly in the field of education. According to Masten (2018), resilience is the ability to adapt and recover in the face of adversity. Resilience is not a fixed characteristic or trait, but rather a dynamic process that can be developed and strengthened over time (Masten, 2014).

However, the COVID-19 pandemic presents unique challenges that require a re-examination of the concept of resilience in the context of teaching. As teachers have had to rapidly adapt their teaching practices to accommodate the move to online instruction and have had to find new ways to connect with their students during this time of social distancing and isolation, it is important to explore how they are demonstrating resilience in the face of these challenges. Understanding the resilience of teachers during this time is crucial for supporting their well-being and for ensuring that students receive high-quality education.

Previous research has highlighted the importance of resilience for teachers and its role in promoting well-being in the face of challenges. For example, a study was conducted by Windle and colleagues (2011), who found that teachers who demonstrated higher levels of resilience reported lower levels of stress and burnout, as well as higher levels of job satisfaction. Similarly, a meta-analysis by Skaalvik and Skaalvik (2017) showed that teacher resilience was positively associated with positive emotions, job satisfaction, and teaching effectiveness.

In the context of teaching, resilience refers to a teacher's ability to cope with the challenges and stresses of their profession, and to adapt to changes in the educational

landscape. Resilient teachers are able to maintain their commitment to their students and to their profession, despite the difficulties they may encounter (Day & Gu, 2014).

Research has shown that resilience is a key factor in promoting teacher well-being (Gu & Day, 2013). Teachers who are more resilient are better able to manage stress and anxiety, and are less likely to experience burnout or leave the profession (Tugade & Fredrickson, 2004). Moreover, teachers who are resilient are better able to provide high-quality instruction and to support the learning of their students (Day & Gu, 2014).

Given the importance of resilience in promoting teacher well-being and student learning, it is important to understand the factors that contribute to teacher resilience. Previous research has identified a number of factors that are associated with teacher resilience, including a sense of purpose and meaning in their work, a positive outlook and mindset, a supportive work environment, and access to professional development opportunities (Gu & Day, 2013; Tugade & Fredrickson, 2004).

1.3 Theoretical Frameworks of Resilience in Teaching

In this section, we will discuss theoretical frameworks of resilience and how they apply to resilience in teaching. This account will provide a foundation for understanding the concept of resilience and its importance in the context of teaching.

Resilience is a dynamic and multifaceted construct that has been studied in various disciplines (Bhamra, Dani & Burnard, 2011), including psychology, sociology, and education. In the field of psychology, resilience is defined as the capacity to recover from adversity, adapt to change, and maintain a positive self-concept despite challenging circumstances. In the context of teaching, resilience can be defined as the ability of teachers to cope with the demands of their profession and maintain their well-being in the face of stress and adversity (Day & Gu, 2014).

1.3.1 Job Demands-Resources Model

One of the most influential theoretical frameworks of resilience is the Job

Demands-Resources (JD-R) model, which was developed by two Dutch researchers, Arnold

B. Bakker and Evangelia Demerouti. It proposes that job demands and resources interact to
influence employees' well-being and work outcomes. Job demands in this model encompass
the physical, psychological, social, and organizational facets of a job that necessitate
continuous exertion and are linked to psychological consequences, such as stress and burnout.

On the contrary, job resources in this context pertain to the physical, psychological, social,
and organizational elements of a job that serve a functional purpose in accomplishing work
objectives, alleviating job demands, and fostering personal growth and advancement.

According to the JD-R model, employees' well-being and work outcomes are influenced by
the balance between job demands and job resources (Bakker & Demerouti, 2007).

Resilience in teaching is a crucial aspect that can be understood within the framework of the Job Demands-Resources (JD-R) model. In the context of teaching, job demands can encompass various factors that teachers face in their daily work. These demands may include heavy workloads, time pressure, administrative tasks, disruptive student behaviour, and the need to meet diverse student needs. These demands can place significant psychological, emotional, and physical strain on teachers, leading to stress and burnout if not managed effectively.

On the other hand, job resources for teachers can include supportive colleagues, effective leadership, access to professional development opportunities, autonomy in decision-making, adequate instructional materials, and a positive and inclusive school climate. These resources can play a vital role in reducing the negative impact of job demands, enhancing teachers' well-being, and fostering their resilience.

1.3.2 Conservation of Resources Theory

American psychologist Dr. Stevan E. Hobfoll developed another theoretical framework of resilience, which he termed the Conservation of Resources (COR) theory. This framework posits that individuals seek to acquire, maintain, and protect the resources they value, such as energy, time, and social support. According to the COR theory, resource loss, resource threat, or resource gain can lead to changes in individuals' well-being and behaviours. In the context of teaching, the COR theory suggests that teachers' well-being and resilience are influenced by their access to resources that enable them to cope with the demands of their profession (Hobfoll, 1989).

1.3.3 Broaden-and-Build Theory

The Broaden-and-Build theory of positive emotions suggests that positive emotions broaden individuals' attentional scope, cognitive flexibility, and creative thinking, which in turn, can lead to long-term personal growth and development. This theory proposes that positive emotions play a crucial role in building resources that contribute to individuals' well-being and resilience. In the context of teaching, positive emotions, such as enjoyment and satisfaction, can help teachers cope with the demands of their profession and promote their well-being and resilience (Fredrickson, 2001).

In summary, theoretical frameworks of resilience in teaching provide a foundation for understanding the concept of resilience and its importance in the context of teaching. These frameworks suggest that job demands, job resources, and positive emotions play a crucial role in promoting teachers' well-being and resilience, and can provide a basis for developing strategies and interventions to support teachers during times of crisis.

1.4 The Role of Resilience in Promoting Teacher Well-being

Resilience has been defined in a number of ways in the literature, but it is generally understood as the ability to adapt to and cope with challenging or adverse circumstances.

Resilience can be thought of as a process or a set of skills that allows individuals to recover from setbacks, learn from their experiences, and continue to move forward despite adversity. In the context of teaching, resilience has been identified as an important factor in promoting teacher well-being and job satisfaction.

Numerous studies have found that resilience is positively related to teacher well-being and job satisfaction. An illustration of this can be highlighted in a study conducted by Fernet et al. (2013), where data was gathered from 586 school principals and vice-principals in Quebec, Canada. The study spanned two time points, nine months apart, and revealed a positive correlation between resilience and job satisfaction, as well as a negative correlation between resilience and burnout. Similarly, a study by Klusmann et al. (2016), which studies 1789 mathematics teachers in Germany, found that teacher resilience was positively related to work engagement and negatively related to emotional exhaustion.

Resilience has also been found to be a significant factor in promoting teacher retention. A study conducted by Gu and Day (2013) in England involved 300 teachers, revealing a positive correlation between teacher resilience and both job satisfaction and the intention to remain in the teaching profession. Similarly, the aforementioned study by Klusmann et al. (2016) found that teacher resilience was positively related to organisational commitment, which is an important predictor of employee retention.

In addition to its positive effects on teacher well-being and job satisfaction, resilience can also promote effective teaching. Jennings and Greenberg (2009) found that teacher resilience was positively related to teacher effectiveness, as measured by student perceptions of the quality of instruction. The study used data from a school-based intervention program that aimed to promote social-emotional learning and resilience among teachers, revealed that teachers who took part in the program demonstrated enhancements in both resilience and instructional effectiveness, as reported by their students.

It is valuable to acknowledge that research on the role of resilience in promoting teacher well-being in an Algerian context is limited. While resilience and teacher well-being are important topics that have been studied in various educational contexts worldwide, specific research focusing on Algeria is relatively scarce. A close study was the one conducted by Imane Fersaoui (2021) but only addressed the impact of teaching itself on teachers' well-being without studying the impact of external factors on it.

Overall, the literature suggests that resilience is an important factor in promoting teacher well-being along with job satisfaction, retention, and effectiveness. The next section will explore some of the theoretical frameworks developed regarding resilience and how they apply to resilience in teaching in particular.

1.5 Factors Contributing to Teacher Resilience

There are various factors that can contribute to teacher resilience. These factors can be classified into three broad categories: personal characteristics, social support, and organisational factors.

1.5.1 Personal Characteristics

Personal characteristics refer to traits or qualities that are inherent to the individual teacher. Some of the personal characteristics that have been associated with teacher resilience include a positive outlook, a sense of purpose, a growth mindset, and emotional regulation skills (Gu & Day, 2013; Tugade & Fredrickson, 2004).

A positive outlook is characterised by optimism, hope, and a focus on solutions rather than problems. Teachers with a positive outlook are better able to maintain their resilience in the face of adversity (Day & Gu, 2014).

A sense of purpose and meaning in their work can also contribute to teacher resilience. Teachers who feel that their work is meaningful and important are more likely to persist in the face of challenges and setbacks (Skaalvik & Skaalvik, 2017).

A growth mindset is the belief that one's abilities and intelligence can be developed over time with effort and practice. Teachers with a growth mindset are more likely to view challenges as opportunities for growth, rather than as threats to their abilities (Dweck, 2006).

Finally, emotional regulation skills refer to the ability to regulate one's emotions in response to stress and adversity. Teachers who are able to regulate their emotions effectively are better able to manage stress and maintain their resilience in the face of challenges (Tugade & Fredrickson, 2004).

1.5.2 Social Support

Social support refers to the resources and support provided by others, such as colleagues, supervisors, friends, and family. Social support can take many forms, including emotional support, informational support, and tangible support (Cohen & Wills, 1985).

According to Skaalvik and Skaalvik (2017), emotional support, informational support, and tangible support are all crucial for teachers in coping with the stresses and challenges of their profession. Emotional support involves the provision of empathy, caring, and encouragement, which can significantly benefit teachers. When teachers receive emotional support from colleagues, supervisors, and others, it helps them navigate the demanding aspects of their work with greater resilience.

Similarly, informational support plays a vital role in assisting teachers in managing the complexities of their profession. This type of support involves providing advice, guidance, and feedback. When teachers receive informational support from colleagues and supervisors, they gain valuable insights and knowledge that can help them navigate the various challenges they face in their teaching practice.

Furthermore, tangible support is another essential aspect of support for teachers.

Tangible support refers to practical assistance, such as help with tasks or access to resources.

When teachers receive tangible support from colleagues and supervisors, it enables them to

better manage their workload and maintain their resilience. Having access to necessary resources and practical help can alleviate some of the burdens and challenges that teachers encounter in their day-to-day responsibilities.

In conclusion, emotional, informational, and tangible support are all critical for teachers' well-being and professional growth. These different forms of support, when provided by colleagues, supervisors, and others, contribute to teachers' ability to cope with the demands of their profession, navigate complexities, and effectively manage their workload.

1.5.3 Organisational Factors

Organisational factors refer to the characteristics of the school or educational institution where the teacher works. Some of the organisational factors that have been associated with teacher resilience include a supportive school culture, access to professional development opportunities, and a sense of autonomy and control (Gu & Day, 2013; Tugade & Fredrickson, 2004).

A supportive school culture is characterised by a sense of community, collaboration, and respect. Teachers who work in schools with a supportive culture are more likely to feel valued and supported, which can contribute to their resilience (Gu & Day, 2013).

Access to professional development opportunities can also contribute to teacher resilience. Professional development can provide teachers with the skills and knowledge they need to be effective in their profession, as well as a sense of mastery and control over their work (Skaalvik & Skaalvik, 2017).

Finally, a sense of autonomy and control can contribute to teacher resilience (Hakanen et al., 2019). Teachers who feel that they have control over their work, such as the ability to make decisions about how to teach and manage their classroom, tend to be more resilient than

those who feel powerless. Autonomy can also give teachers a sense of purpose and meaning, as they are able to make choices that align with their values and beliefs about education.

In addition to these individual factors, there are also broader systemic issues that can impact teacher resilience. For example, policies and practices that prioritise test scores over student well-being and teacher development can contribute to burnout and low morale as demonstrated by Skaalvik and Skaalvik (2017). High teacher turnover rates, inadequate resources, and lack of support from administrators can also make it difficult for teachers to stay motivated and engaged (Hakanen et al., 2019; Jennings & Greenberg, 2009).

Despite these challenges, there are strategies that can help promote teacher resilience. Schools can provide professional development opportunities that allow teachers to continue learning and growing in their careers. Supportive leadership and positive school culture can also contribute to teacher well-being, as can programs that prioritise teacher wellness and self-care. Ultimately, creating a culture that values and supports the well-being of teachers can lead to a more resilient and effective teaching workforce.

1.6 Resilience Training and Interventions for Teachers

Given the importance of teacher resilience for student success and well-being, there has been growing interest in developing resilience training and interventions for teachers. Australia, for instance, recognises the importance of resilience training for teachers and provides opportunities for such training through some specialised companies such as Driven and the Resilience Project or through organisations such as Positive Schools or the non-profit Smiling Mind. These programs typically aim to enhance teachers' coping mechanisms and emotional regulation strategies, and promote positive adaptation to stressful situations (Jennings & Greenberg, 2009).

One type of resilience training that has been studied extensively is mindfulness-based stress reduction (MBSR). MBSR involves practising mindfulness meditation, body

awareness, and yoga, which can help reduce stress and enhance emotional regulation (Napoli, Krech, & Holley, 2005). Several studies have shown that MBSR can improve teacher well-being and reduce burnout (Flook et al., 2013; Jennings & Frank, 2015; Roeser et al., 2013).

Another type of intervention that has been found to be effective is Cognitive Behavioural Therapy (CBT). CBT is a psychotherapeutic approach that helps individuals identify and challenge negative thoughts and beliefs, and develop more positive and adaptive patterns of thinking and behaviour (Beidas & Kendall, 2010). CBT has been shown to be effective in reducing depression, anxiety, and burnout among teachers (Folkman & Moskowitz, 2000).

Other interventions that have shown promise in enhancing teacher resilience include social support programs, such as mentoring and coaching (Skaalvik & Skaalvik, 2011), and gratitude interventions, which involve regularly reflecting on and expressing gratitude for positive experiences and relationships (Froh, Sefick, & Emmons, 2008).

Overall, resilience training and interventions for teachers have the potential to enhance teacher well-being and promote positive outcomes for students. Further research is needed to identify the most effective approaches and to better understand how these interventions can be integrated into teacher professional development programs.

In a nutshell, it is believed that teacher resilience is a multifaceted construct that is influenced by a variety of factors, including personal attributes, professional factors, and environmental factors. Personal factors, such as self-efficacy, optimism, and coping strategies, are found to be associated with teacher resilience (Mansfield et al., 2016; Tschannen-Moran & Hoy, 2007). Professional factors, such as job satisfaction, organisational support, and professional development, have also been found to be related to teacher resilience (Hewitt & Gersick, 2017; Wong & Wong, 2017). Additionally, environmental

factors, such as school climate and culture, play a role in shaping teacher resilience (Howard & Johnson, 2004; Jennings & Greenberg, 2009).

Furthermore, interventions and training programs aimed at developing teacher resilience have been found to be effective. For example, mindfulness-based interventions, coaching, and mentoring programs have been found to improve teacher well-being and resilience (Beltman et al., 2011; Flook et al., 2013; Jennings et al., 2013). It is important to note that although resilience training can have positive effects on teacher well-being and job performance, it is not a one-size-fits-all approach and should be tailored to meet the specific needs of individual teachers (Brown & Lent, 2008).

The examination of teacher resilience underscores the significance of comprehending the multifaceted elements that contribute to this concept. It also emphasizes the potential advantages of implementing interventions and training initiatives aimed at cultivating teacher well-being and resilience, considering the numerous challenges they may confront in their professional roles.

1.7 Conclusion

In conclusion, this chapter has provided an overview of the concept of resilience in the context of teaching, with a focus on its role in promoting teacher well-being. Resilience, defined as the ability to cope with stress and adversity, is crucial for teachers to maintain their own well-being and provide high-quality education to their students.

The chapter has discussed various theoretical frameworks of resilience in teaching, including the Job Demands-Resources model, Conservation of Resources theory, and Broaden-and-Build theory. These frameworks highlighted the importance of job demands, job resources, and positive emotions in promoting teacher resilience.

Furthermore, the chapter examined the factors that contribute to teacher resilience, including personal characteristics, social support, and organisational factors. Personal characteristics such as a positive outlook, sense of purpose, growth mindset, and emotional regulation skills could enhance teachers' resilience. Social support from colleagues, supervisors, friends, and family have been crucial in helping teachers navigate the challenges of their profession.

Organisational factors such as a supportive school culture, access to professional development opportunities, and a sense of autonomy and control also played a significant role in promoting teacher resilience.

Chapter 2: Challenges Faced by Teachers during

the COVID-19 Pandemic

2.1 Introduction

The COVID-19 pandemic, an unprecedented global health crisis, has undoubtedly left an indelible mark on society, affecting nearly every facet of human life. From the very beginning, the educational sector bore the brunt of the pandemic's impact as schools and universities worldwide grappled with the daunting task of maintaining educational continuity while ensuring the safety and well-being of students and staff. As the virus spread rapidly, educational institutions were compelled to close their doors or swiftly transition to alternative modes of teaching, with online learning emerging as the primary solution to prevent the virus from further spreading within these densely populated environments.

However, this sudden and colossal shift to remote teaching has not come without its fair share of challenges, particularly for educators who found themselves at the forefront of this educational revolution. Teachers around the world were thrust into an entirely unfamiliar territory, requiring them to quickly adapt to new technologies, learn innovative pedagogical approaches, and navigate uncharted waters in order to deliver quality education to their students remotely. These unprecedented circumstances demanded flexibility, creativity, and resilience from teachers as they strove to overcome the logistical, technical, and pedagogical hurdles posed by this new reality.

Beyond the professional challenges, teachers also had to grapple with the emotional and psychological toll of the pandemic. The profound disruption to daily routines, the fear and anxiety surrounding the virus, and the constant adaptation to ever-changing circumstances placed an immense burden on their mental well-being. The responsibility of supporting their students' emotional needs while managing their own heightened stress levels proved to be an arduous task, leading to increased burnout, fatigue, and feelings of isolation among educators.

Thus, this chapter aims to delve into the specific challenges faced by teachers during the COVID-19 pandemic, providing a comprehensive understanding of the multifaceted issues they encountered. By exploring the coping strategies employed by teachers to surmount these obstacles, we can gain valuable insights into the resilience and adaptability of educators in the face of adversity. Furthermore, an examination of the impact of the pandemic on their overall well-being will shed light on the urgent need for the development of effective policies and support systems to safeguard the mental and emotional health of teachers during and beyond this unprecedented crisis.

Ultimately, recognizing and addressing the challenges faced by teachers during the COVID-19 pandemic not only facilitates a deeper understanding of the educational landscape in times of crisis but also serves as a foundation for designing robust and responsive systems that can better support educators in the future. The experiences, lessons learned, and strategies adopted by teachers during this extraordinary period will undoubtedly shape the future of education, making it imperative to explore their stories, perspectives, and well-being in the context of this transformative moment in history.

2.2 Overview of the COVID-19 Pandemic and its Impact on Education

The COVID-19 pandemic, which was caused by the SARS-CoV-2 virus and first identified in Wuhan, China in December 2019, has spread worldwide affecting almost all countries and territories (Sintema, 2020). In March 2020, the World Health Organization (WHO) declared a global pandemic (WHO, 2020). In response, countries around the world have implemented various public care strategies such as handwashing, wearing face masks, physical distancing, and avoiding mass gathering and assemblies, along with lockdowns and stay-at-home orders to flatten the curve and control the transmission of the disease (Sintema, 2020).

The pandemic has also disrupted education in numerous ways, including forcing schools to switch to remote learning, cancelling or postponing exams, and causing significant learning loss due to disruptions to regular classroom instruction (Kuhfeld et al., 2021). The pandemic has also had an unequal impact on students, with those from low-income families and marginalised communities facing greater challenges in accessing education (UNESCO, 2020).

In addition to its impact on students, the pandemic has also had significant implications for teachers (RAND Corporation, 2021). Teachers have had to adapt quickly to new modes of instruction, often with limited training and resources (UNESCO, 2020). Many have had to balance their teaching responsibilities with caring for their own families and dealing with the stress and uncertainty caused by the pandemic (RAND Corporation, 2021).

Furthermore, the pandemic has created new challenges for teachers in terms of maintaining student engagement and motivation in remote learning environments, as well as addressing the mental health and well-being of their students (UNESCO, 2020). These challenges have required teachers to be innovative and flexible in their approaches to teaching and to work closely with their colleagues and communities to provide the necessary support for their students (RAND Corporation, 2021).

2.3 Challenges Faced by Teachers during the Pandemic

The COVID-19 pandemic brought unprecedented disruptions to the field of education, forcing teachers around the world to rapidly adapt to remote teaching and learning. This section explores the various challenges faced by teachers during this period, focusing on two main aspects: challenges in adapting to remote teaching and the emotional and psychological challenges they encountered. Additionally, it addresses the lack of engagement and involvement among both university members and students, shedding light on the impact of these factors on the teaching and learning experience.

2.3.1 Challenges in adapting to remote teaching

2.3.1.1 Adaptation to New Teaching Methods and Technologies. One of the most significant challenges teachers have faced during the COVID-19 pandemic has been adapting to new teaching methods and technologies. With the sudden shift to remote learning, teachers have had to learn new online teaching tools, such as video conferencing software and learning management systems. Many teachers have felt overwhelmed due to their unpreparedness for the transition to online teaching (Downing & Dyment, 2013), particularly those who had limited experience with technology before the pandemic

A survey of teachers at the National Autonomous University of Mexico (UNAM) found that many struggled with the sudden shift to online teaching and had concerns about student engagement and learning outcomes (Sánchez et al., 2020). The article also cites a report from UNESCO on the adverse consequences of school closures, which highlights issues such as unequal access to technology and resources, increased risk of dropout and disengagement, and negative impacts on mental health and well-being (UNESCO, 2020).

2.3.1.2 Redesigning Lesson Plans for Remote Learning. According to Chelghoum and Chelghoum (2020), a significant number of respondents highlighted that issues related to time management and scheduling were unavoidable and impactful challenges during the pandemic. In addition to learning new technologies, teachers have also had to redesign their lesson plans to accommodate the constraints of remote learning. They have had to find new ways to deliver content, provide feedback, and engage students online. This has required creativity, flexibility, and adaptability, as well as a willingness to experiment with new approaches to teaching and learning.

2.3.1.3 Managing Diverse Learning Abilities. Another significant challenge for teachers during the pandemic has been managing diverse learning abilities among their students. Remote learning has made it more challenging for teachers to provide

individualised support and feedback to students, particularly those who require additional assistance. Teachers have had to find new ways to differentiate instruction and provide support to students with different learning needs, such as providing recorded lessons, additional resources, and one-on-one online tutoring sessions.

2.3.1.4 Addressing the Digital Divide. According to Aytaç (2021), teachers have encountered the challenge of addressing the digital divide during the transition to remote learning amid the pandemic. The article highlights that many students from low-income families and marginalised communities have faced limited access to reliable internet and devices, thereby making it difficult for teachers to provide equitable learning opportunities. Aytaç further notes that most students do not have access to the internet, computers, smartphones, or similar technologies, while those who do have internet often face limitations such as quota limits. The study also highlights the presence of digital inequality among households and students. These findings strongly suggest that a significant number of students from disadvantaged backgrounds have experienced restricted access to necessary technology, which has posed challenges for teachers in ensuring equal learning opportunities.

Simultaneously, the abrupt shift to distance learning presented significant hurdles for students. The lack of prior experience with distance learning necessitated rapid adaptation, yet disparities in access to resources such as computers and internet connectivity posed barriers to participation. Additionally, finding a quiet and suitable study environment within crowded households proved challenging (Zermane & Aitouche, 2020).

2.3.2 Emotional and Psychological Challenges

2.3.2.1 Emotional and Psychological Impact. The COVID-19 pandemic has had a significant emotional and psychological impact on teachers, who have had to deal with the stress and uncertainty caused by the pandemic. Many teachers have reported feeling overwhelmed, anxious, and burnt out due to the increased workload (MacIntyre et al., 2020),

long hours, and the challenges of teaching remotely (RAND Corporation, 2021; Casimiro Urcos et al., 2020).

Teachers have also faced unique challenges related to their personal lives. Juggling teaching responsibilities alongside the care of children or other family members within the home environment has added an additional layer of stress and pressure (Delgado-Gallegos et al., 2021). Factors such as haste, competitiveness, societal and technological transformations, compounded by the health crisis and the pandemic itself, have further threatened the psychological equilibrium of numerous university teachers (Casimiro Urcos et al., 2020). Supporting Mental Health and Well-being

Teachers have had to find ways to support their own mental health and well-being while also addressing the emotional needs of their students. This has involved providing emotional support and counselling, incorporating mindfulness practices into their lessons, and connecting students with mental health professionals when necessary (Casimiro Urcos et al., 2020).

2.3.2.2 Disruptions to Conventional Roles and Obligations. The COVID-19 pandemic has caused substantial disruptions to the conventional roles and obligations of academic professionals, resulting in heightened levels of uncertainty and anxiety (Delgado-Gallegos et al., 2021). In addition to these challenges, teachers have also had to confront the significant stress caused by family health concerns during this time (MacIntyre et al., 2020). Juggling their teaching responsibilities with the care of children or other family members within the home environment has presented notable difficulties and increased their overall stress levels. These additional challenges highlight the unique circumstances that teachers have faced during the pandemic, as they navigate the demands of remote teaching while also managing the well-being of their loved ones. Balancing work and personal life

within the confines of the home environment has intensified the pressure and stress experienced by teachers.

2.3.3 Lack of Engagement and Involvement

2.3.3.1 Lack of coordination and involvement among members of the

universities. The lack of coordination and collaboration among members within universities is a widespread challenge that hampers the attainment of desired objectives, as emphasised by Kerras and Salhi (2021). This issue is not confined to a particular geographical location but is observed on a global scale. Insufficient coordination results in fragmented efforts, disjointed decision-making processes, and suboptimal outcomes. Additionally, the limited awareness and lack of interest among professors in this form of education can be attributed to the traditional educational background of officials, who have demonstrated little enthusiasm for this type of educational approach (Guessar, 2020).

2.3.3.2 Lack of student engagement. In addition to the challenges mentioned earlier, teachers also faced a significant issue of student engagement during remote learning (Chelghoum & Chelghoum, 2020). As highlighted by Delgado-Gallegos et al. (2021), younger students, unlike professional-level students or graduates who benefit from recorded lectures, are more susceptible to household distractions. The presence of various distractions in their home environment posed a significant challenge for teachers in effectively engaging and maintaining the focus of younger minds during remote learning. This, combined with the lack of synchronous or asynchronous interaction on the university-provided platform for uploading EFL courses, further intensified the sense of isolation and hindered effective communication between teachers and students (Sarnou & Sarnou, 2021). Consequently, teachers experienced a disconnection from the teaching process and expressed concerns about their autonomy in delivering the course material. These challenges related to student

engagement and the limitations of online learning platforms added to the overall difficulties faced by teachers during the pandemic.

2.4 Coping Strategies Used by Teachers during the Pandemic

Despite the challenges they have faced, teachers have demonstrated remarkable resilience and adaptability during the COVID-19 pandemic. Many teachers have adopted new strategies and approaches to teaching to ensure their students continued learning and well-being.

Research conducted by Hidalgo-Andrade, Hermosa-Bosano, and Paz (2021) indicated that teachers utilised a variety of coping strategies, with the most frequently reported ones being social support, physical activity (exercise), and engaging in leisure activities. However, MacIntyre, Gregersen, and Mercer (2020) employed the Brief-COPE inventory and found that acceptance was the most commonly used coping strategy among teachers, followed by advanced planning, re-framing, actively taking action, and using work or other activities as distractions. The difference in findings between the two studies may be attributed to the different data collection methods used.

Teachers employed various coping strategies during the pandemic, some of which include providing direct contact with students through video conferencing to enable effective communication and real interaction (Kerras & Salhi, 2021). Additionally, educators effectively utilised online platforms such as Google Meet, Facebook closed groups, Messenger, and Zoom to facilitate student comprehension of course content, foster increased learner autonomy, and maintain instructional continuity (Sarnou & Dallel, 2021).

In the Algerian context, Ghounane (2022) revealed that Algerian teachers embraced platforms like Moodle and Teams as part of their coping strategies during this challenging period. During the pandemic, around 83% of these educators turned to online learning as a

supplement to traditional in-person teaching, despite only a small percentage of teachers utilizing online learning methods before the pandemic.

In order to tackle these difficulties, effective strategies for online teaching during the global crisis encompass various actions, such as ensuring equitable access to digital resources, offering comprehensive explanations to parents, dedicating time for planning and creating daily routines, delivering substantial learning content, designing self-directed learning activities, and carefully selecting suitable tools (Chelghoum & Chelghoum, 2020). Some tips for online teaching during the pandemic include hosting live classes, recording these classes for later consumption, promoting engagement through breakout rooms, and finding different ways to provide feedback.

Overall, teachers have demonstrated their adaptability and resilience by embracing new strategies and technologies to ensure the continuity of education and support their students during the COVID-19 pandemic.

However, it is important to note that literature and research in this specific point regarding coping strategies used by teachers during the pandemic are limited. The unprecedented nature of the COVID-19 pandemic presented unique challenges, and there has been a scarcity of comprehensive studies exploring the full range of coping strategies employed by teachers. As a result, further research is needed to delve deeper into this topic and provide a more comprehensive understanding of the coping mechanisms utilised by teachers during times of crisis. Such research would not only contribute to the existing body of knowledge but also inform future educational practices and policies in similar challenging circumstances.

2.5 Impact of the Pandemic on Teachers' Well-being

The COVID-19 pandemic has had a significant and detrimental impact on the well-being of teachers. They have faced numerous challenges and had to adapt to new teaching methods and technologies, resulting in increased stress levels and emotional exhaustion. Allen, Jerrim, and Sims (2020) conducted a study in the United Kingdom that tracked the fluctuations in teacher well-being during the pandemic. The findings showed significant spikes in anxiety levels among teachers when school lockdowns were implemented and announcements about reopening were made. Interestingly, teachers' anxiety levels often increased in response to speculative information rather than actual policy shifts.

In the United States, the RAND Corporation (2021) conducted a study revealing that nearly 60% of teachers reported high levels of stress during the pandemic, with over half experiencing emotional exhaustion. Another study by Pierce et al. (2021) found that teachers were experiencing burnout at higher rates than before the pandemic.

Various factors contribute to the negative impact on teachers' well-being, including increased workload, lack of support, and the challenges of remote teaching. The RAND Corporation (2021) study also highlighted feelings of isolation and disconnection from colleagues and students as additional stressors for teachers.

The consequences of the pandemic on teachers' well-being have significant implications for their job satisfaction, retention, and effectiveness as educators. It is crucial to provide them with necessary support, including access to mental health services, flexible work arrangements, and opportunities for professional development and collaboration. By ensuring adequate support, teachers will be better equipped to support their students' learning and well-being during and beyond the pandemic.

According to Allen, Jerrim, and Sims (2020), the implementation of lockdown measures during the COVID-19 pandemic resulted in a slight increase in work-related

anxiety among female teachers compared to their male counterparts, particularly among those who have children in their households. This finding aligns with the research conducted by Casimiro Urcos et al. (2020), which affirmed that "the impact is negatively related to the emotional state, because it increased predominantly in a severe way, significantly raising the levels of stress, anxiety and anguish. Affecting mostly in women and in the age group of 44 to 54 years" (p. 9). The studies collectively suggest that female teachers, whether in schools or universities, experienced increased work-related anxiety and a negative impact on their well-being as a result of the pandemic and associated measures.

Delgado-Gallegos et al. (2021) shed light on the profound impact of the pandemic on teachers' well-being, using a modified version of the adapted COVID-19 stress scales (ACSS) to assess the mental health of academic professionals during the transformative period of education under COVID-19 quarantine.

An alternative perspective that can be derived from the aforementioned is that despite the significant changes in teachers' daily routines, it is possible that these changes did not lead to a substantial overall decline in their mental well-being (Allen, Jerrim, & Sims, 2020).

In conclusion, it is crucial to recognise and address the adverse effects of the pandemic on teachers' well-being. Providing the necessary support and resources will help mitigate the negative impact and enable teachers to effectively fulfil their role in supporting students' learning and well-being during and after the pandemic.

The literature review provides a comprehensive understanding of the challenges faced by teachers during the COVID-19 pandemic. The sudden shift to remote teaching posed significant challenges for educators, particularly in adapting to new teaching methods and technologies. Many teachers felt overwhelmed and underprepared, especially those with limited prior experience with technology. Redesigning lesson plans for remote learning and

managing diverse learning abilities among students were additional challenges that teachers had to overcome.

The digital divide emerged as a significant issue, with students from low-income families and marginalised communities facing limited access to reliable internet and devices.

This inequality in access to technology posed challenges for teachers in ensuring equal learning opportunities for all students.

Teachers also faced emotional and psychological challenges during the pandemic. The increased workload, long hours, and the uncertainties surrounding the situation led to feelings of burnout and anxiety. Balancing teaching responsibilities with personal obligations and family health concerns added to the stress experienced by teachers.

The lack of engagement and involvement among both university members and students further compounded the challenges faced by teachers. Limited coordination and collaboration within universities hindered the attainment of desired objectives. Lack of student engagement during remote learning and the limitations of online learning platforms created a sense of disconnection and hindered effective communication between teachers and students.

Despite these challenges, teachers demonstrated resilience and adaptability. They employed various coping strategies, such as social support, physical activity, engagement in leisure activities, and utilising online platforms to facilitate effective communication and maintain instructional continuity. Strategies for online teaching included hosting live classes, recording lessons, promoting engagement through breakout rooms, and providing feedback in different ways.

The pandemic had a detrimental impact on teachers' well-being, with increased stress levels, emotional exhaustion, and higher rates of burnout reported. Factors contributing to the

negative impact on well-being included increased workload, lack of support, and the challenges of remote teaching.

Understanding the challenges faced by teachers during the pandemic is crucial for developing effective policies and support systems to safeguard their mental and emotional health. Teachers' experiences, coping strategies, and well-being should be considered in designing robust and responsive systems that can better support educators in the future. The lessons learned from this transformative moment in history will shape the future of education and highlight the importance of teacher well-being in times of crisis.

2.6 Conclusion

In conclusion, this chapter delved into the specific challenges faced by teachers during the COVID-19 pandemic. It explored the multifaceted issues encountered by educators as they navigated the sudden shift to remote teaching and learning. This chapter discussed the challenges of adapting to new teaching methods and technologies, redesigning lesson plans for remote learning, managing diverse learning abilities, and addressing the digital divide. Additionally, it examined the emotional and psychological toll on teachers, including increased stress levels, burnout, and the disruption of conventional roles and obligations. This chapter also highlighted the lack of engagement and involvement among university members and students as a significant challenge.

Despite these challenges, teachers demonstrated resilience and adaptability by employing coping strategies such as social support, physical activity, and advanced planning. They embraced new technologies and platforms to facilitate effective communication and maintain instructional continuity. However, the pandemic had a detrimental impact on teachers' well-being, with increased stress, anxiety, emotional exhaustion, and burnout reported.

Recognizing and addressing these challenges is crucial for understanding the transformative impact of the pandemic on education and for designing responsive systems to support educators in the future. The experiences, lessons learned, and coping strategies adopted by teachers during this extraordinary period will shape the future of education. It is imperative to prioritise the development of effective policies, support systems, and resources to safeguard the mental and emotional well-being of teachers during and beyond this unprecedented crisis. By doing so, we can ensure the resilience and well-being of teachers and create a more robust and inclusive education system for the future.

Chapter 3: Research Methodology and Data

Analysis

3.1 Introduction

This chapter will present the methodology and data analysis methods that are used in this study to investigate the extent to which university teachers have demonstrated resilience during the COVID-19 pandemic while transitioning from face-to-face delivery to online teaching. The chapter will begin with a description of the research design and methodology, followed by a discussion of the sampling and the participants. The data collection methods, which include a questionnaire and semi-structured interviews, are then described, as well as the data analysis methods used for both the quantitative and qualitative data. Ethical considerations related to the study are also provided. Finally, the chapter concludes with a thorough analysis and discussion of the findings of the study and a suggestion of some recommendations and implications for policy and practice.

3.2 Research Design and Methodology

The research design and methodology for this study are carefully planned to address the research questions and hypotheses while ensuring the collection of comprehensive and reliable data. This section provides an overview of the research design and methodology employed in this study.

The study relies on a mixed-methods approach, combining quantitative and qualitative research methods. This approach allows for a more comprehensive understanding of teachers' resilience during the COVID-19 pandemic, capturing both statistical trends and in-depth insights from participants.

The quantitative component of the study involved the administration of a structured questionnaire to a large sample of teachers, combining closed-ended and Likert scale questions. Inspired by a well-established scale for measuring general resilience, the questionnaire was specifically designed to incorporate components related to resilience during the COVID-19 pandemic. Closed-ended questions collected demographic information,

while Likert scale questions assessed teachers' resilience levels, coping strategies utilised, and perceptions of support received during the pandemic. Administered both in person and online, the questionnaire offered flexibility and convenience for participants, aiming to capture the unique challenges and experiences faced by teachers during this unprecedented time.

For the qualitative component of the study, a thematic analysis approach was employed. This approach involved analysing the transcribed interviews to identify patterns, themes, and categories within the data. Through a systematic exploration of the qualitative data, significant insights and findings were identified.

To enhance the validity and reliability of the findings, triangulation was employed by comparing and contrasting the quantitative data from the questionnaire with the qualitative data generated through thematic analysis. This triangulation approach allowed for a more comprehensive understanding of the research questions and provided a richer and more nuanced analysis of teachers' resilience. By conducting a rigorous examination of the qualitative data, this study contributed to a deeper understanding of the research topic.

Overall, the research design and methodology employed in this study ensured a comprehensive and rigorous investigation of teachers' resilience during the COVID-19 pandemic. The combination of both in-person and online administration of the questionnaire, along with the thematic analysis of qualitative data, allowed for a deeper understanding of teachers' experiences, coping strategies, and support systems, contributing to the body of knowledge on teacher well-being and resilience during crisis situations.

3.3 Sampling and Participants

In this study, we opted for the identification of eligible teachers with relevant experiences and insights related to the research questions. In this respect, we included only teachers who taught during the pandemic; in addition, we excluded those who did not take

part during the COVID-19 period of instruction. Therefore, 30 teachers from the Department of English, Faculty of Letters and Languages, Ibn Khaldoun University of Tiaret, are the sample of this research study. The sample size of 30 teachers is considered appropriate since it represents all the teachers at the department.

We began by explaining the purpose and significance of the study to the department administration. With their support, we prepared the list of participants based on criteria such as teaching experience, gender, and age to ensure a representative sample. The criteria were carefully considered to capture a range of perspectives and experiences related to the challenges faced by English language teachers during the COVID-19 pandemic.

Upon preparing the list of participants, we directly approached them and invited them to participate in the study. Detailed information regarding the objectives of the study, procedures, and the voluntary nature of participation was provided to each potential participant. Informed consent was obtained from all participants, emphasizing their understanding of the purpose of the study and their rights of confidentiality as active participants.

Confidentiality and anonymity were maintained throughout the study. Each participant was assigned a unique identifier, and all data collected were treated with utmost confidentiality.

It is important to note that while the study focused on a specific department within a single university, the findings may not be fully generalizable to other educational settings; however, they will provide valuable insights into the experiences of English language teachers within the specific context of the Department of English at Ibn Khaldoun University of Tiaret.

3.4 Data Collection Methods

To gather data for this study, we employed two primary data collection methods: a questionnaire and a semi-structured interview. These methods were chosen to obtain both quantitative and qualitative data, allowing for a comprehensive exploration of the research questions, since we are interested in identifying whether university teachers have been resilient in facing the miscellaneous challenges and well-being issue that were imposed by the outbreak of COVID-19 pandemic and its direct impact on their performance

3.4.1 Questionnaire

The questionnaire was administered to all 30 participants selected from the Department of English, Faculty of Letters and Languages, Ibn Khaldoun University of Tiaret. This method was chosen to obtain quantitative data. The questionnaire consisted of three sections: demographic information, the CD-RISC questionnaire, and COVID-19 specific questions.

3.4.1.1 Demographic Information. The Demographic Information section aimed to gather data about the participants' characteristics, such as age, gender, teaching experience, and highest level of education. This information provided insights into how these demographic factors may have influenced their experiences of teaching during the COVID-19 pandemic and their resilience in dealing with its challenges. It also helped in interpreting the study's results and identifying potential biases or limitations in the sample.

3.4.1.2 CD-RISC Questionnaire. The CD-RISC Questionnaire measured participants' level of resilience by assessing their agreement with various statements on a scale from 0 to 4. We used the CD-RISC-10 version, a reliable measure of resilience that has been validated in previous research (Connor & Davidson, 2003; Yu & Zhang, 2007). The CD-RISC is a 25-item self-report measure specifically designed to assess an individual's level of resilience. Extensive research has demonstrated the CD-RISC's robust psychometric

properties across various populations, including university students and healthcare workers (Connor & Davidson, 2003; Windle et al., 2011). In order to minimise respondent burden and accommodate the time constraints of participants, the CD-RISC-10, a shorter version of the scale consisting of 10 items, was selected for this study. Previous research has indicated that the CD-RISC-10 retains good psychometric properties and reliability in measuring resilience (Connor & Davidson, 2003; Yu & Zhang, 2007). This choice enabled efficient data collection while still capturing the essential aspects of participants' resilience levels during the COVID-19 pandemic.

3.4.1.3 COVID-19 Specific Questions. The COVID-19 Specific Questions section is intended to assess teachers' experiences during the pandemic, including their ability to adapt to changes in their teaching job, their confidence in handling the challenges of teaching during the pandemic, their ability to stay connected with students, and their perception of support from colleagues. A scale from 1 to 5 was used to assess these aspects.

3.4.2 A Semi-Structured Interview

Additionally, a subset of 7 participants was selected for semi-structured interviews. This interview aimed to collect qualitative data and capture a diverse range of perspectives and experiences related to teaching during the COVID-19 pandemic. The interview was conducted either face-to-face or online, depending on participants' availability and preferences. An interview guide was developed to ensure consistency in the topics covered while allowing for open-ended responses. The interviews were audio-recorded with participants' consent to ensure accurate data capture.

During the interviews, participants were asked about their resilience, coping strategies, professional development opportunities, and mental health during the COVID-19 pandemic. These questions aimed to gather in-depth information and provide a deeper understanding of the factors contributing to their resilience. The interviews were conducted in

a conversational style to allow for the emergence of unexpected insights and perspectives.

Thematic analysis was used to analyse the data collected through the interviews.

Both the questionnaire and semi-structured interviews provided valuable insights into the participants' experiences, perspectives, and strategies employed in demonstrating resilience during the COVID-19 pandemic. The combination of quantitative data from the questionnaire and qualitative data from the interviews allowed for a comprehensive analysis of the research questions and a more nuanced understanding of the participants' experiences.

The data collection process adhered to rigorous ethical guidelines. All participants provided informed consent, demonstrating their comprehension of the study's objectives, voluntary involvement, and the confidentiality of their answers. Participants were given the option to provide their contact information separately if they wished to receive the study's findings, ensuring their anonymity and confidentiality.

The collected data from both the questionnaire and the semi-structured interviews will undergo rigorous analysis using appropriate methods to address the research questions and hypotheses. Quantitative techniques such as descriptive statistics and inferential analysis will be applied to the questionnaire data, while qualitative techniques such as thematic analysis will be used for the interview data. Integrating both types of data will provide a comprehensive understanding of the research topic and enhance the validity and reliability of the study findings.

In a nutshell, the combination of a questionnaire and semi-structured interviews provided a robust approach to data collection. We were able to gather both quantitative and qualitative data from a sample of 30 teachers, contributing to a comprehensive analysis of resilience and experiences during the COVID-19 pandemic. This approach allowed for the exploration of different perspectives, generating meaningful insights and enhancing the understanding of the research theme.

3.5 Data Analysis

The data obtained from the questionnaire and semi-structured interviews will be analysed using appropriate data analysis methods to address the research questions and confirm or reject the hypotheses. This section provides an overview of the data analysis methods employed in this study.

The findings and results of the study, including both quantitative analysis and thematic analysis of qualitative data, will be presented and discussed providing valuable insights into the ways in which teachers demonstrated resilience during the COVID-19 pandemic.

3.5.1 Quantitative Data Analysis

The quantitative data collected from the questionnaire will be analysed using descriptive statistics and inferential analysis techniques. Descriptive statistics, such as frequencies, percentages, and means, will be calculated to summarise the participants' demographic characteristics and their responses to the CD-RISC questionnaire and COVID-19 specific questions. These descriptive statistics will provide an overview of the participants' characteristics and resilience levels during the COVID-19 pandemic.

Inferential analysis techniques, such as correlation analysis, will be applied to examine the relationships between different variables. For example, correlation analysis will be used to assess the associations between resilience levels and demographic factors, such as age, gender, educational level, and teaching experience.

The quantitative data analysis will be conducted using statistical software to ensure accuracy and reliability in the analysis process. The results of the quantitative data analysis will be presented in tables, charts, and graphs to facilitate the interpretation and visualization of the findings.

3.5.1.1 Demographic Information. The demographic distribution of the participants in the study is as follows:

Gender

Figure 1
Participants' Gender Distribution

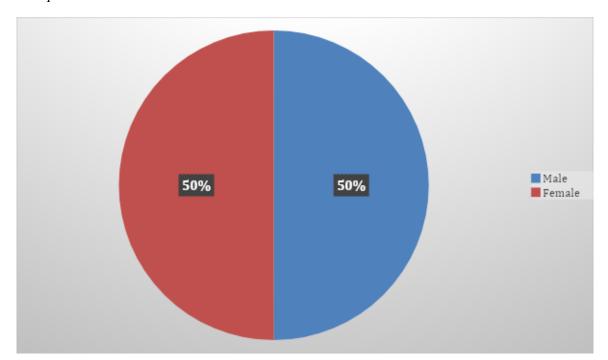


Table 1Gender *Distribution*

	Frequency	Percentag
		е
Male	15	50
Female	15	50

Age

Figure 2 Participants' Age Distribution

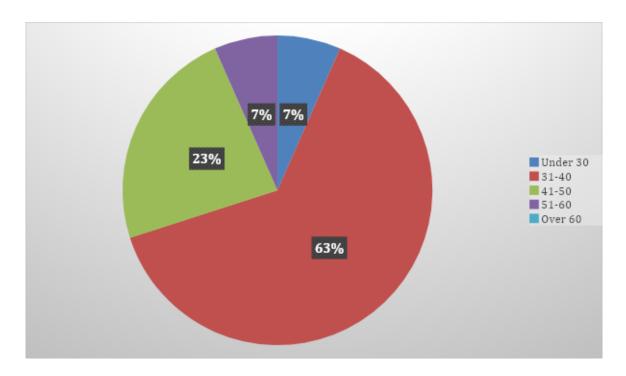


Table 2Age Distribution

	Frequency	Percentag
		е
Under 30	2	6.6
31-40	19	63.3
41-50	7	23.3
51-60	2	6.6
Over 60	0	0

Experience in Teaching at University Level

Figure 3Distribution of Participants' Experience in Teaching at University Level

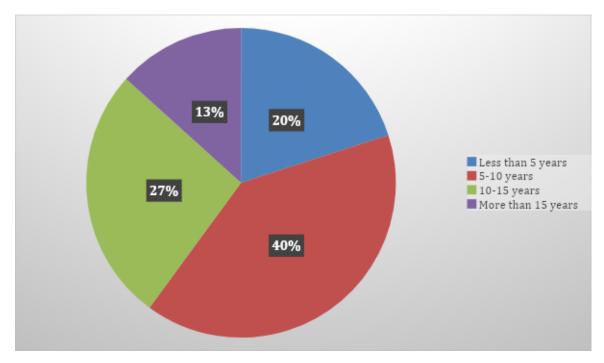
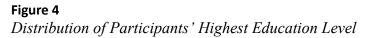


Table 3Experience in Teaching at University Level Distribution

	Frequency	Percentag
		е
Less than 5 years	6	20
5-10 years	12	40
10-15 years	8	26.6
More than 15 years	4	13.3

Highest Education Level



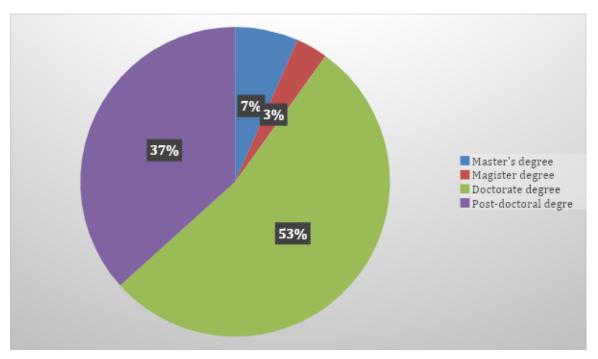


Table 4Highest Education Level Distribution

	Frequency	Percentag
		е
Master's degree	1	6.6
Magister degree	1	3.3
Doctorate degree	16	53.3
Post-doctoral degree	11	36.6

The demographic distribution provides a comprehensive overview of the participants' characteristics, including gender, age, teaching experience, and educational attainment. These demographic factors will be considered in the data analysis to explore potential relationships and associations with resilience levels during the COVID-19 pandemic.

3.5.1.2 CD-RISC Questionnaire. The CD-RISC questionnaire was used to assess the participants' resilience levels during the COVID-19 pandemic. The scores obtained from the

CD-RISC questionnaire provide valuable insights into the participants' overall resilience and how it varies across different demographic factors. The following presents the average CD-RISC scores for all participants, as well as for different demographic categories.

The average CD-RISC score for all participants in the study was 30.07 out of 40. The participants in the study demonstrate a relatively high level of resilience. The CD-RISC measures various factors associated with resilience, such as adaptability, self-efficacy, and positive emotions. A score above the midpoint of 20 indicates a moderate level of resilience, while a score closer to the maximum of 40 suggests a stronger ability to bounce back from adversity. Therefore, the average score of 30.07 indicates that the participants, as a group, possess a considerable level of resilience. This overall score also provides a baseline for understanding the resilience levels of the entire participant group.

Table 5CD-RISC Score Distribution

	Average	Max.	Min.
9	<u>Gender</u>		
Male	30.46	40	9
Female	29.73	37	23
	<u>Age</u>		
Under 30	32	33	31
31-40	28.24	37	9
41-50	33.57	40	28
51-60	31.5	35	28
Over 60	0	0	0
Highest Education Level			
Master's degree	29.5	31	28

Magister degree	33	33	33	
Doctorate degree	30.29	40	21	
Post-doctoral degree	29.64	36	9	
<u>Experience</u>				
Less than 5 years	30.83	23	40	
5-10 years	28	37	9	
10-15 years	29.88	36	21	
More than 15 years	34.5	36	34	

Based on the CD-RISC questionnaire scores obtained from the participants, it is evident that resilience levels vary across different demographic categories. Among the demographic categories analysed, participants between the ages of 41 and 50 demonstrated the highest average CD-RISC score of 33.57, indicating a relatively higher level of resilience within this age group. Additionally, participants with more than 15 years of teaching experience exhibited the highest average CD-RISC score of 34.50, suggesting that their years of experience may have contributed to increased resilience. Furthermore, participants with a Magister degree, although based on a single participant and therefore potentially an outlier, displayed an average CD-RISC score of 33.00, which is noteworthy.

3.5.1.3 COVID-19 Specific Questions. In addition to the overall assessment of resilience using the CD-RISC questionnaire, participants were also asked specific questions related to the impact of the COVID-19 pandemic. These questions were rated on a scale from 1 to 5, with 1 representing "strongly disagree" and 5 representing "strongly agree." The following subsection presents the average scores obtained by participants on these COVID-19 specific questions.

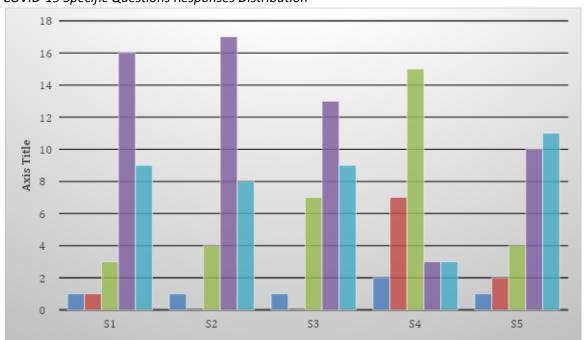


Figure 5 *COVID-19 Specific Questions Responses Distribution*

The participants' total average score on the COVID-19 specific questions was 18.89 out of 25. This indicates a relatively high level of agreement or positive response to these questions overall. The scores vary across different categories such as gender, age, highest education level, and experience.

Table 6COVID-19 Specific Questions Score Distribution

	Average	Max.	Min.	
	<u>Gender</u>			
Male	17.50	25	7	
Female	18.20	25	14	
<u>Age</u>				
Under 30	20.50	20	21	
31-40	18.71	25	13	
41-50	17.57	23	7	
51-60	23.50	25	22	

Over 60	0.00	0	0
<u>Highe</u>	st Education	<u>Level</u>	
Master's degree	17.50	20	15
Magister degree	23.00	23	23
Doctorate degree	18.00	25	7
Post-doctoral degree	19.91	25	16
<u>Experience</u>			
Less than 5 years	17.50	22	7
5-10 years	18.20	23	14
10-15 years	19.63	25	13
More than 15 years	21.25	25	19

The average score for all participants was 18.89, serving as a baseline for understanding the resilience of the entire group. When considering gender, the average score for female participants was 17.50, while male participants scored slightly higher with an average of 18.20. In terms of age, participants under the age of 30 had the highest average score of 20.50, indicating relatively higher resilience. As age increased, the average scores decreased, with participants between the ages of 41 and 50 obtaining an average score of 17.50. However, participants between the ages of 51 and 60 exhibited the highest resilience with an average score of 23.50. Looking at experience levels, participants with more than 15 years of experience showed the highest average score of 21.25, while those with less than 5 years of experience had an average score of 17.50. When considering the highest education level, participants with a Magister degree obtained the highest average score of 23.00, followed by those with a post-Doctorate degree scoring an average of 19.91. Participants with a Master's degree and a Doctorate degree had average scores of 17.50 and 18.00, respectively.

These findings suggest that age, gender, experience, and education level can play a decisive role in determining individuals' resilience levels during the COVID-19 pandemic.

To determine which statement had the most positive feedback and which had the most negative feedback, we examined the frequencies provided for each statement in this section. Based on the frequencies, Statement 1 ("I was able to adapt to the changes in my teaching job due to COVID-19"), Statement 2 ("I felt confident in my ability to handle the challenges of teaching during the COVID-19 pandemic"), and Statement 3 ("I had found ways to stay connected with my students during the COVID-19") received the most positive feedback, with 23 respondents each expressing positive views (choosing response options 4 and 5). Statement 4 ("I felt supported by my colleagues during the COVID-19 pandemic") had the most negative feedback, with 10 respondents expressing negative views (choosing response options 1 and 2). Statement 5 ("I had been able to maintain a positive attitude towards my teaching job during the COVID-19 pandemic") had fewer negative responses compared to Statement 4, with 3 respondents expressing negative views.

Upon careful analysis, it is evident that there is a clear tendency towards a negative response to the fourth statement in this section: "I felt supported by my colleagues during the COVID-19 pandemic." Specifically, 21.43% of the responses expressed agreement, while 28.57% expressed disagreement. The remaining 50% of responses fell into the neutral category. In the case such a statement, a neutral response can be interpreted as leaning more towards disagreement than agreement. If a respondent strongly agrees with the statement, it indicates that they felt a significant level of support from their colleagues during the challenging circumstances of the pandemic.

On the other hand, if a respondent strongly disagrees, it suggests that they perceived a lack of support or did not feel their colleagues were supportive during that time. Within the

context of feeling supported by colleagues, a neutral response indicates that the individual's perception of support may be ambiguous or not strongly leaning towards agreement.

It could suggest that they did not experience a significant level of support from their colleagues, even if they did not outright disagree.

3.5.1.4 Correlation Analysis. We performed a correlation analysis between most of the items in the questionnaire (demographic questions, CD-RISC statements, and COVID-19 specific questions) to attempt to find a relationship between the participants' demographics, their CD-RISC scores, and how well they reacted during the COVID-19 pandemic. There were no strong coefficients recorded from the 23 correlation coefficients we calculated, but the following are to be addressed:

- Positive correlation between CD-RISC score and gender (0.23): This
 correlation suggests that there is a weak positive relationship between
 CD-RISC scores (resilience) and gender. It indicates that male teachers may
 have slightly higher resilience scores compared to female teachers. However,
 it is important to note that a correlation of 0.23 represents a relatively weak
 relationship.
- Positive correlation between CD-RISC score and experience (0.18): This
 correlation indicates a weak positive relationship between CD-RISC scores
 (resilience) and teaching experience. It suggests that individuals with more
 years of teaching experience may have slightly higher levels of resilience. This
 could be attributed to the accumulation of skills, coping mechanisms, and
 adaptability developed over time in the teaching profession.
- Positive correlation between COVID-19 score and experience (0.32): this suggests a significant positive relationship between teachers' reactions during the pandemic (COVID-19 score) and their teaching experience. This indicates

that teachers with more years of experience may have reacted more positively or effectively during the pandemic compared to those with less experience. Experienced teachers have amassed a wealth of knowledge and skills, which empower them to cultivate coping strategies (such as flexible lesson planning, effective communication, resource sharing, collaboration, etc.), adaptability, and resilience as they progress in their careers. Their capacity to remain positive and adaptable positions them well to navigate the uncertainties and complexities of teaching during a crisis like COVID-19. Overall, their accumulated knowledge and skills, coupled with their ability to remain positive and adaptable, empower them to handle the challenges posed by the pandemic more effectively.

Positive correlation between COVID-19 score and degree (0.15): This correlation indicates a weak positive relationship between teachers' reactions during the pandemic (based on COVID-19 Specific Questions score) and their highest level of education (degree). It suggests that teachers with higher degrees may have reacted slightly more positively or effectively during the pandemic compared to those with lower degrees. Higher degrees may provide teachers with a broader knowledge base, pedagogical skills, and critical thinking abilities that can contribute to their ability to adapt and respond to the challenges of the pandemic.

In conclusion, the quantitative data analysis, including the examination of demographic information, CD-RISC questionnaire scores, and responses to COVID-19 specific questions, has provided valuable insights into the resilience levels of university teachers during the COVID-19 pandemic. The findings indicate that resilience levels can vary

based on demographic factors such as gender, age, teaching experience, and educational background.

Overall, the participants in the study exhibited a moderate level of resilience, with an average CD-RISC score of 30.07. The analysis revealed that male participants and those with more teaching experience tended to have slightly higher resilience scores. Additionally, participants with higher degrees showed slightly more positive reactions during the pandemic, as indicated by their scores on the COVID-19 specific questions.

Furthermore, the analysis of participants' responses to the COVID-19 specific questions highlighted both positive and negative aspects of their experiences. Notably, the statement regarding feeling supported by colleagues received a mixed response, with a significant number of participants expressing neutral or negative views. This suggests that support from colleagues may have been perceived as lacking or insufficient during the pandemic.

The correlation analysis indicated weak positive relationships between resilience and gender (0.23), as well as resilience and teaching experience (0.18). It also revealed a significant positive relationship between teachers' reactions during the pandemic (based on COVID-19 specific questions score) and their teaching experience (0.32), suggesting that teachers with more years of experience may have reacted more positively or effectively during the pandemic compared to those with less experience.

In light of the comprehensive quantitative data analysis conducted in this study, it is now crucial to delve into the qualitative data to gain a deeper understanding of the factors influencing the resilience levels of university teachers during the COVID-19 pandemic. Qualitative data analysis will allow us to explore the rich narratives, personal experiences, and perspectives shared by the participants, providing valuable context to complement the quantitative findings.

3.5.2 Qualitative Data Analysis

This thematic analysis explores the challenges faced by teachers, their coping strategies, efforts to maintain well-being, and the types of support they desire. The analysis is based on qualitative data collected through a semi-structured interview with seven teachers. Thematic analysis was employed to identify patterns, themes, and categories within the data, providing valuable insights into the experiences of teachers in their day-to-day work.

3.5.2.1 Challenges Faced by Teachers. The analysis revealed four prominent challenges faced by teachers:

Sense of Overload due to the Rotational Teaching System. Teachers reported feeling overwhelmed due to the rotational teaching system, which required them to switch between teaching different levels for 15-day periods. The constant adaptation to different curricula, teaching styles, and student needs resulted in significant stress and difficulties in time management.

Difficulty Adapting to Online Teaching. The rapid shift to online education presented challenges for teachers in engaging students effectively, maintaining discipline, and ensuring meaningful interaction. The lack of face-to-face communication hindered gauging student understanding and providing immediate feedback, calling for additional training and resources.

Communication Barriers. Teachers faced difficulties in conveying complex concepts effectively, language barriers, and limited communication channels with students and parents. Language differences hindered effective communication, and limited opportunities for open dialogue exacerbated these challenges.

Increased Administrative Tasks. The growing burden of administrative tasks, paperwork, and bureaucratic processes detracted from teachers' primary role as educators.

Limited time and energy for lesson planning, professional development, and individualised student support were significant concerns.

3.5.2.2 Coping Strategies for Online Teaching

Teachers employed three effective coping strategies:

Learning About Online Teaching. Teachers engaged in professional development opportunities, attended webinars, and sought guidance on incorporating interactive elements and using technology effectively. Actively learning about online teaching allowed for pedagogical adaptation and improved student engagement.

Seeking Help from Well-Informed and Well-Trained Teachers. Teachers sought guidance and support from experienced colleagues who had successfully navigated the challenges of online education. Collaborative platforms provided spaces to share experiences, exchange best practices, and seek help when facing specific challenges.

Practising Reflective Teaching. Teachers engaged in reflective practices to continuously improve their teaching methods. Reflecting on instructional practices, seeking feedback, and analysing teaching impacts allowed for adaptability and refinement of pedagogical strategies.

3.5.2.3 Maintaining Well-being. Teachers recognised the importance of prioritising their own well-being and employed strategies such as:

Practising Self-Care Activities. Engaging in self-care activities like exercise, hobbies, mindfulness, and spending time with loved ones helped teachers alleviate stress and enhance their overall well-being.

Maintaining a Positive Attitude. Teachers cultivated a positive attitude, expressed enthusiasm, provided encouragement, and created a sense of community in the virtual classroom. This positivity benefited their own well-being and students' motivation and engagement.

Following Rules Concerning Social Distancing and Hygiene. Teachers prioritised student safety by adhering to rules and guidelines related to social distancing and hygiene. They implemented strategies to ensure physical distance and promoted mask-wearing and hand hygiene practices.

3.5.2.4 Desired Support for Teachers. Teachers identified several areas where they sought support to enhance their professional well-being and effectiveness:

Professional Development Opportunities. Comprehensive and ongoing professional development opportunities that address online teaching skills, new teaching methods, and technology usage were desired. Teachers emphasised the importance of continuous learning and upskilling.

Technological Infrastructure and Resources. Access to reliable technological infrastructure, necessary hardware, software platforms, and user-friendly digital resources were deemed essential for effective online teaching.

Collaborative Learning Communities. Opportunities to engage in collaborative learning communities, share experiences, and exchange best practices were desired. Professional networks, online forums, and mentorship programs were seen as instrumental for ongoing support and professional growth.

Adequate Time for Planning and Preparation. Teachers stressed the need for reduced administrative tasks, paperwork, and non-teaching responsibilities to allow for focused lesson planning and individualised student support. Dedicated time for reflection and collaborative planning was essential for teaching quality and job satisfaction.

Collaboration between Administration and Teachers. Collaboration and effective communication between university administration and teachers were emphasised.

Involvement in decision-making processes, recognition of expertise, and valuing teachers'

insights and experiences were crucial for creating a positive work environment and improving the educational experience.

Provision of Emotional Support through Experts. Access to emotional support services provided by experts such as therapists and psychologists was desired. Counselling with some workshops focused on stress management and resilience building were seen as important for teacher well-being.

This thematic analysis sheds light on the challenges faced by teachers, their coping strategies, efforts to maintain well-being, and the types of support they desire. Understanding these themes is crucial for developing interventions and support systems that address teachers' specific needs and enhance their professional well-being and effectiveness. By providing targeted support in areas such as professional development, technology, well-being, collaboration, and planning time, education systems can empower teachers and create an environment conducive to effective teaching and student success.

3.6 Results and Discussion

The results of the study on the resilience levels of university teachers during the COVID-19 pandemic provide valuable insights into the experiences and coping strategies of the participants. The findings reveal several interesting patterns and trends, shedding light on how different factors may influence teachers' resilience in the face of unprecedented challenges.

Quantitative Data

Quantitative data plays a crucial role in research and analysis, and the quantitative data collected through the questionnaire, which was divided into three sections, provided some valuable insights.

Demographic Characteristics. The study participants were evenly distributed in terms of gender, with equal representation of males and females. This

indicates that the study sample was diverse and balanced in terms of gender.

Regarding age, the majority of participants fell within the 31-40 age range,
suggesting that this age group was most affected by the pandemic in the context of
university teaching. The participants also exhibited varied levels of teaching
experience, with a significant proportion having between 5 and 10 years of
experience. This suggests that teachers with a moderate level of experience were
well-represented in the study.

CD-RISC Questionnaire. The assessment of resilience levels using the CD-RISC questionnaire revealed that the participants, on average, exhibited a moderate level of resilience. This suggests that university teachers, as a group, possessed a certain degree of adaptability and ability to cope with the challenges posed by the COVID-19 pandemic. Notably, participants between the ages of 41 and 50 and those with more than 15 years of teaching experience demonstrated higher levels of resilience. This finding may indicate that individuals with more life and professional experience have developed stronger resilience skills over time, allowing them to navigate the difficulties associated with the pandemic more effectively.

COVID-19 Specific Questions. The participants' responses to questions specifically related to the impact of the COVID-19 pandemic revealed a relatively high level of agreement or positive response. This suggests that the teachers recognized and acknowledged the challenges brought about by the pandemic and the changes it necessitated in their professional lives. Participants under the age of 30 and those with more teaching experience tended to exhibit higher agreement scores, implying that younger teachers and those with greater experience may have been more aware of the effects of the pandemic on their work and were more open to adapting to new circumstances.

Correlations. The correlation analysis provided insights into the relationships between different variables. A weak positive correlation was found between resilience levels and gender, indicating that resilience may be slightly higher in either males or females. Similarly, a weak positive correlation was observed between resilience and teaching experience, suggesting that as teaching experience increases, so does resilience. Additionally, a significant positive correlation was found between participants' reactions during the pandemic and their teaching experience. This implies that teachers with more experience may have been more affected by the pandemic and its consequences.

Overall, these results highlight the resilience demonstrated by university teachers during the COVID-19 pandemic. Despite the challenges they faced, teachers showed a moderate level of resilience, with certain demographic factors such as age and teaching experience influencing their levels of resilience. The findings emphasize the importance of recognizing and supporting the well-being and coping strategies of teachers, particularly those in the early stages of their careers or with less experience, as they may require additional support to navigate difficult circumstances effectively. By understanding the factors that contribute to resilience, educational institutions can provide targeted interventions and resources to enhance the well-being and professional growth of their teaching staff, ultimately benefiting both educators and students.

Qualitative Data

Thematic analysis was conducted to explore the challenges faced by teachers, coping strategies employed, efforts to maintain well-being, and the desired types of support. The analysis revealed the following key themes:

- Challenges: Teachers faced various challenges during the pandemic, including
 adapting to changes in teaching, handling the challenges of remote teaching, and
 maintaining student engagement and connection.
- Coping Strategies: Teachers employed diverse coping strategies such as embracing technology, seeking professional support, engaging in self-care practices, and fostering collaboration among colleagues.
- Well-being: Teachers made efforts to prioritise their well-being by maintaining a
 positive attitude, balancing work-life demands, and seeking emotional support from
 colleagues and loved ones.
- Desired Support: Teachers expressed the need for support in terms of technological resources, training, emotional support from colleagues and supervisors, and recognition of their efforts during the challenging times.

The findings of the study generally confirm the hypotheses proposed. Hypothesis 1 posited that teachers demonstrated resilience by adapting their teaching practices to the online environment and finding new ways to connect with their students. The study's qualitative analysis revealed that teachers indeed employed strategies such as embracing technology and seeking professional support to cope with the challenges of remote teaching and maintain student engagement. Similarly, Hypothesis 2 suggested that teachers would use coping strategies like self-care practices, seeking social support, and leveraging technology, which aligns with the qualitative findings of the study. Lastly, Hypothesis 3 proposed that support for teachers' resilience during the pandemic could be provided through mental health resources, professional development opportunities, and collaboration with peers. The study's findings underscored the need for technological resources, training, emotional support from colleagues and supervisors, and recognition of teachers' efforts, thus confirming Hypothesis 3. Overall, the findings provide empirical support for the hypotheses and demonstrate the

ways in which teachers demonstrated resilience and coped with the challenges posed by the COVID-19 pandemic.

3.7 Recommendations

Based on the findings of the study, the following recommendations can be made:

3.7.1 Provision of Comprehensive Training and Professional Development Opportunities

To enhance teachers' resilience and effectiveness in online teaching, it is crucial to provide them with comprehensive training and professional development opportunities. This should include technical training on the use of online platforms and tools, pedagogical training on effective online teaching strategies, and training on self-care and stress management. By equipping teachers with the necessary skills and knowledge, they will be better prepared to navigate the challenges of online teaching and maintain their well-being.

3.7.2 Establishment of Support Systems and Networks

Creating support systems and networks for teachers is essential for their resilience during challenging times. Schools and educational institutions should establish formal mechanisms for teachers to seek emotional support, share best practices, and collaborate with peers. This can be facilitated through regular meetings, support groups, online forums, or mentoring programs. By fostering a sense of community and providing opportunities for collaboration, teachers can receive guidance, encouragement, and practical advice from their colleagues, which can significantly contribute to their resilience and overall well-being.

3.7.3 Prioritisation of Mental Health Resources

Recognising the importance of mental health support, educational institutions should prioritise providing access to mental health resources for teachers. This can include counselling services, workshops on stress management and self-care, and resources for promoting work-life balance. Proactive measures should be taken to address the

psychological impact of the pandemic on teachers and provide them with the necessary support to cope with stress, anxiety, and burnout.

3.7.4 Recognition and Appreciation of Teachers' Efforts

It is crucial to acknowledge and appreciate the efforts of teachers during challenging times. School administrators and policymakers should actively recognize and publicly acknowledge the resilience and dedication demonstrated by teachers in adapting to online teaching and supporting their students. This can be done through public recognition events, appreciation letters, or incentives that highlight the exceptional contributions made by teachers. By recognizing and valuing their work, teachers are more likely to feel motivated, supported, and resilient in their roles.

3.7.5 Foster of a Culture of Innovation and Flexibility

Educational institutions should foster a culture of innovation and flexibility, encouraging teachers to explore creative approaches to online teaching. Providing teachers with the autonomy to experiment with new strategies, technologies, and teaching methods can boost their confidence and resilience. Administrators should create an environment that values and supports innovative ideas, while also offering resources and feedback to help teachers implement these ideas effectively.

By implementing these recommendations, educational institutions can empower teachers, support their resilience, and enhance their overall well-being. Ultimately, this will contribute to the delivery of high-quality education, even during challenging times such as the COVID-19 pandemic.

3.8 Conclusion

This chapter provided a comprehensive examination of the resilience of teachers during the COVID-19 pandemic and their coping strategies in the realm of online teaching.

The findings of this study shed light on the challenges faced by teachers and offer valuable insights into their approaches to navigate these unprecedented circumstances.

The findings demonstrated the remarkable adaptability and dedication displayed by teachers as they embraced online teaching. Despite the numerous challenges encountered, teachers employed a range of coping strategies to maintain their effectiveness and well-being. These strategies included leveraging technology for interactive and engaging teaching, prioritizing communication and collaboration with students and parents, and seeking support from colleagues and professional networks.

One noteworthy finding was the significance of comprehensive training and professional development opportunities for teachers. Technical training on online platforms and tools equips teachers with the necessary skills to navigate the digital landscape effectively. Pedagogical training on effective online teaching strategies helps engage students and facilitate meaningful learning experiences. Furthermore, training on self-care and stress management is vital in supporting teachers' well-being while managing the demands of online teaching.

The study highlighted the importance of establishing support systems and networks for teachers. By creating formal mechanisms for emotional support, sharing best practices, and promoting collaboration, teachers can access guidance, encouragement, and practical advice from their colleagues. This sense of community significantly contributed to their resilience and overall well-being.

Additionally, the findings underscore the need for prioritizing mental health resources for teachers. Providing access to counselling services, workshops on stress management and self-care, and resources for promoting work-life balance is crucial in addressing the psychological impact of the pandemic on teachers. These measures are vital in helping teachers cope with stress, anxiety, and burnout effectively.

Recognizing and appreciating teachers' efforts is another key finding. Actively acknowledging and valuing the resilience and dedication demonstrated by teachers in adapting to online teaching and supporting their students boosts their motivation, support, and resilience. Public recognition events, appreciation letters, or incentives highlighting teachers' exceptional contributions can be effective means of recognition.

Furthermore, the study emphasizes the importance of fostering a culture of innovation and flexibility within educational institutions. Encouraging teachers to explore creative approaches to online teaching, providing them with autonomy and resources to experiment with new strategies, technologies, and teaching methods enhances their confidence and resilience. Administrators should create an environment that values and supports innovative ideas while offering feedback and resources to facilitate effective implementation.

While this study has provided valuable insights, it is essential to acknowledge its limitations. The findings are based on a specific sample of teachers and may not be fully representative of all teachers. The study was conducted in a specific context and cultural setting, which may limit the generalizability of the results. Additionally, the reliance on self-reported data introduces the possibility of bias or inaccurate reporting.

Furthermore, the lack of longitudinal data restricts our understanding of how teachers' resilience and coping strategies evolve over time. Future research should consider longitudinal studies to capture the long-term effects and changes in teachers' resilience.

Additionally, future studies could explore additional factors such as the impact of organizational support, the role of teacher-student relationships, or the influence of personal characteristics on teachers' resilience.

In conclusion, the findings of this study underscore the resilience and dedication of teachers during the COVID-19 pandemic. By implementing the recommendations and considering the study's limitations, educational institutions can empower teachers, support

their resilience, and enhance their overall well-being. These efforts will contribute to the delivery of high-quality education even during challenging times, ensuring that students receive the education they deserve.

General Conclusion

This comprehensive dissertation delves into the resilience of teachers amidst the challenging circumstances brought about by the COVID-19 pandemic, specifically focusing on their coping strategies in the realm of online teaching. The primary objective of this study is to shed light on the various obstacles faced by teachers during this unprecedented time and provide valuable insights into their adaptive approaches to navigate the complexities of virtual education.

Through an in-depth analysis of data collected from a specific sample of teachers, the researchers have identified several key findings with significant implications for educational institutions and policymakers. One of the central discoveries of the study is the remarkable adaptability and dedication displayed by teachers as they embraced online teaching during the pandemic. Despite facing numerous challenges, such as technical difficulties, limited access to resources, and the need to quickly reconfigure their teaching methods, teachers demonstrated resilience and determination to continue providing quality education to their students.

To maintain their effectiveness and well-being during this demanding period, teachers employed a diverse range of coping strategies. These strategies included leveraging technology to create interactive and engaging virtual classrooms, prioritizing open communication and collaboration with students and parents to ensure a supportive learning environment, and seeking support from colleagues and professional networks to share experiences and exchange best practices.

One of the most noteworthy findings of the study highlights the importance of comprehensive training and professional development opportunities for teachers. Technical training on online platforms and tools equips teachers with the necessary skills to navigate the digital landscape effectively, ensuring a smooth transition to virtual teaching. Pedagogical training on effective online teaching strategies empowers teachers to engage students and facilitate me

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Appendices

Appendix A: Questionnaire

Dear participant,

Thank you for your willingness to participate in this study that aims to investigate how university teachers are demonstrating resilience during the COVID-19 pandemic, the strategies they use to cope with the challenges of online teaching and social distancing, and how support can be provided to enhance their resilience during this time. The results will be used to identify ways to support teachers in adapting to the pandemic and improving their resilience, which can ultimately benefit their students and the education system as a whole.

Please answer the following questions to the best of your ability. Your responses will be kept confidential and anonymous, and will be used for research purposes only.

Optional Section: Contact Information

If you would like to receive the findings of this study, please provide your email address below. Your email address will not be associated with your responses and will be kept confidential.

Section 1: Demographic Information

- 1. What is your age?
 - Under 30
 - b. 31-40
 - c. 41-50
 - d. 51-60
 - e. Over 60
- 2. What is your gender?
 - a. Male
 - b. Female
- 3. How long have you been teaching at the university level?
 - a. Less than 5 years
 - b. 5-10 years
 - c. 10-15 years
 - d. More than 15 years
- 4. What is your highest level of education?
 - a. Bachelor's degree
 - b. Master's degree
 - c. Doctorate degree
 - d. Post-doctoral degree

Section 2: CD-RISC Questionnaire

Please indicate the degree to which you agree or disagree with the following statements by circling the appropriate option on the scale from 0 (not at all true) to 4 (true nearly all the time).

		Not at all true	Rarely true	Sometimes true	Often true	T nea the
1.	I am able to adapt when changes occur.	0	1	2	3	
2.	I can deal with whatever comes my way.	0	1	2	3	
3.	I try to see the humorous side of things when I am faced with problems.	0	1	2	3	
4.	Having to cope with stress can make me stronger.	0	1	2	3	
5.	I tend to bounce back after illness, injury or other hardships.	0	1	2	3	
6.	I believe I can achieve my goals, even if there are obstacles.	0	1	2	3	
7.	Under pressure, I stay focused and think clearly.	0	1	2	3	
8.	I am not easily discouraged by failure.	0	1	2	3	
9.	I think of myself as a strong person when dealing with life's challenges and difficulties.	0	1	2	3	
10.	\boldsymbol{I} am able to handle unpleasant or painful feelings like sadness, fear, and anger.	0	1	2	3	

Section 3: COVID-19 Specific Questions

Please indicate how much you agree or disagree with the following statements by circling the appropriate option on the scale from 1 (strongly disagree) to 5 (strongly agree).

	Strongly disagree	Disagree	Neutral	Agree	Stro ag
 I was able to adapt to the changes in my teaching job due to COVID-19. 	1	2	3	4	;
I felt confident in my ability to handle the challenges of teaching during the COVID-19 pandemic.	1	2	3	4	:
 I had found ways to stay connected with my students during the COVID-19. 	1	2	3	4	;
 I felt supported by my colleagues during the COVID-19 pandemic. 	1	2	3	4	:
 I had been able to maintain a positive attitude towards my teaching job during the COVID-19 pandemic. 	1	2	3	4	:

If you have any questions or concerns about the study, you may contact the researchers, Ilyes Harrouche (harroucheelias@gmail.com) Khaldia Mostefai (mostefaikhaldia21@gmail.com) at the Department of English, Faculty of Letters and Languages, Ibn Khaldoun University of Tiaret.

Appendix B: Semi-structured Interview

Introduction:

Hello, and thank you for taking the time to speak with us today. Our names are **llyes Harrouche** and **Khaldia Mostefai**, and we are conducting research on the experiences of university teachers during the COVID-19 pandemic. We would like to inform you that this interview will be recorded for research purposes.

Quest	tions:
1.	Can you tell us about your experiences teaching during the pandemic?
	How has it affected your teaching style and practices?
	The wind it directed year todorning ctyle and produces.
_	
2.	What challenges have you faced while teaching online?
	Can you tell us about a specific challenge you faced and how you overcame it?
3.	Have you received any support or resources to help you with the transition to online
	teaching?
	If so, how have they been helpful?
4.	How have you adapted your teaching strategies to engage students in an online
	setting?

	Can you give us an example of a successful strategy you've used?
	can you give us an example of a successful strategy you've used:
5.	How have you maintained your own well-being and mental health while teaching during the pandemic?
6.	Have you collaborated with other teachers to share best practices and strategies for effective online teaching?
	If so, can you tell us about a successful collaboration?
7.	How do you feel about the possibility of returning to in-person teaching?
	Are there any concerns or challenges you anticipate?
	The there any concerne or chancinger you anticipate.
	How has the transition healt to in person to aching hear for you?
Q	
8.	How has the transition back to in-person teaching been for you?
8.	How has the transition back to in-person teaching been for you?
8.	How has the transition back to in-person teaching been for you?
8.	How has the transition back to in-person teaching been for you?
8.	How has the transition back to in-person teaching been for you?
8.	
8.	What challenges have you faced, and how have you adapted your teaching practic
8.	

9.	In your opinion, what kind of support can be provided to university teachers to
	enhance their resilience during pandemics?
10.	. Is there anything else you would like to add about your experiences teaching during
	the pandemic?
	the participant
Closin	ia:
	you for sharing your experiences with us today. Your input is greatly appreciated and
will be	used to better understand the experiences of university teachers during the
	mic. Once again, we want to remind you that this interview has been recorded for
resear	<mark>ch purposes</mark> .
	
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Post-II	nterview Comments:

Appendix C: Copy of the interview Handed to Teachers for Review

Introduction:

Hello, and thank you for taking the time to speak with us today. Our names are **Ilyes Harrouche** and **Khaldia Mostefai**, and we are conducting research on the experiences of university teachers during the COVID-19 pandemic. We would like to inform you that this interview will be recorded for research purposes.

Questions:

- 1. Can you tell us about your experiences teaching during the pandemic? How has it affected your teaching style and practices?
- 2. What challenges have you faced while teaching online? Can you tell us about a specific challenge you faced and how you overcame it?
- 3. Have you received any support or resources to help you with the transition to online teaching? If so, how have they been helpful?
- 4. How have you adapted your teaching strategies to engage students in an online setting? Can you give us an example of a successful strategy you've used?
- 5. How have you maintained your own well-being and mental health while teaching during the pandemic?
- 6. Have you collaborated with other teachers to share best practices and strategies for effective online teaching? If so, can you tell us about a successful collaboration?
- 7. How do you feel about the possibility of returning to in-person teaching? Are there any concerns or challenges you anticipate?
- 8. How has the transition back to in-person teaching been for you? What challenges have you faced, and how have you adapted your teaching practices to ensure the safety of yourself and your students?
- 9. In your opinion, what kind of support can be provided to university teachers to enhance their resilience during pandemics?
- 10. Is there anything else you would like to add about your experiences teaching during the pandemic?

Closing:

Thank you for sharing your experiences with us today. Your input is greatly appreciated and will be used to better understand the experiences of university teachers during the pandemic. Once again, we want to remind you that this interview has been recorded for research purposes.

This is a copy of the interview script that will be handed to you for your review. If you have any objections or concerns regarding the content of this interview, please contact the researchers, llyes Harrouche (harroucheelias@gmail.com) Khaldia Mostefai (mostefaikhaldia21@gmail.com) at the Department of English, Faculty of Letters and Languages, Ibn Khaldoun University of Tiaret.

الملخص

ركزت هذه الدراسة على فحص مستويات التحمل والتحديات واستراتيجيات التكيف لدى معلمي اللغة الإنجليزية كلغة أجنبية في جامعة ابن خلدون خلال جائحة كوفيد-19. استخدمت الدراسة أساليب كمية ونوعية، متمثلة في استبيان ومقابلة شبه منظمة، لجمع البيانات. أظهرت النتائج أن المشاركين قد أظهروا مستويات معتدلة من التحمل، مع ملاحظة معدلات أعلى بين المعلمين ذوي الخبرة الأكثر. واجه المعلمون تحديات في التكيف مع التدريس عن بعد، لكنهم استخدموا استراتيجيات تكيف مثل التأقلم مع التكنولوجيا وطلب الدعم من الآخرين. كما عبروا عن حاجتهم إلى موارد إضافية وفرص تدريب والاعتراف بجهودهم. توصي الدراسة بتوفير الموارد التكنولوجية وفرص التدريب والدعم العاطفي من الزملاء والمشرفين للمعلمين مع الاعتراف بجهودهم خلال الأوقات الصعبة. تهدف هذه التوصيات إلى تعزيز التحمل لدى معلمي الجامعات في المستقبل. رغم كل هذا، من المهم أن نشير إلى القصور الموجودة في الدراسة، بما في ذلك التحيز المحتمل في عملية اختيار العينة، واستخدام القياسات التقريرية الذاتية، وحجم العينة الصغير، مما قد يقيد قابلية تعميم النتائج.

Summary

This study focused on examining the resilience levels, challenges, and coping strategies of EFL (English as a Foreign Language) teachers at Ibn Khaldoun University during the COVID-19 pandemic. The research utilized both quantitative and qualitative methods, including a questionnaire and semi-structured interview, to collect data. The findings indicated that the participants demonstrated moderate levels of resilience, with higher scores observed among teachers with more experience. The teachers faced challenges in adapting to remote teaching but employed coping strategies such as embracing technology and seeking support from others. They expressed the need for additional resources, training, and recognition of their efforts. The study recommends providing teachers with technological resources, training opportunities, and emotional support from colleagues and supervisors, while recognizing their efforts during challenging times. These recommendations aim to enhance the resilience of university teachers in future crises. However, it is important to note the limitations of the study, including potential biases in the sampling process, the use of self-report measures, and the small sample, which may limit generalizability.

Résumé

Cette étude visait à examiner les niveaux de résilience, les défis et les stratégies d'adaptation des enseignants d'EFL (anglais comme langue étrangère) de l'Université Ibn Khaldoun pendant la pandémie de COVID-19. La recherche a utilisé des méthodes quantitatives et qualitatives, notamment un questionnaire et un entretien semi-structuré, pour collecter des données. Les résultats ont montré que les participants présentaient des niveaux modérés de résilience, avec des scores plus élevés chez les enseignants ayant plus d'expérience. Les enseignants ont rencontré des difficultés pour s'adapter à l'enseignement à distance, mais ont utilisé des stratégies d'adaptation telles que l'adoption de la technologie et la recherche de soutien. Ils ont exprimé le besoin de ressources supplémentaires, de formations et de reconnaissance de leurs efforts. L'étude recommande de fournir aux enseignants des ressources technologiques, des opportunités de formation et un soutien émotionnel de la part de leurs collègues et de leurs supérieurs, tout en reconnaissant leurs efforts pendant les périodes difficiles. Ces recommandations visent à renforcer la résilience des enseignants universitaires face aux crises futures. Cependant, il est important de noter les limites de l'étude, notamment les biais potentiels dans le processus d'échantillonnage, l'utilisation de mesures déclaratives et la petite taille de l'échantillon, ce qui peut limiter leur généralisabilité.