

## Primary School Teachers Resilience Factors Mitigating against the Covid -19 Pandemic

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### Abstract

The COVID-19 pandemic has had significant consequences on a global scale resulting in disruptions affecting the health and psychological wellbeing of society. Primary school teachers were among the most affected groups by the new covid-19 measures and restrictions. The study sought to examine resilience factors against the Covid-19 pandemic among primary school teachers in the Mochudi Inspectoral area. The Broaden and build theoretical framework was adopted for the study. A correlational design in the quantitative approach was used on a population of 478 primary school teachers in the Mochudi Inspectoral area. The researchers drew a random sample of 188 primary school teachers from the entire population to complete the survey for the study. The study results were statistically significant, indicating positive correlations between social support and the Covid-19 pandemic ( $r = .364, n=184, p < .05 (0.001)$ ). Secondly, results between optimism and the Covid-19 pandemic were statistically significant and indicated a positive correlation [ $r = .399, n = 184, p < .05 (0.001)$ ] between the two variables among teachers in the Mochudi Inspectoral area. Lastly, there was a weak positive correlation between perseverance and the Covid-19 pandemic among primary school teachers in the Mochudi Inspectoral Area, and the results were not statistically significant [ $r = .077, n = 184, p = > .05 (0.296)$ ]. In light of the results, the researchers conclude that social support and optimism provided a buffer zone for primary school teachers' resilience against the negative effects of the COVID-19 pandemic. While perseverance did not seem to correlate strongly with the COVID-19 pandemic, the authors hypothesise that it is a crucial personal attribute among teachers to survive a pandemic. Though the study was limited to the quantitative approach, the results provide meaningful insight into the COVID-19 pandemic and its association with resilience among primary school teachers. The researchers call for similar future studies to replicate the current study.

**Keywords:** social support, social support, perseverance, Covid-19 pandemic, and Mochudi Inspectoral area.

## Introduction and Background

The Covid-19 upended schooling for 1.6 billion children and more than 63 million teachers. Teachers responded with resilience, innovation, and devotion to their students and careers (UNESCO, 2020). The trauma of the COVID-19 pandemic hit teachers hard and compounded school closures across the world. According to (UNESCO, 2020) more than 1.5 billion students in about 165 countries were affected by the lockdowns of schools and campuses. School closures affected approximately 85 % of the world's student population during the COVID -19 pandemic. The deadly disease ravaged the world and primarily hit Africa (Table 1), with more than 98% of teaching and learning disrupted (Aborode et al., 2020). In a short time, the COVID -19 pandemic had disrupted the landscape of learning in Sub Saharan Africa by limiting how students could access learning across many African countries (Aborode et al., 2020). In South Africa, schools were closed for months, and students relied on online learning (Motala et al., 2020). The closure of schools in response to the COVID -19 pandemic and the extended lockdown of the country meant that the Department of Basic Education developed a plan to recover the missed school days (Tria, 2020). The plan also included exploiting the digital learning platforms, extending hours for lessons, and lesson broadcasting through radio stations Ramadhan (2020).

**Table 1:** Impact of COVID- 19 on teaching and learning by world region.

Region	Not affected	Classroom teaching replaced	Teaching suspended, and solutions developed	Teaching cancelled
Europe	Almost 0%	85%	12%	3%
America	3%	72%	22%	3%
Asia & Pacific	1%	60%	36%	3%
Africa	3%	29%	43%	24%

When the pandemic hit Botswana, continuing teaching became challenging because the students were at home. The country was not ready for online learning because many teachers had not received substantive formal technology training to support teaching and learning thoroughly (Ramadham, 2020). The education community in Botswana had to find ways to deal with the pandemic. The government repurposed the national broadcasting television and radio to reach out to students (Winthrop et al., 2020). In addition, teachers created social media groups to give students homework that they did under the supervision of their parents. It is important to note that not all students had access to the Internet because of their financial status; consequently, they were not at the same pace as other students (Ntshwarang, 2021). In July 2020, the authorities introduced the double-shift system with small class sizes when the schools reopened. As if it was a solution, teachers were to significantly alter the timetable to suit the suggested time of students in school (Winthrop et al., 2020). Teachers continued to work with students in the new arrangement in which contracting the highly infectious and dreadful Coronavirus was significantly not far fetched.

### The research problem and purpose

A little over a year, the COVID -19 pandemic had presented an urgent need for an unplanned World change in schooling, which forced the education system to close schools. Teachers were at the forefront of the schools and were significantly exposed to the threats of the pandemic (Oswald et al., 2020). In the Mochudi Inspectoral area, teachers were equally affected by the Covid -19 pandemic. According to the Kgatleng Regional office, twenty (20) primary schools and 478 primary teachers complimented the Mochudi Inspectoral area. Schools recorded different numbers of quarantined, self-isolations and hospitalised teachers ever since the Covid-19 was declared a pandemic (James 2021). Even though there were no confirmed deaths cases of teachers due to the COVID -19 in the area, teachers had been psychologically affected considering the high numbers of student infections in schools in the area. Teachers interacted with students as part of their duties daily but feared infecting or getting infected by students. The Kgatleng Region Covid-19 Case Management records for week endings 19.03.2021 and 23.04.2021 among 478 teachers in the Mochudi Inspectoral area were as reflected in Table 1.

**Table 2:** Weekly case records for Covid-19

Number of schools	Week endings	Teachers quarantined	Teachers self-isolated	Teachers hospitalised
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18	19.03.2021	58	18	3
18	23.04.2021	8	6	0

The realities of the COVID -19 threats were dreadful and psychologically undermining. The teachers dealt with the deadly and highly contagious novel coronavirus weekly (Day and Gu, 2013). Babb and Trudel (2020:6) noted that teachers' behaviour and attitudes were imperative during the pandemic. Teachers had a significant role in the education system's success despite the threat. Teachers were resilient and faced the COVID -19 pandemic to ensure community service provision. Botswana lost twenty-four (24) teachers at the pandemic's peak (Basimanebotlhe, 2021). Between June and September 2021, the disease exponentially spread and killed people while the country struggled to procure the vaccines. Teachers were highly exposed to the disease despite the Covid-19 Protocols. They remained at the forefront of the education system, and the situation was scary. However, various resilience factors may influence teachers to continue to work in the face of the monster disease. This study aimed to assess primary school teachers' factors mitigating against the COVID -19 pandemic in the Mochudi inspectorate area. The study uses the broaden and build theory that describes the form and function of positive emotions to demystify pessimism associated with the COVID-19 pandemic. The theory hypothesises that experiences of positive emotions can increase a person's awareness and trigger thoughts and actions, build skills and own resources over a certain period (Fredrickson, 2001). The theory explores the psychology behind negative emotions and psychological instability associated with working in the COVID -19 prone primary school context that may affect teachers (Arlin et al., 2020).

### Research questions and null hypotheses

The study was guided by the following research questions and null hypotheses.

1. Is there a relationship between primary school teachers' social support and the COVID -19 pandemic in the Mochudi Inspectoral area?
2. Is there a relationship between primary school teachers' optimism and the COVID -19 pandemic in the Mochudi Inspectoral area?
3. Is there a relationship between primary school teachers' perseverance and the COVID -19 pandemic in the Mochudi Inspectoral area?

Hypotheses statements.

1. H<sub>0</sub>1. There is no statistically significant correlation between primary school teachers' social support and the COVID -19 pandemic in the Mochudi Inspectoral area?
2. H<sub>0</sub>2. There is no statistically significant correlation between optimism and The COVID -19 pandemic threat among primary school teachers in the Mochudi Inspectoral area
3. H<sub>0</sub>3. There is no statistically significant correlation between perseverance and the COVID -19 pandemic among teachers in the Mochudi Inspectoral area.

### Review of related literature

#### *Coronavirus (COVID -19 Pandemic)*

Coronavirus (Covid-19) Pandemic is a fatal disease caused by Severe Acute Respiratory Coronavirus 2 (SRS-COV-2) and was first identified during an outbreak in Wuhan City in China in 2019 (Byrareddy and Rothan, 2020). According to Kumar and Malviya (2020), the virus causes respiratory infections such as pneumonia, cold, sneezing and coughing. It is transmitted through airborne droplets, which enter the human cell through a membrane. Coronavirus is an infectious disease that belongs to the Orthocoronavirinae subfamily caused by 2019-nCoV infections. The virus is characterised by pneumonia with fever, dry cough, and fatigue symptoms. (Chann & Chen, 2020). Patients with SARS-CoV-2 can show mild to severe fever, cough and shortness of breath and later develop acute respiratory discomfort that may worsen and cause organ failure (Bianchi & Ciccozzi, 2020).

The World Health Organization (WHO) considers the Coronavirus pandemic the most critical global tragedy of the century and the most significant challenge humankind has faced since the 2<sup>nd</sup> World War. There was no report of clinically approved drugs or vaccines that could effectively treat Covid-19 (Maity & Chakraborty, 2020). Since

there was no standard treatment for the virus, measures had to be taken to avoid the spread and infections. People were prohibited from eating or touching wild animals in China as a preventative measure. Those suspected of infections were tested, and their body temperatures were monitored for fourteen days. The dead were burned or buried deep (Chan & Chen, 2020).

Africa was also affected by the rapid spread of the virus; preventive measures were used to curb the spread of the virus. Most countries in the continent face challenges of reducing transmission, treating and isolating those who have had contact with patients and restricting large gatherings of people (Lone & Ahmad, 2020). The South African State authorised a national lockdown on March 27 2020, closing childcare facilities and primary and higher education institutions. Further, public leisure activities, reduction in on-site workforce and physical distancing measures were implemented (Aeffner & Coetzee, 2021). Using an alcohol-based sanitiser regularly or washing hands with soapy water was also effective in guarding against infections (Lone & Ahmad, 2020).

Botswana had shown preparedness for the COVID -19 pandemic. Within the first week of January 2020, free Covid-19 testing was done at the border posts and airports, and free sanitisers were provided in schools. The strategy for Botswana was to align with the World Health Organization (WHO) guidelines to avoid the spread of Covid-19. A new Act on Covid-19 was produced and given freely to people. The Act stated that a gathering of more than ten people in one place either for religious or social functions was prohibited. Those who did otherwise were arrested (Uchendu, 2020). The Coronavirus has claimed the lives of teachers and learners across the country since the pandemic started in 2019. Teachers as frontline workers were more exposed to contracting the COVID -19 pandemic than other frontline workers because of daily interaction with large numbers of learners. As of April 17, 2021, 34 teachers had perished from the Coronavirus (Basimanebotlhe, 2021). Throughout those challenges, primary teachers were more determined to overcome and carry on with their duties.

### ***Resilience Factors***

Resilience is the capacity to successfully adapt despite challenging or threatening circumstances (Anser et al., 2020). An individual strength can withstand challenges despite difficult situations and overcome them. Resilience can be a series of protective factors that a person can draw upon in challenging times (Sabouripour et al., 2015). Resilience has many sub-constructs, and therefore, for the study, these have been delimited to optimism, social support, and perseverance.

### ***Optimism***

Ruidiantoro et al., (2020) investigated the level of optimism of students in learning Mathematics during the COVID -19 pandemic. The comparative results between males and females revealed that males scored 80.1 %, indicating that they were very optimistic, and females had a lower score of 78.8% of optimism. Students' levels of optimism in learning Mathematics were based on intrinsic and extrinsic factors because of an individual's thought pattern. Ruidiantoro et al., (2020) concluded that optimistic individuals must be able to change their mindset through plans and actions and learn from the experience of association with other people who succeed. Arslan & Genc (2021) examined the mediating role of optimism and hope on the relationship between Coronavirus stress and subjective wellbeing among young adults in Turkey in a sample of 331 (20.86 males and 64% female) college students. The results showed that Coronavirus stress negatively impacted college students. Optimism mitigated the negative impact of stress on wellbeing during the pandemic. The study's results revealed that being optimistic and hopeful were potential resources to explain how coronavirus stress is related to wellbeing.

Ozdemir & Kerse (2020) surveyed 169 healthcare workers working in Turkey to determine the levels of optimism, stress and emotional exhaustion related to Covid-19 and the effects of optimism directly and indirectly on emotional exhaustion caused by the COVID-19 pandemic. The results showed that health care workers were quite optimistic even though they had experienced stress and emotional fatigue at some stage in their line of duty during the pandemic. The level of optimism inherent to them had contributed to reducing emotional exhaustion. Rehman et al., (2017) postulate that optimism helps individuals improve cognitive expectations of a better future when faced with hostile circumstances. Optimism acts as a protective factor as it increases the ability of an individual to recover from frustrations. Taylor (2012), on the theme, An Individuals' Ability to view the Adverse Situation Positively or Negatively, revealed that, from teaching with old textbooks to working in dilapidated facilities, the informants' optimism bias results in successful teaching careers and various other positive experiences within the community in which they lived. Aralan & Yildirim (2020) examined whether meaning in life and optimism-pessimism mediated the relationship between coronavirus stress and depressive symptoms and whether the mediating effect of meaning in life

on depressive symptoms was moderated by optimism. The results showed that meaning in life and optimism-pessimism mediated the relationship between coronavirus stress and depressive symptoms. Optimism additionally mediated the relationship between meaning in life and depressive symptoms. Furthermore, optimism moderated the mediating effect of meaning in life in the relationship.

### ***Social support***

Grey et al., (2020) examined the role of perceived social support in a range of psychological health outcomes amongst individuals undergoing social isolation and social distancing during COVID -19 in a sample of 2,020 individuals. The results revealed that individuals in self-isolation had significantly higher rates of depression, irritability, and loneliness than those who were not. Levels of depression symptoms were 63% lower in individuals who reported higher levels of social support. On the other hand, those with high social support had a 52% lower risk of poor sleep than others. The participants with the social backing were coping with the stress related to the COVID -19 pandemic. It was evident that during the COVID -19 pandemic, social support was essential to overcome its effects.

Alnazly et al., (2021), in a Jordanian healthcare workers study, assessed the respective levels of fear, anxiety, stress, and social support experienced by the healthcare workers. Social support indicated a moderate to high perceived support for all dimensions among the demographic characteristics. Regarding social support, participants primarily relied on support from families, followed by support from friends. Ozmete & Pak (2020) aimed to define the relationship between anxiety levels and perceived social support during the COVID -19 pandemic as a global crisis and stressor. The data were collected using an online survey of 630 respondents. The results indicated that the anxiety levels of individuals were high during the pandemic. Anxiety levels decreased significantly when perceived social support increased. The researchers concluded that perceived social support should focus on social work practices in trying periods.

Wang et al., (2020) sought to find out how College students in China used social support and resilience as coping mediators between COVID -19 related stressful experiences. A sample of 7800 College students took part in an online survey done during the initial stages of the Covid-19 outbreak in China from January 31, 2020, to February 11, 2020. The results indicated that male and female college students needed social support to manage effectively. Tang and Xing (2021) sought to determine how the family's support and perseverance in creative efforts influenced the originality of children drawing during the COVID -19 pandemic. The data were analysed based on 134 young Chinese children. The study results revealed that the influence of family climate on originality strengthened if children's exposure to the COVID -19 was high. The COVID -19 pandemic was a massive global crisis that led children to be more closely attached to their families. During the period, support from parents helped children reduce the intense emotions associated with the events and encouraged them to put more focus on learning.

### ***Perseverance***

Badin Lou et al., (2021) studied the psychological flexibility and grit as a potential resilient factor in the COVID -19 pandemic on 1102 respondents with a mean age of 36.9 years, of which 75% of the sample represented women. The researchers used depression, anxiety, insomnia, psychological flexibility, and grit measures. The study results revealed that psychological flexibility and, to a lesser extent, grit were important psychological factors against mental health problems in the COVID -19 pandemic. As the researchers predicted, the study results indicated that grit and psychological flexibility were negatively associated with signs of depression, anxiety, and insomnia. de- Zepetnek et al., (2021) examined the relationship between grit and lifestyle behaviour during the early stages of the COVID -19 pandemic and initial lockdown in the United States on 888 adults representing 74.2% females. The researchers hypothesised that those with grit would engage in healthier lifestyle behaviours. The study revealed that respondents with higher grit levels were more physically active. The results suggest that grit may help individuals lead a healthier lifestyle during stressful or adverse events like the COVID -19 pandemic. Bono et al., (2020) investigated the stress and subjective wellbeing of first-year students and the pandemic's impact on their psychological, academic, and financial Well-being.

The study further interrogated first-year students' resilience to the pandemic and the role of their socioeconomic status. It also examined whether grit and gratitude were discussed before the pandemic and found that grit predicted significantly less impact on academic functioning at the end of the semester. Overall, the results suggested that grit and gratitude can be promoted to protect college students' subjective wellbeing to better cope with the adversity of the pandemic. Bramantoro et al., (2020) assessed the effectiveness of grit on career maturity using a grit scale and career maturity. The researchers focused on 90 Christian College students in East Java through the

random sampling technique. The results revealed problems in managing strong emotions and responding effectively to stressful situations, affecting their careers. The researchers concluded that grit influenced students' career maturity based on the study results. Consequently, they recommended the need to cultivate grit to combat the COVID -19 pandemic effect that caused students' career maturity to decrease during the COVID -19 pandemic.

### Research Design and Methodology

The study was a correlational design that surveyed the perception of a representative sample of all primary school teachers in the Mochudi Inspectoral Area. The research study was delimited to Primary teachers in the Mochudi Inspectoral area because of their proximity and convenience to the researchers. The results inferred the general perceptions of primary school teachers in the area. The researchers assume that the perceptions would not be too divergent from those of other teachers in different inspectoral regions of the country. According to Kgatleng Regional Office, there were 20 schools in the Mochudi Inspectoral area with about 478 teachers. The teachers were distributed into different group statuses: permanent teachers, temporary teachers, and teacher aids (Table 3).

**Table 3:** Summary of teachers in the Mochudi Inspectoral area

Group status	Number of teachers
1. Permanent teachers	392
2. Temporary teachers	59
3. Teacher aids	27
Total	478

The researchers randomly drew a sample of 186 respondents who were able to complete were able to complete the survey from the population of 478 primary school teachers. However, two respondents did not fully meet the instrument as some data were missing. The missing data resulted in a sample of 184 (38.4%) of the 478 Primary teachers in the Mochudi Inspectoral area. A consent form was issued, which participants signed and gave back to the researchers as proof of consent. The proposal to undertake the study was presented to a panel for defence. The proposal was then sent for ethical approval under the BOU ethics (Appendix 2) and granted permission under certificate Ref 2019102361283.

The data were collected by one of the researchers using the survey instrument. The sampled population was given the questionnaire and requested to complete it within four days. Information was provided on how the questionnaire was collected once completed. The researcher also explained the instructions to the respondents in both sections. The researcher carried out the data collection. The researchers assigned each questionnaire a code for data entry and cleaning. The data were then categorised and coded into the SPSS code book and cleaned for errors in preparation for analysis.

The questionnaire consisted of two sections; (Appendix 1), A and B. Section A represented the respondents' demographic information, which included: gender, age, marital status, level of education, work experience and post of responsibility. Section B had four subscales that constituted four factors. The perseverance sub-scale had ten items measured on a four-point Likert scale ranging from strongly disagree = (1) to (4) strongly agree. The perseverance scale was adapted from the Development and Validation of the Short Grit Scale (Duckworth and Quinn, 2009). The social support subscale consisted of 8 items on a four-point Likert scale ranging from strongly disagree = (1) to (4) strongly agree. The optimism sub-scale was made up of 7 items measured on a four-point Likert scale ranging from strongly disagree = (1) to (4) strongly agree adapted from (Aragon, 2020) and including individual wellbeing of rumination, optimism, resilience, and ability to receive support. The COVID -19 pandemic scale was made up of 17 items measured on a four-point Likert scale ranging from strongly disagree = (1) to (4) strongly agree and was adapted from the COVID -19 Pandemic Wellbeing Study (Ranieri, 2021): Perceived Coercion and Psychological Wellbeing.

The researchers used Cronbach's alpha reliability coefficient to determine the **instrument reliability index** for internal consistency. Field (2018) and Gliem & Gliem (2003) specify that an index should not be less than 0.7 if the questionnaire is considered reliable. The instrument's internal consistency is reliable if the Cronbach coefficient is 0.7 or more. The perseverance construct consisted of 10 items ( $n = 10$ ), and five items were removed to reach a reliable

alpha index. The alpha coefficient for the remaining five items had an alpha index of .641, within the acceptable threshold. The social support sub-construct constituted ten items ( $n = 10$ ). The researchers removed the two items, and the eight remaining items had an index of .686, which was acceptable. The researchers conducted the reliability analysis for optimism for ten items ( $n = 10$ ), resulting in the removal of 3 items. The alpha coefficient for seven items was .735, suggesting good internal consistency on the threshold scale. The reliability test for the COVID -19 pandemic was analysed for 20 ( $n = 20$ ) items, and three items were removed from the sub-scale. The Alpha coefficient for 17 items was .813, a perfect internal consistency threshold.

#### **Data Analysis, Interpretation and Discussion of results**

This study aimed to assess the factors mitigating the COVID -19 pandemic among Primary school teachers in the Mochudi inspectorate. The study was guided through three research questions. The researchers analysed the data through the Statistical Package for the Social Sciences Version 26 (SPSS - V.26). Descriptive statistics present the characteristics of respondents (Tables 4 – 8)

**Table 4:** Gender of respondents

		Frequency	Percent
Valid	Male	67	36.0
	Female	116	62.4
	27.00	1	.5
	Total	184	98.9
Missing	System	2	1.1
Total		186	100.0

Table 4 shows that 184 teachers participated in the study. The females recorded 116 (62.4%) than males, who recorded slightly lower participants with 67 (36%). The study shows that more females participated, whilst 2 (1.1%) respondents were missing.

**Table 5:** Marital status of the respondent

		Frequency	Percent
Valid	Single	93	50.0
	Married	71	38.2
	Widowed	14	7.5
	Divorced	6	3.2
	Total	184	98.9
Missing	System	2	1.1
Total		186	100.0

The respondents' marital status (Table 5) varied; the singles had a high number of 93, making up 50% of the population study. Seventy-one married making 35.2%, 14 widowed making 7.5% and the least divorced, 6 making 3.2%.

**Table 6:** Descriptive Statistics for respondents

	N	Range	Minimum	Maximum	Mean	Std. Deviation
AGE (in years)	184	40.00	22.00	62.00	40.4130	9.99798
Work Experience	184	38.00	1.00	39.00	14.2663	10.56025
Valid N (listwise)	184					

The population comprised of participants from different age groups ( $M = 40.41$ ;  $SD = 9.99$ ) and work experiences ( $M = 14.26$ ;  $SD = 10.56$ ) (Table 6). The minimum age was 22 years to a maximum of 62 years old.

**Table 7:** Respondents' level of education

		Frequency	Percent
Valid	1. Certificate in Education	10	5.4
	2. Diploma in Education	96	51.6
	3. Degree	70	37.6
	4. Master Degree	8	4.3
	Total	184	98.9
Missing	System	2	1.1
Total		186	100.0

The level of education indicates that 5.4% of participants hold a certificate in education, 52.2% have a Diploma in Education, 37.6% Bachelor's Degree and only 4.3% have a Master's Degree.

**Table 8:** Post of responsibilities

		Frequency	Percent
Valid	1. Temporary Teacher	45	24.2
	2. Senior Teacher	68	36.6
	3. Senior Teacher with portfolio	40	21.5
	4. Head of Department	23	12.4
	5. Deputy School Head	8	4.3
	Total	184	98.9
Missing	System	2	1.1
Total		186	100.0

Of 186 participants according to the post of responsibilities, 24.2% were temporary teachers, 21.5 % were senior teachers with portfolios and 4.3% as deputy school heads.

### **Results of the Null Hypotheses Tests**

**Research Question 1:** *Is there a relationship between primary school teachers' social support and the COVID -19 pandemic in the Mochudi Inspectoral area?*

H<sub>01</sub>. There is no statistically significant correlation between primary school teachers' social support and the COVID -19 pandemic in the Mochudi Inspectoral area. The Person-product moment Correlational coefficient was used to determine the relationship between primary school teachers' social support and the COVID -19 Pandemic in the Mochudi Inspectoral area.

**Table 9:** Correlations between the COVID -19 and social support

Spearman's rho	Dependent and independent variables	TOT_COVDDV	TOT_SSP
RQ 1	TOT_COVDDV	Correlation Coefficient	1.000
		Sig. (2-tailed)	.
	TOT_SSP	Correlation Coefficient	.364**
		Sig. (2-tailed)	.000
	N	184	184

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The relationship between social support and the COVID -19 pandemic among primary school teachers was investigated using the Pearson product-moment correlation coefficient. RQ1 and H<sub>1</sub> (Table 9) indicate a positive correlation (.364) between social support and Covid-19 among primary school teachers in the Mochudi Inspectoral



area. There was a positive correlation between 2 variables observed [ $r = .364, n = 184, p = < .05 (0.001)$ ]. The results indicated that there was (null hypothesis ( $H_1$ )) not a statistically significant correlation between optimism and The COVID -19 pandemic among Primary school teachers in the Mochudi Inspectoral area] was not supported.

**Research Question 2:** *Is there a relationship between primary school teachers' optimism and the COVID -19 pandemic in the Mochudi Inspectoral area?*

$H_02$ . There is no statistically significant correlation between optimism and the COVID -19 pandemic among primary school teachers in the Mochudi Inspectoral area. The Pearson-product moment Correlational coefficient was used to determine the relationship between the level of optimism and the COVID -19 pandemic among teachers in the Mochudi Inspectoral area.

**Table 10:** Correlations between the COVID -19 and Optimism

Spearman's rho	Dependent and independent variables		TOT_COVDDV	TOT_OPT
		TOT_COVDDV	Correlation Coefficient	1.000
			Sig. (2-tailed)	.
		TOT_OPT	Correlation Coefficient	.399**
	RQ 2		Sig. (2-tailed)	.000
			N	184

\*\* . Correlation is significant at the 0.01 level (2-tailed).

The relationship between Optimism and The COVID -19 pandemic among primary school teachers in the Mochudi Inspectoral area was investigated using the Pearson product-moment correlation coefficient. In research question 2 and  $H_2$  Table 10, there was a positive correlation of .399 between Optimism and The COVID -19 pandemic among primary school teachers in the Mochudi Inspectoral area. The was positive correlation between 2 variables observed [ $r = .399, n = 184, p = < .05 (0.001)$ ]. The null hypothesis  $H_2$  [There was no statistically significant correlation between Optimism and The COVID -19 pandemic among primary school teachers in the Mochudi Inspectoral area] was not supported.

**Research Question 3:** *Is there a relationship between primary school teachers' perseverance and the COVID -19 pandemic in the Mochudi Inspectoral area?*

$H_03$ . There is no statistically significant correlation between perseverance and the COVID -19 pandemic among teachers in the Mochudi Inspectoral area. The Pearson-product moment-Correlational coefficient determines the relationship between the perseverance factor and resilience among teachers in the Mochudi Inspectoral area.

**Table 11:** Correlations between the COVID -19 and perseverance

Spearman's rho	Dependent and independent variables		TOT_COVDDV	TOT_PSVR
		TOT_COVDDV	Correlation Coefficient	1.000
			Sig. (2-tailed)	.
		TOT_PSVR	Correlation Coefficient	.077
	RQ 3		Sig. (2-tailed)	.296
			N	184

\*\* Correlation is significant at the 0.01 level (2-tailed).

R3 and H<sub>3</sub> Table 11 indicates a statistically significant difference between primary school teachers' level of perseverance and The COVID -19 pandemic in the Mochudi Inspectoral area. There was a correlation between perseverance and The COVID -19 pandemic in the Mochudi Inspectoral area. The investigation between variables observed [ $r = .077, n = 184, p = > .05 (0.296)$ ]. The null hypothesis H<sub>3</sub> [There was no statistically significant correlation between perseverance and The COVID -19 pandemic among primary school teachers in the Mochudi Inspectoral area] was supported.

## ***Discussion of results***

### ***Relationship between primary school teachers' social support and the COVID -19 pandemic***

There was a positive correlation between 2 variables observed (Table13). The researcher concluded that teachers benefit massively from Social Support to overcome the COVID -19 pandemic expectations against the backdrop of the results. These results agree with the proposed theoretical framework of the 'The Broad and build theory,' which suggests that positive emotions can broaden to build enduring personal resources such as social support skills and resilience (Fredrickson, 2004). In this framework, social support is primarily because of having a positive mindset to accommodate others and bounce back during challenging circumstances. A positive mindset enables teachers to interact well with others. It provides emotional comfort and reassurance hence assisting and increasing their faith in coping with the current situation of the COVID -19 pandemic. Arlin et al., 2020).

The results also agree with the literature reviewed, which shows that social support helps people cope with the pandemic-related stress, which is essential to overcoming its effects. (Grey et al., 2020). These results are significant because social support relieves acute stress symptoms during the COVID -19 pandemic. The social support mechanisms satisfy an individual's psychological needs and improve their sense of control (Alnazly et al.,2021). Social support among primary school teachers is a tool that can be used to deal with painful and stressful situations because it has sound effects on the levels of stress (Ozmete & Pak 2020). Social support among primary school teachers brings about positive emotions because of interaction and openness. There is an expectation that other teachers will provide the necessary assistance through communication and additional support hence reducing trauma and anxiety among their colleagues.

The absence of social support among primary school teachers during the COVID -19 pandemic could significantly increase anxiety (Ozmete & Pak, 2020). Since social support is a significant determinant of anxiety, the researcher hypothesises that social networks should focus on reassurance in challenging periods such as the COVID -19-pandemic (Ozmete & Pak, 2020). Social support depends on the significant others, including professionals, family members, other teachers, Teacher Unions, and employers. In an environment where people must be informed about the everyday unfortunate cases caused by the COVID -19 pandemic, social support proves beneficial to teachers for their psychological wellbeing. The ability and strength to continue with teachers' everyday duties call for a robust support system to prevail over the COVID -19 pandemic. There is a clear indication that social support is suitable for primary school teachers to deal with the effects of The COVID -19 pandemic. The social support and assurance they get from colleagues, family and employers help them navigate the challenges of the COVID -19 pandemic with some confidence (Tang and Xing, 2021).

### ***Correlation between optimism and the COVID -19 pandemic***

The results (Table 14) indicate a positive correlation between optimism and the COVID -19 pandemic. The researcher concludes that optimism influences primary school teachers' response to the COVID -19 pandemic. The Broad and build theory (Fredrickson,2004) of positive emotions supports the results. It stipulates that having positive emotions can influence good ideas, which increases one's ability to outsmart a problem with critical thinking. Having positive emotions impacts primary school teachers to be hopeful for the future regardless of their current status. The way primary school teachers respond to issues of COVID -19 directly affects them at work and home, and high levels of optimism militate against the negative impact of the pandemic. The positive emotions enable primary school teachers to overcome the effects of the COVID -19 pandemic.

The results also support the literature, indicating that optimistic individuals can change their mindset through plans and actions and learn from the experience (Rusdiantoro, 2020). Lagat (2020) also found that the level of optimism among teachers was good during the pandemic, which helped inform how they reacted to the pandemic threat. The results also agree with those of Arsal & Genc (2021), whose study showed that Coronavirus stress negatively impacted college students. Optimism is an antithesis of stress and implies that optimistic primary school teachers can mitigate the hostilities of the COVID -19 pandemic. A positive approach by teachers to the issue of the COVID -19 pandemic can be reflected through their attitude, commitment, and focus on their respective duties. Optimism acts as a protective factor as it increases the ability of an individual to recover from frustrations (Rehman et al., 2017). Primary school teachers display courage, hope and faith, and those attributes are consonant with the literature conducted for the current study. The study results (Table 14) indicate that being optimistic during the COVID -19 pandemic could potentially assist primary teachers in turning negative situations into positives and the hope for a permanent solution.

### ***Correlation between perseverance and the COVID -19 pandemic***

The results reveal that though teachers' level of perseverance is correlated to the COVID -19 pandemic, it was not statistically significant (Table 15). The results diverge from the Broaden- and build theory which relates emotions to psychological and physical wellbeing (Fredrickson, 2004). Literature (Arslan & Genc, 2021) also disagree with these results. It shows that teachers are perseverant by nature and do not need any motivation to be committed to their work during the pandemic. Literature shows that the stress of the pandemic negatively impacts wellbeing during the pandemic (Arslan & Genc, 2021). It is important to note that the lack of the relationship between perseverance and the COVID -19 pandemic in the Mochudi Inspectoral area could have been influenced by factors that were not unearthed in the current study and need to be explored in future.

On the other hand, the literature (Badin et al.,2021) indicates a positive correlation between Covid-19 mitigation measures and perseverance. Perseverance is responsible for a stable mind-frame that buffers psychological problems such as the COVID -19 pandemic, including depression, anxiety and insomnia (Badin et al.,2021). Low levels of perseverance are responsible for adjustment problems that occur during an outbreak of disease. Without this adjustment, mitigation measures like Covid-19 will not be effective. de -Zepetnek et al., (2021) also agreed that those with a higher level of perseverance also have higher levels of grit. De -Zepetnek et al., (2021) also note that those with higher grit were more physically active and led a healthier lifestyle during stressful or adverse events such as The COVID -19 pandemic. This makes mitigation measures work, while those without perseverance may develop chronic stress because of living with Covid-19. In light of the preceding literature, perseverance problems could be more likely among teachers who have families with higher levels of conflict, which may, according to Bono et al., (2020), reduce the ability to cope with the adversity of the pandemic.

The broaden-and-build theory also views perseverance as related to persons' awareness that it triggers thoughts, actions, and the building of skills and resources. The theory draws a line between positive emotions and physical wellbeing (Fredrickson, 2004). This means that persistent worries and fears about illness and its long-term effects, fear of dying, fear of hospitalisation, and social difficulties, especially getting tested, reduce a person's persistence. Persistence also helps to increase positive emotions that fuel psychological resiliency (Arlian et al., 2020). Optimism and Social support significantly influenced teacher reactions toward the COVID -19 pandemic. Perseverance, as one of the factors in the study, was discovered not to influence teacher response to the COVID -19 pandemic.

### ***Implications and recommendations***

The current results carry important practical implications. First, primary school teachers and other individuals should build a social support system for coping with the COVID -19 pandemic. Primary school teachers should keep social distance but not be socially isolated. Maintaining social connections and increasing perceived social support during the pandemic remains crucial and buffers against the adverse consequences of any scourge. Furthermore, family support is vital for all age groups, especially adults. The more difficulties there are, the more the need to provide increased social support to teachers. Individual teachers need to make full use of various social support resources to counteract the negative impact of the COVID -19 pandemic and any other potentially damaging outbreak. Finally, the results suggest that high levels of optimism and social support are necessary for curbing the effects of the COVID -19 pandemic among primary school teachers. The researchers offer some recommendations to the Ministry of Basic Education, Teachers, School administrators, learners and future Researchers

### ***Recommendations for the Ministry of Basic Education***

The employer should support teachers, equipping them with relevant knowledge on coping mechanisms concerning the COVID -19 pandemic and collaborate with the Ministry of Health and other stakeholders. Workshops, other forms of information dissemination and detailed reports on the COVID -19 pandemic would assist teachers in understanding the situations they find themselves in.

### ***Recommendations for Teachers***

The researcher would like to encourage teachers to be optimistic, use the social support they get from friends, family, and colleagues, and have an increased level of perseverance to overcome situations caused by the COVID -19 pandemic in the work environment.

### ***Recommendations for School administrators***

The school administration should raise awareness by conducting campaigns in schools regarding the COVID -19 pandemic and its protocols. There should be an emphasis on positivity and looking forward to life after the pandemic.

### ***Recommendations for Future Researchers***

Future researchers should replicate the study with large sample sizes and conduct studies within multiple Inspectoral areas and geographic spheres. Various research approaches and designs could also help to provide more information on the phenomena.

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