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# Exploring perceptions of parents in supporting learning during COVID-19 at a South African primary school

## Abstract

*The study investigated how the school management team of a primary school in Gauteng supported parents to ensure academic success during COVID-19. Therefore, the study explored the perspectives of parents on their experiences and challenges that they had to support learning at home during the COVID-19 lockdown. This study used a quantitative approach and participants were selected using quota sampling. The respondents were limited to parents of Grade 3–7 learners from a selected school in the Johannesburg municipality area. Data were collected using an item-format combined questionnaire. This study revealed how parents experienced the online learning process. It is recommended that the school should improve its communication system with its parents, and provide online training and workshops to parents and teachers on how to give support to learners in an online teaching environment.*

**Keywords:** COVID-19, educational development, online learning, perceptions of parents; parental involvement

## 1. Introduction

The COVID-19 pandemic has changed education forever and schools all over the world were closed down to contain the spread of the virus. This led to more than 1.5 billion children worldwide being schooled at home (Strauss, 2020). Deacon (2020) claims that 2 million South African children were at home without any form of educational guidance during the lockdown. Parents had to step into the role of educator and many found this extremely difficult as they still had to do all their daily activities. Madsen (2020) argues that parents battled between being caring parents and conscientious professionals at the same time. As a result, it became clear that many parents had different expectations as to how the online learning process should be conducted. It was however vital that schooling took place, but learners missed out on contact time with their teachers which resulted in setbacks for many learners, as some parents could assist with online learning and support



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their children, whereas others could not. As a result, it became critical for the school, parents, and community to work together to assure that effective learning still took place at home as learners needed to bridge the gap in their education caused by the national lockdown implemented, as explained by Moore (2020).

## 2. Research questions

Deacon (2020) argues that remote learning and teaching success depends on infrastructure and the support learners receive. Teachers and learners were physically separated from one another during the pandemic. They had to find ways through technology to keep in contact with one another. The United Nations (2020) points out that during the COVID-19 pandemic, teachers were immediately tasked with implementing distance learning and had to do this without any guidance, training, or resources. Therefore, teachers had to develop new skills and at the same time, provide the child with the needed knowledge. The teacher could not see the child physically and this made the task of teaching very difficult. The teacher could not determine if a child understood a concept or if the child was managing the workload (Calarco, 2020).

According to Saavedra (2020), there is already a global crisis where children are not learning the fundamentals at school with traditional teaching methods. As Calarco (2020) points out, it was unclear what schools exactly expected from parents during the crisis. Seale (2020) and Calarco (2020) further suggest that families needed to be equipped to support learning at home to prevent COVID-19 from deepening inequality for an entire generation of children.

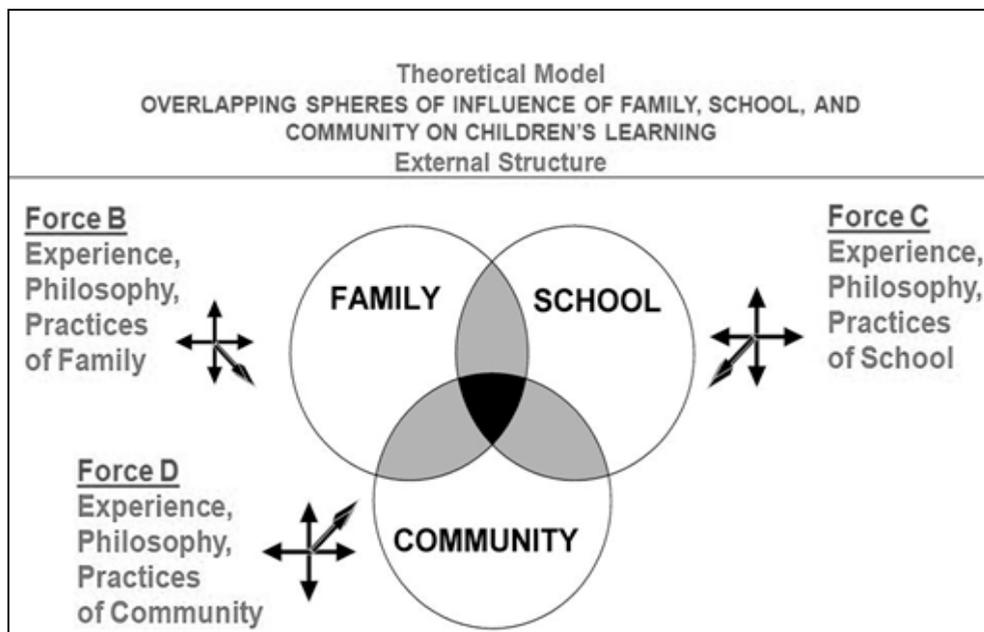
The South African education system was not prepared for a pandemic like COVID-19, and it may have a lasting effect on its education system. The main aim of our research was to investigate how the school management of a primary school in the D12 district in Gauteng can support parents to ensure academic success during COVID-19 by taking cognizance of parents' perspective on how the school dealt with the online learning process.

To achieve the aforementioned research aim the following sub-questions were developed:

- How can school management support parents with the learning process taking place at home?
- Which problems at home hinder academic success for the learners during COVID-19?
- How can relationships between senior management, teachers, and parents improve learners' academic success during COVID-19?
- What strategies can school management implement to support parents during and after COVID-19?

## 3. Theoretical model of Epstein's overlapping spheres of influence

The study was framed by the theoretical model of Epstein's overlapping spheres of influence. Epstein's (2006) theory of overlapping spheres of influence describes how the school, parents, and the community have to work together to ensure the child's development and effective learning. To ensure that this occurs, the school management team (SMT) needed to provide all parents with effective measures on how they should conduct the online learning process taking place at home.



**Figure 1:** Epstein's overlapping spheres of influence (Epstein, 2006)

Data from the study of Grade Power Learning (2018) suggests that a learner who does not understand a concept properly and moves on to the next concept is left with no foundation to understand the work that will follow; therefore, it is critical for a parent to be informed by the school on what is expected of the child as well as what is expected of the parent – in this way, the parent could prevent a gap in their child's education. Meador (2020) explains that a parent who is involved and provides the child with a good foundation of education will have a child that is educated successfully. The community and parents played a vital role during this pandemic. Parents also required support when they could not assist their children due to various reasons. These included a parent working and not having the time to assist their child or a parent that was unable to assist their child because they were not educated themselves. Some parents needed assistance with technology to assist their children as they were not fortunate enough to have the technology or the knowledge of how the technology worked. This view is supported by Deacon (2020), Calarco (2020), and Newman (2018). Epstein's theory of overlapping spheres of influence became very important as every sphere needed support from each other to make sure that the child kept developing.

#### 4. Literature review

The pandemic unfolded across the world leaving many learners in front of closed school doors. The COVID-19 pandemic served as a transformative challenge in the educational field as educators had to think on their feet to solve the problems they were faced with. Dong, Cao and Li (2020) found that Chinese parents rejected online learning because of online learning's shortcomings. They found that young children were not able to regulate themselves without the intervention of external bodies. Thus, a parent had to help the child with the learning process taking place, but their time was limited as they still needed to focus on their jobs to ensure an income. Parents felt that they lacked the time and professional knowledge to

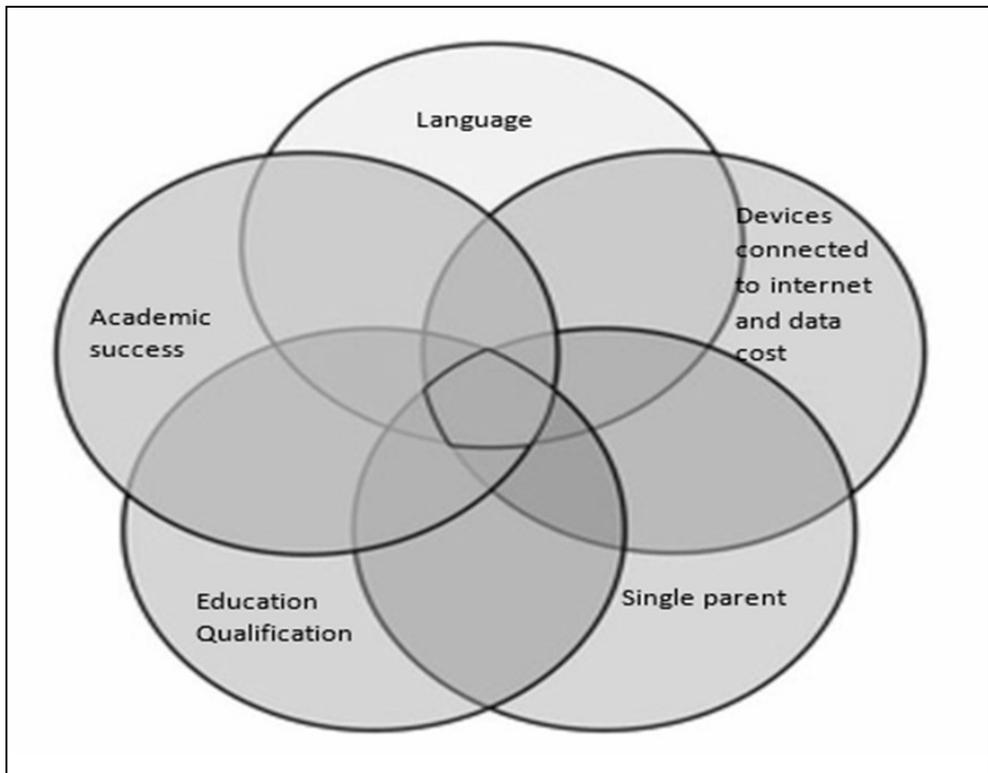
support online learning. Parents felt that young children did not have the motivation and self-discipline to work independently, especially now that they were isolated from other children.

In Finland, the relationship between schools, parents, and the larger school community is vital to providing contextual and quality education. A study conducted by Albiser *et al.* (2020) shows that during the pandemic, teachers spent on average, 1.2 hours a day communicating and cooperating with parents. In Singapore, it was found that higher parental stress levels were associated with poorer parenting-related outcomes such as harsh parenting and poor parent-child relationships (Chung *et al.*, 2020). Good relationships between parents and teachers can benefit the child.

In Sweden, schools and homes are seen as complements, and establishing good communication between parents and teachers is seen as paramount. Löwenhielm *et al.* (2017) explain that in Sweden, they believe that there should be mutual interest and understanding between teachers and parents.

Schools in South Africa were caught off-guard by the pandemic as they were not at all prepared to be faced with something like this – a situation where a teacher and learner would be separated and had to rely on technology to reach one another. Teachers had to think on their feet and find ways to reach their learners – even the learners that were less fortunate and did not have any access to technology and resources. A study done by Statistics South Africa in 2018 found that just over three million South Africans remain illiterate (Newman, 2018). Bangani (2020) argues that children of parents with low literacy levels and limited education resources were at risk of learning losses as they could not reinforce their children's learning at home. Many of these parents were from lower socioeconomic backgrounds and could not afford access to the internet. According to Jansen (cf. Ramrathan, 2020), if one did not have access to the internet, Google Classroom, and other digital learning platforms, one would only get further left behind in an already compromised and divided education system. In South Africa, there is a great variance in schools' infrastructure to support learning and teaching. There is a significant difference between higher socioeconomic and lower socioeconomic families. Parents of lower socioeconomic status could not afford data costs or provide their children with devices. Reddy, Soudien and Winnaar (2020) point out that some children did not even have a book or a desk to work on. Therefore, not all learners had access to learning materials and these learners would have no learning processes taking place at home.

According to Venz (2021), the flow of communication from the school to parents and back is the key to creating productive relationships. To be successful in bringing the three spheres together and working in harmony to ensure academic success there should be a clear understanding of what is expected from one another (Epstein, 1995). According to Bonar *et al.* (2021) remote learning is even more difficult if English is not the learners' first language. Silver (2018) stresses that teaching is all about communication. Clear, effective communication is thus important. The language barrier and lack of understanding impacted the online learning process as parents had to explain the learning content to their children, which became a problem as they did not understand the content.



**Figure 1:** Factors that hinder academic success

According to Garey (2020), if parents do not understand the content and instructions, they cannot assist their children. According to Businesstech (2019), only 4.89 million of the South African population speak English. Language barriers make online learning very difficult. According to Businesstech's (2019) report 51,1% of the parents who took part in a survey indicated that they cannot speak English. This language barrier may impact negatively on the online learning process. SMT will have to implement guidance and support to parents and should be knowledgeable regarding the factors that influence how support should be conveyed (The National Education Collaboration Trust, 2017). Garey (2020) points out how difficult single parents found it to be involved with their children's academic progress while trying to juggle work and get through day-to-day life routines. Lansford (2020) points out that parental involvement during the pandemic became vital and more challenging as parents were now more directly responsible for aspects of their child's education.

## 5. Research methodology

### 5.1 Research sample

The target population comprised of parents, both male and female, between the ages of 37 and 45+ from one selected quintile 5 public primary school (School A) based in the city of Johannesburg in the province of Gauteng (South Africa). School A is a primary school in Roodepoort and was established in 1987. Roodepoort is located 24km West of Johannesburg.

For this study, the sample size was 500 and a total of 500 questionnaires were distributed and 374 were returned. This gave a return rate of 74.8% which is good for a study of this nature. The researchers made use of quota sampling, which is a non-probability sampling technique. Etikan and Bala (2017) hold the view that quota sampling is a technique where some evident characteristic guides the researcher; in this case, the respondent had to be a parent of a primary school learner in Grades 3–7. This allowed the researchers to gain insight into parents' views on how school management can support parents during a pandemic to ensure that effective learning occurs.

## 5.2 Method of data collection

The primary data were collected through a structured, newly developed questionnaire that was distributed to the selected parents using hand delivering in a sealed envelope. The parents were asked to complete it anonymously and returned it in a sealed envelope, to ensure that the responses received were truthful and completed honestly.

## 5.3 Ethical consideration

Approvals from relevant authorities were obtained, and ethical clearance was granted by the university's research ethics committee (reference number 2021/07/07/61669520/20/AM). Approval was also obtained from the Department of Education in Gauteng with reference: 8/4/4/1/2 before the commencement of data collection.

## 5.4 Measuring instrument

Nominal scales were used to categorize the variables in Section A of the questionnaire. Respondents were grouped according to gender, age, race, mother tongue, educational qualifications, the support given during lockdown, and devices used during the lockdown. Sections B and C of the questionnaire were used to gather information on addressing teaching and learning in an online environment during a pandemic and the management of teaching and learning in an online environment during COVID-19. The responses from Sections B and C were scored on a six-point scale, ranging from 1, strongly disagree to 6, strongly agree. The questionnaire had a cover letter with instructions on how to complete it and the reasons it was conducted. It also assured the respondents of the confidential nature of the research and stated that they were free to remain anonymous if they so wished.

## 5.5 Pilot study

A pilot study was conducted to test the Likert-scale and item-format combined questionnaire. Junyong (2017) describes a pilot study as a study that is conducted on a smaller scale than the main study. A pilot study is important to improve the main study's quality and efficiency (Junyong, 2017). The questionnaire was distributed to a small number of individuals (20 parents) from the same test population. These respondents did not form part of the main study which enabled us to test and validate the questionnaire. The respondents were asked to write notes on the questionnaire if questions were unclear or misunderstood. The pilot study thus allowed the researchers to address flaws in the questionnaire, among other inadequate time to complete the questionnaire, and poor language use.

## 5.6 Statistical analysis

The Statistical Package for Social Sciences (SPSS 27.0 for Windows) was used to process the raw data from the questionnaire (Norusis, 2009). Descriptive statistics were initially

compiled to analyse the composition of the sample and so determine its representativeness. Correlation coefficients were used to measure the relationship aspects facilitating online teaching and learning during a pandemic and management difficulties and analyses to determine the percentage variance in the dependent variable predicted by the independent variable (Maree, 2010).

## 6. Results and discussions

### 6.1 Descriptive analysis

The overall majority of respondents were Black and all categories were equally represented. A rather small percentage of respondents (20,3%) indicated that had a post-graduate qualification.

### 6.2 Factor analysis results

Aspects facilitating online teaching and management difficulties consist of numerous variables. To identify which variables are involved in the various constructs, Principal Axis Factoring (PAF) was performed to reduce the numerous variables involved to a more parsimonious number of factors, while retaining as much of the information as possible (Field, 2018: 249). The following four first-order factors were identified:

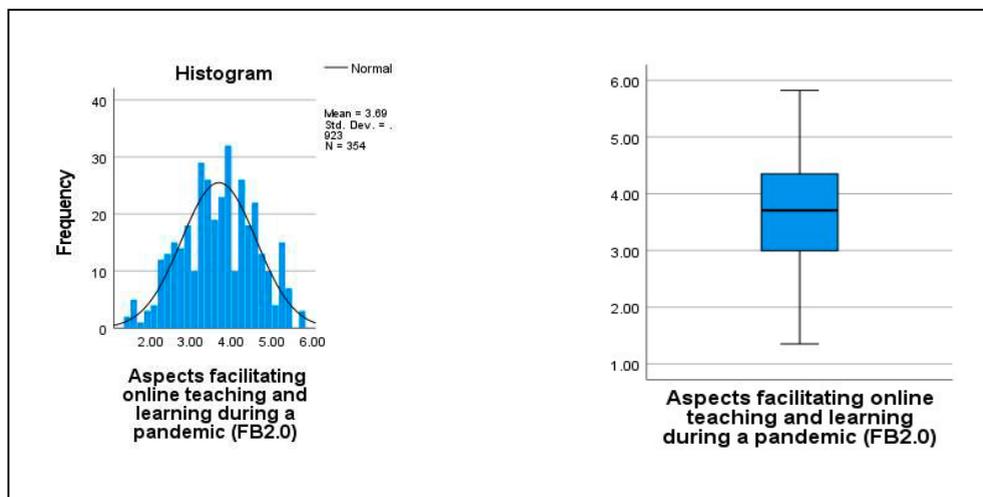
- FB1.1 - Online service provision by the school during the pandemic with a Cronbach Alpha of 0.91.
- FB1.2 - Concerns regarding online teaching and learning with a Cronbach Alpha of 0.67.
- FB1.3 – Aspects hindering online teaching and learning with a Cronbach Alpha reliability of 0.48.
- FB1.4 – Challenges experienced by online teaching and learning with a Cronbach Alpha reliability of. 0.46.

When the four first-order factors were subjected to a further factor analytic procedure with varimax rotation, only one factor resulted. It was named Aspects facilitating an online teaching and learning environment during a pandemic (FB2.0). As all loadings are  $>0.50$  all factors are likely to show converging validity. The low Cronbach Alpha loadings in the factors are probably due to the negative wording in the items which then had the scales inverted (Van Sonderen, Sanderman & Coyne, 2013). There are only 2 items in the last 2 factors and hence one cannot remove any items to improve the possible reliability. Table 1 explains the rotated component matrix showing the factor loadings in the factor “Aspects facilitating online teaching and learning in an online environment during a pandemic (FB2.0)

**Table 1:** Rotated component matrix showing the factor loadings in the factor “Aspects facilitating online teaching and learning in an online environment during a pandemic (FB2.0)

Description of the items in FB2.0	Component			
	1	2	3	4
B18.I received sufficient support from the school and its management to assist my child/children with the learning process taking place at home.	.812			
B7. Communication between the school and parents was effective during the COVID-19 pandemic.	.778			
B8. I understood what was expected from me as a parent to help my child in his/her learning process	.768			
B14.In my opinion, the school management provided enough support to ensure that academic loss was kept to a minimum.	.731			
B19.The school helped parents in need of resources.	.695			
B2. Resources from the school were widely available to help assist children with the learning process taking place at home.	.671			
B15. The amount of work done online was sufficient to ensure that learning loss was kept to a minimum	.663			
B17.I feel all the teachers put in the same amount of effort in the online learning process.	.624			
B12.I found that my child’s teachers were easily accessible during the COVID-19 pandemic.	.604			
B11.There is a positive relationship between me and my teachers.	.579			
B9Rec. I find it difficult to be involved in my child’s/ children’s education		.754		
B10Rec. I am uncertain of the part that I am responsible for in my child’s/children’s academic programme		.720		
B6Rec. My child is at risk of not progressing with the learning process as I could not assist with the learning process		.696		
B20Rec. I feel that COVID-19 has hindered my child’s/children’s academic progress			.700	
B16.In my opinion, online teaching and learning were just as good as face-to-face teaching and learning.			.552	
B3Rec. I found the online learning process to be overwhelming (scale inverted)				.846
B1. It was easy to assist my child/children with online learning.				.637
Extraction Method: Principal Component Analysis.				
Rotation Method: Varimax with Kaiser Normalization.				
a. Rotation converged in 10 iterations. Factor loadings<0.500 are not shown for clarity				

A multiple regression analysis was conducted to determine which of the four first-order factors could be classified as being the best predictors of Aspects facilitating an online teaching and learning environment during a pandemic factor. The following relevant values were determined: The KMO of 0.723 with Bartlett’s sphericity value of  $p = 0.000$  indicated that this was plausible and had a Cronbach reliability of 0.890. The data distribution of items in this factor is given in Figure 2.



**Figure 2:** Histogram and boxplot showing data distribution of aspects facilitating an online teaching and learning environment during a pandemic

The data in Figure 2 indicated that the mean for the factor was 3.69 (95% CI – LL = 3.59, UL = 3.79) with a median of 3.71 and SD of 0.923. The Kolmogorov-Smirnov test for the normality of data had a p-value of 0.200 indicating that the distribution was not significantly different from normal (it is probably normal) (Field, 2018: 249). Respondents could thus be said to be neutral in opinions about this facilitation factor. At most one could make the assumption they were uncertain tending towards partial agreement. One would have wished for a higher factor mean indicating a larger agreement. However, the aspects influencing online teaching and learning are also relatively new to school management and the relatively low factor mean does inform school management that more effort needs to be put into communication with parents regarding this.

### 6.2.1 Comparing two independent groups for significant differences in aspects facilitating online teaching and learning during a pandemic (FB2.0)

When testing for significant differences between the factor means of two independent groups, the Independent *t*-test was used to determine whether the variances are different between the two groups involved. Male respondents agreed more strongly with the aspects facilitating online teaching and learning during a pandemic (FB2.0) than female respondents. However, this difference in mean scores was not statistically significant. Both gender groups partially disagreed with the items in the management factor.

In addition, the researchers made use of multivariate analysis of variance (MANOVA). The various assumptions for MANOVA such as independence of residuals, random sampling, multivariate normality, and homogeneity of covariance matrices (Box's test  $p > 0.05$ ) were all met. (Field, 2018: 753). The researchers also made use of the Wilks' Lambda test at the multivariate level ( $\Lambda$ ). There was a significant effect of age groups of the parent respondents on the aspects facilitating online teaching and learning during the pandemic. More univariate tests with Bonferroni corrections were conducted. The younger age group of parent respondents agreed statistically significantly more strongly with the online service provision delivered by the school than did the older age group of parent respondents.

Furthermore, the religious affiliation groups of parent respondents variable were collapsed into two groups as most parent respondents affiliated themselves with Christianity. No significant differences were present between the two religious groups. No significant differences were present between the religious affiliation groups regarding the management of challenges (FC2.0). Both groups perceived the impact to be moderate.

### 6.2.2 Comparing three or more independent groups for significant differences between aspects facilitating online teaching and learning during a pandemic (FB2.0) and management difficulties (FC2.0)

#### *Race as an independent variable*

When testing the two factors (FB2.0) and (FC2.0) at the multivariate level against the three race groups the following multivariate results for 1000 bootstrapped samples were present:

$$[\Lambda = 0.938, F(4,700) = 5.65, p = .000, r = 0.18]$$

The three race groups differ statistically significantly from one another when tested at the multivariate level. Results at the univariate level indicated that this difference was in the FB2.0 factor only namely:

$$[FB2.0 - \bar{X}_O = 3.60; \bar{X}_B = 3.91; \bar{X}_W = 3.41; F(2,351) = 11.25, p = .000, r = 0.25]$$

Hence, Black respondents agreed the most strongly with aspects facilitating online teaching and learning during the pandemic. They differed statistically significantly from White respondents at the 1% level of significance. Furthermore, the result shows that respondents from the Black race group partially agreed with the items in the factor of online service provision by the school during the pandemic. They differed statistically significantly from the other race group at the 5% level ( $p=.021$ ) and from the White race group at the 1% level of significance ( $p=.000$ ) who both partially disagreed with the items in the factor.

Regarding aspects hindering online teaching and learning during the pandemic the following result was found:

$$[FB1.3 - \bar{X}_O = 2.53; \bar{X}_B = 2.83; \bar{X}_W = 2.23; F(2,351) = 8.11, p = .000, r = 0.21]$$

All three race groups partially disagreed with the items in the factor aspects hindering online teaching and learning. However, Black respondents differed statistically significantly from White respondents ( $p=.000$ ) and hence Black respondents could be said to disagree least strongly with aspects hindering online teaching and learning.

#### *Highest educational qualification*

The educational qualification groups were recoded into three groups. There were statistically significant differences regarding factor FB2.0 (aspects facilitating online teaching and learning in an online environment during a pandemic) and FC2.0 (management difficulties experienced in online teaching and learning during the lockdown). Concerning educational qualifications groups, the result of the comparison of the three educational qualifications groups was:

$$[FC2.0 - \bar{X}_{PSD} = 3.18; \bar{X}_{D,D+FDE} = 3.34; \bar{X}_{B,DeG} = 3.57; F(2,351) = 9.31, p = .000, r = 0.22]$$

Although all three groups partially disagreed with management challenges experienced respondents with a B. Degree or higher agreed more strongly than the other two qualification groups at the 5% level ( $p = 0.028$  for Diploma/Diploma + FDE group) and the 1% level ( $p = 0.000$ ). As the management of challenges was composed of three first-order factors it is necessary to see which of the three first-order factors is involved with this significant difference.

Hence, the three first-order factors differ at the multivariate level ( $p < 0.05$ ) and univariate tests for the three first-order factors gave the following results:

$$FC1.1 - F(2,351) = 3.50, 0.003, r = 0.14$$

$$FC1.2 - F(2,351) = 5.06, p = 0.007, r = 0.17$$

$$FC1.3 - F(2,351) = 8.60, p = 0.000, r = 0.22$$

All three of the first-order factors involved in the management of challenges factor showed significant differences were present between the three highest educational qualification groups with the highest qualification group agreeing more strongly than the other two groups. Using only effect sizes (they are standardised and can be compared) it is observed that the largest effect size occurs for the problems experienced regarding online teaching and learning and hence it is seen as the most important of the three effects. The higher the educational qualifications the larger the extent of the management of challenges of teaching and learning in an online environment during a pandemic was perceived to be.

### *Mother tongue groups*

The various mother tongue groups were recoded into five groups, namely Afrikaans, English, Nguni, Sotho, and Other. The results of 1 000 bootstrapped samples using the two factors FB2.0 and FC2.0 as dependent variables and five mother tongue groups as independent variables or predictors were as follows:

$$\Lambda = 0.937, F(8,696) = 2.87, p = .004, r = 0.18$$

The two factors differ statistically significantly from one another at the multivariate level concerning the five mother tongue groups. Univariate tests indicated that the difference was only due to the aspects facilitating online teaching and learning in an online environment during a pandemic (FB2.0). The results at the univariate level were:

$$[FB1.0 - \bar{X}_A = 3.61; \bar{X}_E = 3.50; \bar{X}_N = 3.91; \bar{X}_S = 4.01; \bar{X}_O = 3.66; F(4) = 4.87, p = .001, r = 0.23]$$

The English home language group had the lowest factor mean and differed statistically significantly from the Sotho home language group at the 1% level ( $p = 0.003$ ) and the Nguni home language group ( $p = 0.009$ ). However, as the aspects facilitating online teaching and learning (FB2.0) are composed of four first-order factors it was necessary to determine which of the four first-order factors is involved in this significant difference between mean factor scores. A MANOVA test using the four first-order factors showed that FB1.1 (Online service provision by the school during the pandemic) and FB1.3 (Aspects hindering online teaching and learning) were the only two factors involved in the significant differences at the multivariate level:

$$\Lambda = 0.903, F(16,1057) = 2.24, p = .003, r = 0.16$$

Tests at the univariate level were:

[FB1.0 –  $\bar{X}_A = 3.80$ ;  $\bar{X}_E = 3.66$ ;  $\bar{X}_N = 4.16$ ;  $\bar{X}_S = 4.38$ ;  $\bar{X}_O = 3.95$ ;  $F(4) = 6.00$ ,  $p = .000$ ,  $r = 0.25$ ]

The English mother tongue group, with the lowest factor, mean, differed statistically significantly from the Nguni ( $p = 0.009$ ) and the Sotho groups ( $p = 0.000$ ). The Sotho mother tongue group agreed the most strongly with the online services provided by the school, followed by the Nguni group. The English mother tongue group agreed the least strongly with the items in the factor and possibly were the least satisfied with the online teaching and learning service delivery of the school during the lockdown. Race groups are significantly related to issues involved with this factor probably due to cultural and socioeconomic differences.

[FB1.3 –  $\bar{X}_A = 2.45$ ;  $\bar{X}_E = 2.38$ ;  $\bar{X}_N = 2.95$ ;  $\bar{X}_S = 2.82$ ;  $\bar{X}_O = 2.30$ ;  $F(4) = 3.68$ ,  $p = .006$ ,  $r = 0.20$ ]

Concerning the aspects hindering online teaching and learning all groups disagreed with the items in the factor but the English mother tongue group disagreed more strongly than the other race groups and differed statistically significantly from the Nguni mother tongue group ( $p = 0.01$ ).

## 7. Empirical findings

The role of parents in supporting learning during the COVID-19 pandemic is based on two underlying multifactorial dimensions, namely “Aspects facilitating an online teaching and learning environment” (FB2.0) and “Management difficulties regarding online teaching and learning” (FC2.0). Each of the dimensions was found to consist of sub-dimensions. The “Aspects facilitating an online teaching and learning environment” (FB2.0) had the following sub-dimensions, namely “Online service provision by the school during the pandemic” (FB1.1); “Concerns regarding online teaching and learning” (FB1.2); “Aspects hindering online teaching and learning” (FB1.3); and “Challenges experienced by online teaching and learning” (FB1.4). All four of these first-order factors exhibited both converging and diverging validity.

The second dimension named “Management difficulties regarding online teaching and learning” (FC2.0) was found to be composed of three sub-dimensions, namely “Training and development for online teaching and learning” (FC1.1); “Costs of online teaching and learning” (FC1.2) and “Difficulties experienced by respondents regarding online teaching and learning” (FC1.3). All factors showed diverging validity and it was only FC1.3 that did not exhibit converging validity due to the poor wording of one of the items. The CR was 0.78 and the Cronbach alpha was 0.602, which improved to 0.654 if item C1 was removed.

Regarding the aspects facilitating online teaching and learning during a pandemic (FB2.0) significant differences were found between the younger (<41 years) and older age groups (42+ years). The younger age group agreed more strongly with the items in this factor. This difference was found to be due to two of the first-order factors namely:

- FB1.1 – Online service provision by the school during the pandemic. The younger age group agreed significantly more strongly than did the older age group concerning B19 (The school helped parents in need of resources), B8 (I understood what was expected from me as a parent to help my child in his/her learning process) and B14 (In my opinion

the school management provided enough support to ensure that academic loss is kept to a minimum).

- FB1.2 – Concerns regarding online teaching and learning. The younger age group of parents disagreed significantly more strongly with the items in this factor than did the older age group of parents. The two concerns where significant differences were found between the age groups were B9 (I find it difficult to be involved in my child's/children's academic programme and B10 (I am uncertain of the part that I am responsible for in my child's/children's academic programme). In each of these items, the younger age group of parent respondents appear to be more confident (disagreed more strongly) with the items than the older age group of parent respondents.
- Respondents who had children in the junior phase (Grade 1 to Grade 3) agreed significantly more strongly with the factor aspects facilitating online teaching and learning (FB1.2) than did parents who had children in the intermediate phase (Grade 4 to Grade 6) and the senior phase (Grade 7 to Grade 9). These significant differences were found to be the result of differences in two of the first-order factors, namely FB1.1 (Online service provision by the school) and FB1.3 (Aspects hindering online teaching and learning). In both first-order factors the lower the grade level, the larger the extent of agreement with the factor. Hence, parents who have children in the intermediate and senior phases appear to need more assistance in facilitating online teaching and learning activities which seems logical as the content of the academic programme becomes more complicated.

Statistically significant differences were found in FB2.0 (Aspects facilitating online teaching and learning during the pandemic). Black respondents agreed significantly more strongly with the items in the factor than White respondents did. These significant differences were found to be due to two of the four first-order factors, namely FB1.0 (Online service provision by the school during the pandemic) and FB1.3 (Aspects hindering online teaching and learning). In both first-order factors, Black respondents disagreed less strongly with the items involved. FB1.0 (Online service provision by the school) had the largest effect size difference between means and could be seen to be the most important of the two factors.

The MANOVA test indicated that significant statistical differences were present in the FC2.0 dimension (Management challenges experienced during the pandemic). Respondents with a B. Degree or higher agreed significantly more strongly with this factor than did the other two educational qualification groups. All three of the first-order factors involved in the management challenges factor (FC2.0) indicated that the B. Degree or higher respondents agreed significantly more strongly than did respondents with lower educational qualifications. Factor FC1.3 (Problems experienced regarding online teaching and learning) had the highest effect size and was perceived as the most important of the three first-order factors. The higher the educational qualification the larger the extent of perceived management challenges to teaching and learning in an online environment.

Significant differences were found to be present between the five mother tongue groups regarding FB2.0 only (Aspects facilitating online teaching and learning during the pandemic). The English mother tongue group agreed significantly less strongly than did the Nguni and Sotho mother tongue groups. This significant difference in the FB2.0 dimension was found to be due to differences in FB1.1 (Online service delivery by the school during the pandemic) and FB1.3 (Aspects hindering online teaching and learning). In the FB1.1 factor (Online service delivery by the school) the English mother tongue group agreed the least strongly with the items in the factor and were the least satisfied group and differed significantly from the Nguni

and Sotho mother tongue groups. Concerning aspects hindering online teaching and learning (FB1.3), the English mother tongue group disagreed the least strongly with the items in the factor and differed statistically significantly from the Nguni and Sotho mother tongue groups. Presently English is the language of use in South Africa and it appears as if more attention is needed concerning the Nguni and Sotho mother tongue groups when it comes to aspects concerned with online service providers such as schools.

## 8. Conclusion

This study found that there are factors that have an effect on the perceptions of parents supporting learning during COVID-19 at a South African primary school, ranging from, inter alia, online services provided by the school during the pandemic, concerns regarding online teaching and learning, aspects hindering online teaching and learning and challenges experienced during online teaching and learning. All the factors require careful management and the schools need to re-evaluate their online teaching and learning programme to be prepared for any future pandemics. Therefore, the following recommendations are made:

- The school management team should focus its support on the older age group of parents as they seem to need more support. The school could engage parents on a platform where parents could interact and engage with one another to get support from fellow parents.
- The school could use its therapists to provide parents with a course on how to assist their children with the online learning process taking place at home to ensure that all parents can help their children succeed academically.
- The school should create an online discussion platform where parents with a higher educational qualification take the lead in assisting the parental groups and help parents who do not understand the content or misunderstood instructions.
- The school should consider in-depth training of teachers on how to facilitate online learning, as this is a new domain for many teachers, especially the older generation. The school could conduct its training by using its teachers and their knowledge and experience. In that way, all teachers are on the same page and there will be consistency in the online teaching being facilitated.
- The school should reconsider its communication system with all the stakeholders. Clear communication must take place between the school management team, its teachers, and the parents. There must be visible mutual respect. If mutual respect is not visible between parents and teachers, learners might feel that they do not need to show respect and if no respect is shown, clear and effective communication will not take place.
- For the online learning process to be effective and to ensure academic success during and after COVID-19, the school must improve its communication channels. The school and teachers should communicate with parents regularly.
- To maintain a professional role, a teacher must stay resourceful. It is recommended that a teacher always have additional resources to offer a parent in need.
- It is important to support parents and to inform them of the decisions taken. It is important to explain to parents why the decision was taken for them to understand the reasoning behind the decision-making.
- The school should provide parents with workshops on how to assist a child with the online learning process, as many parents are unsure of how to assist their child and prevent a

learning loss. This will also create an environment where parents feel free to express their concerns and to seek help if they need help.

- It is important for the school that parents should be in contact with one another during a pandemic. Parents should form support groups to support one another with the learning process. Parents could also support one another emotionally, as there are many challenges that parents have to deal with during a pandemic.

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