

Being a confined teacher: Dealing with the psychological effects of confinement during the covid-19 outbreak and getting out of it

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ABSTRACT: The new coronavirus due to its rapid spread and its numerous victims represents a real public health problem and requires great resilience in individuals. Since then, confinement has been recommended or even imposed on populations despite the large literature on its negative psychological effects. The study explores the experience of confinement through its psychological consequences and the strategies that teachers adopt to improve their subjective well-being and get out of it. From a composite questionnaire administered online between April 30 and June 08, 2020, based on three tools, we measured perceived stress, anxiety and depression on 244 teachers. The results show that 66.0% of the participants experienced continuous stress during confinement compared to 56.5% who indicated a moderate/severe level of anxiety and 21.7% for a moderate/severe depression. Finally, they indicate that after being supplied with basic foodstuffs, the teachers engaged in learning activities during confinement. The study suggests the need for the adoption of reassuring communication, producing meaning in the eyes of third parties and stakeholders but also the need to keep contacts between teachers and learners/relatives by technological means.

KEYWORDS: Covid-19, stress, anxiety, depression, teachers, psychological effects.

1 INTRODUCTION

The majority of studies devoted to the psychological consequences of confinement during the major pandemics that the world has experienced have been carried out among general populations (Bhat et al., 2020; Caleo et al., 2018; Huang & Zhao, 2020; Zhang & Ma, 2020). Specifically, one part concerned different social groups, including survivors of victims (Desclaux et al., 2017; Kim et al., 2017), people at risk or presenting certain pathologies (Drain & Garrett, 2020; Jeong et al. 2017) and health workers (Greenberg et al., 2020). Another, smaller part has looked at the psychological effects of confinement on education in general (Akaba, 2020); on students (Cao et al., 2020; Duraku & Hoxha, 2020) or simultaneously on students and school administrative staff (Sahu, 2020). But few studies have evaluated the psychological consequences for teachers (Talidong & Toquero, 2020). However, they are the first category of social actors whose professional activity was suspended completely for a while during confinement. In Cameroon, their activities were entirely halted from March 17 to May 31, 2020. Apart from the minority that was involved in distance learning, the large majority remaining experienced a long period of professional inactivity. Furthermore, analysing Cameroonian responses to COVID-19 in the education sector, Béché (2020) has revealed that the Cameroonian education system is plagued by disorganisation, educational inequalities and exclusion – problems that affect learners' and teacher's daily lives on a personal level. This cannot be without consequences in terms of mental health.

The aim of this study is to understand the lived experience of this period of confinement via two objectives: evaluate the psychological consequences of confinement on teachers (1) and, identify the strategies they adopted to improve their subjective well-being and overcome these difficult events (2). Beyond what precedes, the choice to carry out such research on teachers is linked to the fact that teaching is presented in the literature as one of the service professions which leads to a high level of stress due to many psychosocial factors in the school milieu (Hafsi et al., 2017; Kyriacou, 2001; Lantheaume, 2011); but also to the fact that the teacher be described as the public service worker with the highest rate of psychological distress (Ilgan et al., 2015). It therefore seemed interesting to us to assess whether the stressful situation due to the teaching profession or milieu was relieved by the fact of no longer going to school in the Covid-19 period. In other words, assessing the level of psychological suffering of inactive teachers during confinement could help understand the effects of confinement during Covid-19 pandemic on teachers.

BRIEF CLARIFICATION OF SOME VOCABULARIES IN LINK WITH COVID-19

The history of the changing world is punctuated with major infectious diseases and epidemics: the accidental occurrence of a large number of cases of a transmissible infectious disease, or a considerable increase in the number of cases, in a given region or community; and pandemics: an epidemic that affects a large number of people over a very large geographical area. From the world's first plague epidemic between the 6th and 7th centuries until the Ebola epidemic in 2014, the loss of life has been inestimable (Bilmans, 2015). This is still the case today with the Covid-19. As the world approaches 1 million deaths from COVID-19, adding to the fact that two categories of disease are interacting within specific populations—infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and an array of non-communicable diseases, Horton (2020) argued that COVID-19 is not a pandemic but a syndemic. This concept is so far used to describe how COVID-19 clusters with pre-existing conditions, interacts with them and is driven by larger political, economic, and social factors (Singer et al., 2017). In case of epidemics, pandemics or syndemics, public policies have always been mobilized for responding to acute phenomena: detecting, isolating, quarantining, confining and, henceforth, vaccinating (Cambon et al., 2021).

In the case of a pandemic, isolation is one strategy among others which consists in isolating people suspected of being infected by a virus from the rest of the population to minimize contamination (Tecirli et al., 2020). This definition differs from quarantine which refers to the separation and restriction of movement of people who, although not yet confirmed sick, have been exposed to an infectious agent and who, therefore, are likely to become infectious themselves (Bilmans, 2015). However, the two terms are often used interchangeably, especially in communication with the public (Manuell & Cukor, 2011). The other strategy is confinement which consists of isolating people and families in order to limit the propagation of the virus (Hartley et al., 2020). It is the most efficient strategy to limit high risk of contamination in case of a pandemic. Isolation, quarantine and confinement are several public health measures to prevent the spread of an infectious disease. This is why Cameroonian teachers have been asked to confine themselves during the Covid-19 crisis despite its considerable psychological impact for those concerned (Brooks et al., 2020).

PSYCHOLOGICAL CONSEQUENCES OF CONFINEMENT ON TEACHERS

Studies on the effects of confinement are about four historic epidemics: SARS, MERS, Ebola and H1N1 influenza. These studies reveal that living in an epidemic context is not psychically neutral because a global epidemic is a traumatic event. Indeed, whether we are directly concerned or more from a distance because it directly confronts us with death, or at least with a threat of death (Thiébaux, 2020). At the very beginning of the Covid-19 spread, Brooks et al. (2020) carried a rapid review of evidence on the psychological impact of quarantine and how to reduce it. They found over 3166 papers and analysed 24 in their review. Most reviewed studies reported negative psychological effects including post-traumatic stress symptoms, confusion, and anger (Brooks et al., 2020). Beyond quarantine or confinement due to an epidemic, studies indicate that being forced to stay at home creates a context of "worry" (Soulet, 2005) and has negative psychological effects on the mental health of populations (Flahault, 2020). Meaning that this kind of event can generate a strong emotional charge very difficult to control, which can have many repercussions at the psychological level. Thus, several studies, while recognizing the efforts made by many States to stop the Covid-19 pandemic, recall that more schools will remain closed and that the duration of the confinement is extended, the negative consequences on the physical and mental health of the populations are accentuated (Deloche-Gaudez, 2020; Wang, G. et al., 2020). We can thus observe in populations emotional fatigue, sleep disorders, permanent concerns about the future, fear of others and of being contaminated, impaired judgment, mood disorders, the tendency to hypochondria (Thiébaux, 2020). Other reactions like fear, stress, depressive symptoms are mentioned by a lot of research (Rajkumar, 2020; Brooks et al., 2020). Mengin et al. (2020) mention the presence of addictive behaviours, eating and sleep disorders, the immediate and delayed risk of depression and suicide. Other stressors included longer quarantine duration, infection fears, frustration, boredom, inadequate supplies, inadequate information, financial loss, and stigma (Brooks et al., 2020).

Rubin (2020) has shown that putting an entire city under quarantine has negative psychological effects on populations. Moreover, studying the consequences of the closure of universities due to the new coronavirus outbreak on the education and mental health of students and academic staff, Sahu (2020) concludes that the rapid expansion of this disease creates doubt and anxiety among students and teachers about the future. He adds that the quarantine is potentially generating a very high level of stress within the university

community, including among the students. Baht et al. (2020) notes that 67.5% of the population of Kashmir recognize that confinement has been the source of psychological problems. Cao et al. (2020) assessed the psychological impact of Covid-19 on 7,143 Chinese college students. It appears that 0.9% of the respondents were experiencing severe anxiety, 2.7% moderate anxiety, and 21.3% mild anxiety. They also indicate that living in urban areas, family income stability and living with parents were protective factors against anxiety. In addition, emotions such as fear were reported by the press among English citizens during the confinement. This situation leads individuals to compare what was happening at the “end of the world”, not to mention the panic scenes reported in the city of Wuhan (Robin, 2020). Added to fear, is also a high level of anxiety. Indeed, confinement implies the absence or reduction of social contact, the loss of daily routines and the return to the monotony that are sources of boredom. Boredom combined with other factors are the causes of anxiety in individuals (Mengin et al., 2020).

COPING WITH AND RECOVERING FROM THE PSYCHOLOGICAL EFFECTS OF CONFINEMENT

Many researchers have suggested that during this period of confinement due to covid-19 a good organisation at the personal, family and community levels is key to reinforcing individual coping mechanisms. To this effect, the WHO (2020) has made several recommendations to improve on the psychological well-being of populations in general, as well as that of specific groups: health workers, children, the elderly and people in isolation. The following are recommended: reduce time spent watching television; protect oneself and protect others by respecting barrier measures and having a healthy lifestyle; create situations that provide positive emotions and allow you to keep hope; share the positive experiences of healed people; honour and encourage health workers who take care of people sick with Covid-19. Some of these strategies have also been identified by several authors (Deloche-Gaudez, 2020; Wang, G. et al., 2020).

Studying the reaction of Filipino teachers to anxiety during confinement due to Covid-19, Talidong and Toquero (2020) reveal that they have engaged in personal online learning, in exchanges with the community to reduce worry. According to literature review carried by Brooks and colleagues (2020), in situations where quarantine is deemed necessary, officials should quarantine individuals for no longer than required, provide a clear rationale for quarantine and information about protocols, and ensure sufficient supplies are provided. Appeals to altruism by reminding the public about the benefits of quarantine to wider society can be favourable.

2 METHOD

2.1 PARTICIPANTS

The study uses a quantitative approach based on the simple random sampling technique. Its involved 244 teachers, including 154 women and 90 men, chosen based on the following inclusion criteria: 1) having spent at least 14 days of confinement, 2) having been on duty in an educational institution at the time classes were interrupted on March 17, 2020, and 3) not having another job that would occupy them during the period of interruption. Thus, those of the trained teachers who were not yet practising before March 17 were excluded from the sample, as were those with less than 14 days of confinement. At the end, the participants (n = 244) were between 19 and 60 years old (M = 37.57; SD = 8.57). They came from the three classic cycles of education in Cameroon. The nursery / primary cycle with 41.4% (n = 101), the secondary with 49.6% (n = 121) and that of the higher education with 09% (n = 22). They were mostly from the public sector 79.5% (n = 194) than from the private 20.5% (n = 50). They lived more in the regional capitals for 86.9% (n = 212) than in the departmental capitals 13.1% (n = 32). In addition, teachers were in service in nine out of ten regions of Cameroon except for the South West. The most represented regions are: Centre 72.1% (n = 176), South 07% (n = 17) and Littoral 5.7% (n = 14) and Far North 5.3% (n = 13). Finally, 10 participants (4.1%) manifested coronavirus disease while 21 (8.6%) declared having had a neighbour or relative declared positive for Covid-19.

2.2 INSTRUMENTS

A questionnaire comprising of two open questions making it possible to obtain qualitative data on the strategies adopted by teachers to cope with the psychological effects of confinement and, three Likert-type scales making it possible to measure stress, anxiety and depression. We chose these questionnaires because they are among the most used tools in the literature to assess these psychological distress but also because there are adapted French versions. Those scales are: Perceived Stress Scale, Beck Depressive Inventory, and Generalized Anxiety Disorder -7.

Perceived Stress Scale [PSS] (Cohen et al., 1983). The French version of the PSS proposed by Quintard (1994) was used to measure perceived stress. Its 10 items allow you to measure the importance with which life situations are perceived as threatening. The participants responded by positioning themselves on a 5-point scale with 1 = Never; 2 = Almost never; 3 = Sometimes; 4 = Quite often and 5 = Often. The final score is obtained by adding the scores to the different items. A high score indicates high perceived stress, while a low score indicates low perceived stress.

Beck Depressive Inventory [BDI 13] (Beck & Beamesderfer, 1974). Translated into French by Collet and Cottraux (1986), the BDI-13 makes it possible to measure depressive cognitions by proposing, for each of the items (13 in total), a series of four statements representing increasing degrees of symptoms. For each series of the four propositions, you must read, then choose the one that best describes your condition during the last two weeks by encircling the number of the proposition. The overall score is obtained by adding the scores of the 13 questions. The higher the score, the more depressed the subject.

Generalized Anxiety Disorder -7 [GAD-7] (Spitzer et al., 2006). GAD-7 is a rapid, reliable, validated and relevant screening tool for the screening of generalized anxiety disorder. The GAD-7 scale is made up of the seven items marked with zero to three (0 = never; 1 = several days; 2 = more than half the time; 3 = almost every day, for the past two weeks). The total score is obtained by adding the score obtained for each item (score ranging from 0 to 21).

2.3 PROCEDURE

Data was collected indirectly and in digital form between april 30th and june 08th 2020. This strategy was adopted due to the restrictions imposed by Covid-19 pandemic. Also, according to Hohwü et al. (2013), this filling mode (Web-based questionnaires) could replace traditional paper questionnaires with minor effects on response rates and lower costs. After the questionnaire was designed, it was digitized using the Google Forms platform (<https://docs.google.com/forms/>) then distributed to Gmail, Yahoo mail and Hotmail mail systems; as well as through social networks such as WhatsApp and Facebook. In practice, some of the teachers addresses that we had were invited through electronic mail and the other party invited through the various WhatsApp, Telegram and Facebook forums dedicated to teachers. The data does not, however, make it possible to specify the proportion of teachers in the sample who actually responded by messaging from those who responded through social networks.

Before the distribution of the final version, a pre-test was carried out with about twenty teachers, to verify the understanding of the items constituting the different scales. The Cronbach internal consistency index alpha (α) of the different scales was calculated: PSS ($\alpha = 0.72$); BDI-13 ($\alpha = 0.85$) and GAD-7 ($\alpha = 0.91$). The extracted quantitative data was exploited under SPSS 20.0, while the qualitative data was analysed using the technique of content analysis. The qualitative material comes from two open questions contained in our questionnaire, the purpose of which is to identify the strategies put in place by our participants to deal with the psychological effects of confinement. It concerns 30 participants drawn at random from among the 86 who fully completed these two questions: only criterion for inclusion.

ETHICAL CONSIDERATIONS

Prior to administering the questionnaire to participants, they were reassured that all information they provide will be kept confidential, and shall only be used for the purpose of the study. They were also informed that their participation is voluntary and free of any charges. Furthermore, they were informed they could withdraw from the study at any time they wished.

3 RESULTS

3.1 PSYCHOLOGICAL CONSEQUENCES OF CONFINEMENT AMONG TEACHERS

Only the psychological consequences most frequently observed in times of crisis and more evaluated by different authors were considered (Fardin, 2020; Desclaux et al. 2017; Hawryluck et al., 2004). These are stress, anxiety and depression.

STRESS AMONG CAMEROONIAN TEACHERS DURING CONFINEMENT DUE TO COVID-19 OUTBREAK

Stress is a normal physiological response to an abnormal situation allowing an organism to adapt to the multiple positive or negative events that it experiences. Stress appears and disappears on its own, depending on whether or not one is in the presence of stressors (Québec.ca, 2020, www.quebec.ca/). Extended exposure to stressors makes stress chronic and harmful to health. In our study, 11.1% of participants were able to cope with stress during confinement versus 89.9% who suffered from it, with 66.0% who suffered from it throughout confinement. In addition, effects of the number of confinement days is not significant $F(2, 241) = 1.106, p = 0.333$. While the effect of the educational cycle on the level of perceived stress is significant $F(2, 241) = 5.03, p = 0.007$. Primary school teachers suffered the most from stress than secondary and university lecturers. However, there is no significant difference between those in secondary and higher education lecturers according to the Tukey's multiple comparison test.

Table 1. Different stress thresholds depending on certain characteristics of the participants

Variables	Stress level n (%)			P
	Mild	Moderate	Severe	
Gender				
Male (n =90; M =28.43; SD =6.53)	11 (4.5)	17 (7.0)	62 (25.4)	.652
Female (n =154; M =28.87; SD =7.67)	16 (6.6)	39 (16.0)	99 (40.6)	
Order of education				
Public (n =194; M =28.30; SD =7.18)	20 (8.2)	51 (20.9)	123 (50.4)	.087
Private (n = 50; M =30.28; SD =7.43)	7 (2.9)	5 (2.0)	38 (15.6)	
City/Town of Residence				
Region (n = 212; M =29.17, SD = 6.82)	16 (6.6)	53 (21.7)	143 (58.6)	.009
Department (n =32; M =25.59, SD = 9.23)	11 (4.5)	3 (1.2)	18 (7.4)	
Confinement habit				
Yes (n = 153; M =27.87, SD = 7.74)	23 (9.4)	38 (15.6)	92 (37.7)	.02
No (n = 91; M =30.10, SD = 6.16)	4 (1.6)	18 (7.4)	69 (28.3)	
Sick of Covid-19				
Yes (n =10; M =21.40, SD = 10.97)	5 (2.0)	0 (0.0)	5 (2.0)	<.001
No (n =234; M =29.02, SD = 06.93)	22 (9.0)	56 (23.0)	156 (63.9)	
Affected loved one/neighbour				
Yes (n =21; M =32.52, SD = 5.57)	1 (0.4)	1 (0.4)	19 (7.8)	.012
No (n =223; M =28.34, SD = 7.31)	26 (10.7)	55 (22.5)	142 (58.2)	

Note. M: average; SD: standard deviation; n: sample; p: critical probability

ANXIETY AMONG CAMEROONIAN TEACHERS DURING CONFINEMENT DUE TO COVID-19 OUTBREAK

Unlike fear, which is a response to a definite and very real threat, anxiety is a response to a vague or unknown threat. Anxiety manifests itself when we believe that a dangerous or unfortunate event can occur and we anticipate it. Perception of the event has a great influence on the intensity of the anxiety experienced (Québec.ca, 2020; www.quebec.ca/).

Table 2. Different anxiety thresholds depending on certain characteristics of the participants

Variables	Anxiety level n (%)				P
	Absence	Mild	Moderate	Severe	
Gender					
Male (n =90; M =10.43; SD =6.07)	20 (8.2)	20 (8.2)	23 (9.4)	27 (11.1)	.855
Female (n =154; M =10.58; SD =6.14)	29 (11.9)	37 (15.2)	40 (16.4)	48 (19.7)	
Order of education					
Public (n =194; M =10.13; SD =6.09)	41 (16.8)	51 (20.9)	43 (17.6)	59 (24.2)	.052
Private (n = 50; M =12.02; SD =5.95)	8 (3.3)	6 (2.5)	20 (8.2)	16 (6.6)	
City/Town of Residence					
Region (n = 212; M =10.67; SD =5.88)	37 (15.2)	54 (22.1)	54 (22.1)	67 (27.5)	.323
Department (n =32; M =9.53; SD = 7.42)	12 (4.9)	3 (1.2)	9 (3.7)	8 (3.3)	
Confinement habit					
Yes (n = 153; M =9.59, SD = 6.27)	40 (16.4)	39 (16.0)	33 (13.5)	41 (16.8)	.002
No (n = 91; M =12.11, SD = 5.48)	9 (3.7)	18 (7.4)	30 (12.3)	34 (13.9)	
Sick of Covid-19					
Yes (n =10; M =7.60; SD =8.42)	5 (2.0)	1 (0.4)	0 (0.0)	4 (1.6)	.122
No (n =234; M =10.65; SD =5.97)	44 (18.0)	56 (23.0)	63 (25.8)	71 (29.1)	
Affected loved one/neighbour					
Yes (n =21; M =13.47, SD = 6.38)	3 (1.2)	2 (0.8)	3 (1.2)	13 (5.3)	.02
No (n =223; M =10.24, SD = 6.01)	46 (18.9)	55 (22.5)	60 (24.6)	62 (25.4)	

Note. M: average; SD: standard deviation; n: sample; p: critical probability

Overall, 20.1% of the participants showed no signs of anxiety, against 79.9% who showed at least one sign and in the following proportions: 30.7% severe anxiety; 25.8% moderate anxiety and 23.4% mild anxiety. In addition, there is a significant effect of the educational cycle on anxiety, $F(2.240) = 6.47, p = 0.002$. Once again, primary school teachers were more anxious than secondary school teachers.

DEPRESSION AMONG CAMEROONIAN TEACHERS DURING LOCKDOWN DUE TO COVID-19 OUTBREAK

The Québec.ca site (2020, www.quebec.ca/) indicates that depression is a temporary state of weariness, discouragement and sadness that can manifest itself in different ways, both physically and psychologically. Its intensity varies from one person to another. More than half (54.5%) of the participants showed no signs of depression. Furthermore, we do not observe any effect of the number of days of confinement on anxiety, even if this effect is significant with the teaching cycle on depression, $F(2.237) = 3.54, p = 0.03$. However, the level of mild depression is expressed in 22.9% against 15% for moderate depression and 6.7% for severe depression.

Table 3. Different depression thresholds depending on certain characteristics of the participants

Variables	Depression level n (%)				P
	Absence	Mild	Moderate	Severe	
Gender					
Male ($n=89; M=4.25; SD=5.18$)	57 (23.8)	13 (5.4)	14 (5.8)	5 (2.1)	.232
Female ($n=151; M=5.13; SD=5.61$)	76 (31.7)	42 (17.5)	22 (9.2)	11 (4.6)	
Order of education					
Public ($n=190; M=4.46; SD=5.15$)	109 (45.4)	46 (19.2)	25 (10.4)	10 (4.2)	.056
Private ($n=50; M=6.12; SD=6.40$)	24 (10.0)	9 (3.8)	11 (4.6)	6 (2.5)	
City/Town of Residence					
Region ($n=209; M=5.06; SD=5.65$)	114 (47.5)	47 (19.6)	32 (13.3)	16 (6.7)	.061
Department ($n=31; M=3.09; SD=3.55$)	19 (7.9)	8 (3.3)	4 (1.7)	0 (0.0)	
Confinement Habit					
Yes ($n=149; M=4.37; SD=5.33$)	87 (36.2)	35 (14.6)	20 (8.3)	7 (2.9)	.117
No ($n=91; M=5.51; SD=5.62$)	46 (19.2)	20 (8.3)	16 (6.7)	9 (3.8)	
Sick of Covid-19					
Yes ($n=10; M=1.10, SD=1.59$)	9 (3.8)	1 (0.4)	0 (0.0)	0 (0.0)	0.28
No ($n=230; M=4.96, SD=5.51$)	124 (51.7)	54 (22.5)	36 (15.0)	16 (6.7)	
Affected loved one/neighbor					
Yes ($n=20; M=5.65; SD=5.13$)	9 (3.8)	8 (3.3)	1 (0.4)	2 (0.8)	.473
No ($n=220; M=4.73; SD=5.49$)	124 (51.7)	47 (19.6)	35 (14.6)	14 (5.8)	

Note. M: average; SD: standard deviation; n: sample; p: critical probability

3.2 COPING WITH PSYCHOLOGICAL EFFECTS DURING CONFINEMENT

Participants relied on different organizational modalities and on a variety of social, personal and spiritual factors to maintain a positive attitude during confinement. The descriptive analysis of the participants' speech indicates that 10.46% did not set up any particular organisation strategy during the lockdown. They were living as they did before the outbreak of the Covid-19 pandemic. In contrast, out of 90% of participants who took steps to ensure proper containment, the organisation consisted of four major activities. First, the provision of essential food and protective equipment such as a first aid kit, hydro-alcoholic gel and protective masks; with 27.78% of the indicators. Secondly, through learning activities (47.19%). In this strategy, university research comes first with 19.41%, followed by learning assistance to children (13.89%) and teachers' auto-didactic activities (13.89%). Thirdly, leisure activities and finally distance learning with respectively 11.11% and 8.33% of organisational indicators. Some have moved to rural areas to avoid the psychological effects of Covid-19.

4 DISCUSSION

Confinement has undeniable effects on the psychological well-being of those who are confronted with it. In the event of a pandemic, these effects are noticeable before, during and sometimes persist for several years (Jeong et al., 2016).

4.1 PSYCHOLOGICAL CONSEQUENCES OF CONFINEMENT AMONG TEACHERS

Our results show that from the announcement of the government decision marking the start of confinement, its modalities and duration, Cameroonian teachers experienced mixed emotional reactions including those with a positive connotation: joy, feeling of relief. The negative emotional reactions were mainly those of worry, fear, doubt, etc. These contrasting reactions would testify to the diversity of possible reactions to such a situation (Thiébaux, 2020). Moreover, these first negative psychological manifestations reflect the presence of a real or imminent threat. While it could not be associated with the confinement, it could still be understood. Because any pandemic period is potentially traumatic (Hartley et al., 2020), whether one is directly concerned or not (Thiébaux, 2020). The pandemic which first broke out in China and spread through Europe, sparked great worry when a first case of covid-19 was reported in Africa. The announcement of the start of confinement is thus seen as the beginning of a real ambiguous adventure (Kane, 1961) since all the experts predicted the worst for Africa (WHO, 2020; www.who.int/). Others then called for a reaction of solidarity for Africa and favelas (Cattacin, 2020; Nkengasong & Mankoula, 2020). Some of our participants, while finding relief from this decision setting the start of confinement, discreetly allows one to see that they were already in psychological distress by the general disease situation around the world. Therefore, the government's communication reassured teachers and helped them give sense to the situation (Soulet, 2005).

The academic level of our participants was deduced from their recruitment diploma. Contrasting studies emphasize that the level of education is not associated with psychological effects during confinement (Hawryluck et al., 2004; Zhang & Ma, 2020); our analysis rather suggests that the level of education (inferred from the educational cycle) is significantly associated with the psychological consequences during confinement. In fact, primary school teachers were more exposed to stress, anxiety and depression than their high school and college colleagues. Thus, if the interruption of primary school classes marked the end of any intellectual activity that could occupy a significant part of these teachers' time, this was not the case for secondary school teachers and even more so for those in higher education who have research and supervision as a complementary activity to teaching. Primary school teachers can therefore suffer from social isolation due to the feeling of loneliness, boredom resulting from the loss of daily routines (Deloche-Gaudez, 2020; Mengin et al., 2020). Research and research supervision constitute a source of activity during confinement for higher education teachers and justifies their relatively good mental health. However, the fact that secondary school teachers have a better mental health state compared to primary school teachers appears complex to understand.

Regarding stress, the results of this study show that the period of confinement was experienced with more difficulty for nearly 57% of participants. Specifically, 89.9% of our participants suffered from stress, with 66.0% throughout the confinement period. Other studies have reported very low numbers between 2% to 30% of the population for the levels: mild, moderate and severe (Cao et al., 2020; Zhang & Ma, 2020). Our conclusions are however very close to the 53.8% obtained from the Chinese population two weeks after the outbreak of the pandemic (Wang, C. et al., 2020). A few months after the Ebola crisis in West Africa, 76.4% of survivors were still suffering from stress (Jalloh et al., 2018). The very high stress scores obtained on the African continent are said to be due to the abundant communication around the small capacity of African countries to face major health crises (Cattacin, 2020; WHO, 2020; www.who.int/) and even the image of a "starving Third World" Africa conveyed for decades (Dumont, 1965, cited by Pumain, 2020). Africans would thus feel confronted with death or a death threat when an epidemic or pandemic is declared on their territory (Thiébaux, 2020).

Concerning anxiety, with the onset of the pandemic and the start of confinement, citizens' habits changed significantly. These changes, combined with other factors, are likely to generate anxiety symptoms or even establish disorders (Mengin et al., 2020). Our initial results show that 20.1% of the participants showed no signs of anxiety while 23.4% had a mild level of anxiety. 56.5% of the participants showed moderate/severe levels of anxiety. This proportion is close to the 48.6% obtained in Sierra Leone a few months after the Ebola crisis (Jalloh et al., 2018); but also, the 47.2% obtained during isolation due to Middle East Respiratory Syndrome (Jeong et al., 2016). On the other hand, this threshold is twice as high as the 33.6% (moderate/severe anxiety) reported in Hong Kong during the SARS-CoV-1 epidemic (Chan et al., 2007) and three times greater than the 23.8% reported in Great Britain during H1N1 influenza (Rubin et al., 2009). Our higher score is justified by the fact that the Covid-19 crisis was managed with much more difficulties than previous crises like that of SARS in 2003 (Fardin, 2020) which would have raised the worry threshold. It should also be noted that the number of days of confinement noted in these studies is relatively low (between 5 and 21 days) compared to that of our study (between 15 and 80 days). The duration of the confinement would justify that the participants had a high level of anxiety (Deloche-Gaudez, 2020). In this same perspective, several studies recommend not extending the confinement period for a long time to optimize the mental well-being of citizens (Ozamiz-Etxebarria et al., 2020; Wang, G. et al., 2020).

Concerning depression, 22.9% of the participants had mild levels of depression, compared to 15.0% for moderate levels and 6.7% for severe levels. Wang, C. et al. (2020) report similar proportions: 12.2% for moderate depression and 4.3%, severe/extreme depression. Our results are also close to 12.3% obtained in Hong Kong during the SARS-CoV-1 epidemic (Lee et al., 2006). These values are low compared to the 48.6% obtained a few months after the Ebola epidemic in Siéra Leone (Jalloh et al., 2018). Our thresholds would be linked to the multiplication of cases of coronavirus declared in Cameroon towards the end of March. After the identification of the first case on March 06, 2020, the curve rapidly rose to 529 cases two months later. The country then occupies third place in terms of

contamination in Africa after Algeria, Burkina Faso (www.afro.who.int/). Awareness of the reality of the threat due to Covid-19 would explain the lack of interest from participants. This is because, at the onset of the disease in China, not everyone took the threat of the disease seriously. With the arrival of the first cases and the start of confinement, people began to perceive the effects of monotony (Ozamiz-Etxebarria et al., 2020). The information shared on social networks and some official media could help understand this threshold for the expression of depressive symptoms. Indeed, information on the invulnerability of Africans to coronaviruses, the project to test an anti-covid-19 test on Africans had gone viral on social networks and certain international media. This type of information only keep populations in anxiety. Finally, our study reveals that age is not significantly associated with the expression of depressive symptoms. Gender was not determinant in the manifestation of depressive symptoms in our participants. These observations are supported by the conclusions of Huang and Zhao (2020).

4.2 STRATEGIES USED BY TEACHERS TO COPE WITH AND COPE WITH PSYCHOLOGICAL EFFECTS

Faced with any exotic and little-known situation such as that of the novel coronavirus, individuals develop various coping strategies. The descriptive analysis of the participants' speech indicates that nearly 90% of the participants took measures to reduce the psychological discomfort. Firstly, the provision of essential food and protective equipment such as hydro-alcoholic gel and protective masks. This attitude is in line with WHO recommendations (2020; www.who.int/) on the need to maintain a healthy lifestyle if one is called to stay at home during confinement. This includes: a suitable diet, regular exercise and above all maintaining social contact with loved ones by email or phone. Brooks et al. (2020) recognized that the provision of essential materials is fundamental to cope with the effects of containment. Only, this should be done before the start of confinement and a conservation plan must be made including relocation plans to avoid any surprises.

Secondly, come the learning activities (47.19%). In this strategy, university research comes first with 19.41%, followed by learning assistance to children (13.89%) and teachers' auto-didactic activities (13.89%). These teacher's activities thus contribute to maintaining a daily rhythm of activity. Just like leisure activities and distance learning. Sahu (2020) recognizes the importance and necessity of the establishment of online education by academic authorities as an effective strategy against the psychological effects of confinement due to the spread of the coronavirus. The Swiss Federation of Psychologists (SFP) recognizes that confinement is a burdensome situation that one should be lived without stress. To arrive at that, she says that the education of children or the resolution of conflicts between spouses should not be put forward. However, one must keep their usual daily routine activities and plan with precision the time slots dedicated to school time and leisure (www.psychologie.ch/fr/).

5 CONCLUSION

Our research aimed to understand the experience of confinement, its psychological consequences on Cameroonian teachers and the strategies they put in place to deal with it and get out of it. It appears that teachers suffered psychically during the period of confinement due to the new coronavirus. Stress appears to be the first psychological consequence, followed by anxiety and finally depression. Lack of appropriate information, over-information, the image of an incapable Africa and unrestricted information shared by traditional and new media could justify this high propensity for psychological suffering. In addition, to cope and improve their subjective well-being, teachers followed the recommendations of the WHO and mental health experts, by providing themselves with food supplies, and also by getting versed with distance education activities during confinement. The results of this study suggest continuing research on the psychological effects of confinement on teachers using a larger sample, to have an in-depth understanding of their experience of confinement, to identify the psychosocial factors associated with the psychological consequences, to implement methods of psychological intervention for them.

AUTHORS' CONTRIBUTIONS

SOH Gustave, conceptualization and background. TACHOM WAFFO Boris, methodology. WAMBA André, conceptualization and conclusion. SAAH Handson KEWIHNU, discussion. TAGNE NOSSI Alain, literature review and final draft. All authors have read and approved the final version of the manuscript.

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