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COVID-19 LOCKDOWN, LOCUS OF CONTROL AND STATE ANXIETY AMONG RESIDENTS OF PLATEAU STATE NIGERIA

Dauda Akwai Saleh[1] Ibrahim Dauda Arobo[2] James Abel[3] Teplong Joyce Ibrahim[4] Jonah Zumlong Damilep[5] Sunday Dakama[6] Haa Nevin Terry[7]

[1& 5]Department of Psychology, Plateau State University Bokkos, Plateau State, Nigeria
[2]Nigerian Police Academy Wudil, Kano State, Nigeria
[3]Department of Psychosocial and Mental Health Services, Nigerian Army Medical Corps
[4]College of Life and Environmental Sciences (CLES), University of Exeter, United Kingdom
[6]Department of Sociology, Federal University Wukari, Taraba State, Nigeria
[7]Centre for Addiction Treatment and Research Vom, Plateau State, Nigeria

Corresponding author: salehakwai@yahoo.com; +2348034671485

ABSTRACT: *A total of 406 participants include 211 (52.0%) males and 195 (48.0%) females participated in this study. Three (3) hypotheses were tested using linear regression at 0.05 significant level. Findings of the study revealed that, the value of the calculated statistic of COVID-19 lockdown was significant, t = 7.070, p = 0.000 (p <.05). The value of calculated statistics of internal locus of control was not significant, t = 1.708, p = 0.088 (p>.05). Furthermore, the value of calculated statistics of external locus of control was significant, t = -4.088, p = 0.000 (P<.05). The researchers conclude that mental health status of individuals should be taken into consideration during and after the COVID-19 pandemic. It is therefore, recommended that mental health practitioners such as clinical psychologists and psychiatrists should be included as part of the task force to address COVID-19 pandemic considering the possible increase of mental health challenges during and after the pandemic.*

KEYWORDS: COVID -19, lockdown, locust of control, anxiety

INTRODUCTION

In March 2020, assessment showed that COVID -19 can be characterized as a pandemic (World Health Organization [WHO], 2020). COVID-19 pandemic has become the central focus of health globally. Shanafelt, Ripp, and Trockel (2020) reported that the pandemic has affected people in all nations, continents, races, and socioeconomic groups. Quarantining of entire communities, closing of schools, social isolation, and shelter-in-place orders have abruptly changed daily life. According to National Association of School Psychologists (2020), lockdowns can save lives and are considered best practice in crisis response. Thus, measures to curb the spread of the virus such as lockdown (which involves mandatory stay at home with restriction of movement), social distancing, and closing of schools, organisations, worship places and non-essential services have been imposed by

the Plateau State government. However, depending on circumstances, some lockdowns may produce anxiety, stress and traumatic symptoms. Among 1210 respondents in China, Wang, Pan, Wan, Tan, Xu, Ho, and Ho (2020) discovered that, 53.8% reported the psychological impact of the outbreak of COVID-19 as moderate or severe; 16.5% reported moderate to severe depressive symptoms; 28.8% reported moderate to severe anxiety symptoms; and 8.1% reported moderate to severe stress levels. Those affected by quarantine are likely to report distress due to fear and risk perceptions (Johal, 2009).In a study on the panic of Filipinos during COVID-19 pandemic in the Philipines, Nicomedes and Avila (2020) reported that it is very evident that respondents are suffering from moderate level of anxiety.

During outbreaks, individuals are put under extreme stressful condition resulting in higher risk of developing anxiety and depression particularly for students and healthcare professionals (Naser, Dahmash, Al-Rousan, Alwafi, Alrawashdeh, Ghoul… & Dagash, 2020).During the severe acute respiratory syndrome (SARS) epidemic of 2002 – 2004, high prevalence of posttraumatic stress disorder (PTSD) symptoms, anxiety, fear, depression and frustration among emergency professionals involved in the SARS epidemic of 2002- 2004 was found**(**Wei, Han, Liu, Liu, & Huan, 2004; Wu, Fang, Guan, Fan, Kong, Yao, …& Hoven, 2009). Among healthcare professionals, valid social support, self-efficacy, internal locus of control (LOC) and Sense of Coherence (SOC) have been considered as resilience factors in previous studies (Conversano, Marchi, & Miniati, 2020). A more external locus of control was negatively associated with psychological well-being (Weintraub, Mamani, & Tawfik, 2015). Farahati, Tehrani and Khoshro (2014) found significant positive relationship between external locus of control and anxiety. But significant relationship between anxiety and social phobia and internal locus of control was not found. Among men athletes, Fard and Khosravi (2015) did not find any meaningful relationship between internal and external locus of control and competitive anxiety.

Statement of the problem

Even though the stay-at- home and lockdown laws have been implemented in many parts of the world, in Nigeria, the Plateau State government as a way of controlling the spread of the virus had issued the stay-at-home and recently a total lockdown throughout the State. Globally, researchers have reported negative psychological effects of lockdown and based on the hallmarks of previous pandemics like the 1918 Spanish Flu pandemic, 1889 & 1977 Russian Flu, 1957 Asian Flu, 1968 Hong Kong Flu and the 2009 Influenza A(H1N1) pandemic in the Netherlands (Gilman, 2010), as history shows a pandemic's ability to cause major disruptions in individual's and group's executive functioning, creating chronic anxiety, distress and fear.

To the best of the researchers' knowledge globally there have been many research conducted in relation to COVID-19 and its implication on mental health. However, in Nigeria, only few research focus on the mental health implication of lockdown in relation to COVID-19. In Plateau State, anxiety is perceived to be common due to the current change; therefore, this study is aimed at revealing trends in the COVID-19 lockdown,

locust of control and state anxiety among residents of Plateau State Nigeria. At the time of this study only 3 cases of COVID-19 were reported in Plateau State. Thus it is hypothesized that;

1. COVID-19 lockdown will significantly predict anxiety.
2. Internal locus of control will significantly predict anxiety.
3. External locus of control will significantly predict anxiety.

METHOD

Research design

Online survey design is adopted in this study. Due to the stay-at-home and lockdown law put in place as measure to control the spread of COVID-19 in Plateau state, it was impossible to conduct face –to- face interview. Thus, online survey design is found suitable for this study.

Participants

A total of 406 participants include 211 (52.0%) males and 195 (48.0%) females participated in this study. In terms of age, majority 228 (56.2%) were between 35 – 49 years, followed by those between 18-34 (36.0%) years, those between 50 – 64 years were 31 (7.6%) and only 1 (0.2%) participant falls within the category of 65 years and above. In relation to marital status, majority 253 (62.3%) were married compared to singles and divorcee with 152 (37.4%) and 1 (0.2%) respectively. In terms of religion, majority 388 (95.6%) were Christians followed by 17 (4.2%) that were Muslims and only 1 (0.2%) indicate religion as others. In relation to educational status, majority 296 (72.9%) hold postgraduate degree, 106 (26.1%) hold undergraduate degree and 4 (1.0%) hold Secondary School Certificate Examination (SSCE). In terms of family composition, majority 228 (56.2%) live with 4 – 8 persons, 119 (29.3%) live with 2 – 3 persons, 35 (8.6%) live alone and only 24 (5.9%) live with 9 persons and above. Among the study participants, 231 (56.9%) indicate that they were prepared for the lockdown while 175 (43.1%) indicate that they were not prepared for the lockdown.

Instruments

State- Trait Anxiety Inventory (STAI), Form Y-1

State- Trait Anxiety Inventory (STAI), FormY-1 was developed by Spielberger (1983). The STAI was adopted for the use of professionals in Nigeria after several years of research and was re-standardized for use among Nigerians. State- Trait Anxiety Inventory, form Y is the second modified version of the STAI series. The first version called STAI form X was developed in 1970 by Speilberger, Gorsuch & Lushere. The Y-1 and Y-2 forms of STAI have 20 items each designed to measure different aspects of anxiety as characteristics of personality (Omoluabi, 1997). In this present study, only STAI Y-1 (state anxiety) is used for data collection as a measure of anxiety. Spielberger (1983) provided the original psychometric properties for American samples while Omoluabi (1987) provided the properties for Nigerian samples. Omoluabi (1987, 1997) provided reliability for American

($\alpha = .91$ for males and $\alpha = .93$ for females, test – retest Male = .33 and females = .31) and Nigerian samples, (test-retest Male & Female = .61). The concurrent validity coefficients of .69 (MAACL today M&F) and .43 (MAACL General M&F) were reported between Y-1 Scale of STAI and MAACL (Anxiety) by Zuckerman and Lubin (1965). The mean score for form Y-1 by Omoluabi (1987) were M = 35.72 and F = 35.20 (American Samples) and mean score of 33.59 for M&F (Nigerian samples).

Short Scales for the Assessment of Locus of Control Orientations in Population Surveys

Short Scales for the Assessment of Locus of Control Orientation in Population Survey (German version: Kurzskalen zur Messung von Kontrollüberzeugungen in Bevölkerungsumfragen, KMKB) was developed by Jakoby and Jacob (1999). The KMKB scales have been developed according to the theoretical background of Rotter's Social Learning theory. The KMKB consist of two subscales, each comprised of three items. The first three items of the KMKB measure internality (ILOC) and the next three assess externality (ELOC). Jakoby and Jacob (1999) had developed the scale on the basis of the data of an extended heterogeneous sample from the 1995 Sozialwissenschaftliche Bevölkerungsumfrage [English: Social Sciences Omnibus Survey] (SOWIBUS omnibus survey), and validated on the data of the 1996 SOWIBUS omnibus survey: The internal consistencies reported by the authors are .62 to .71 for ILOC and .58 to .64 for ELOC. Jakoby and Jacob (1999) reported validity of .70 for ILOC and .58 for ELOC. Similarly, Hancock (2001) yielded reliability coefficients of .77 for the ILOC- and .64 for the ELOC subscale.

Procedure

Survey monkey approach utilizing online Google forms was used to generate data for this study. The link for the Google forms was sent to each of the researchers' Gmail address and WhatsApp (a social media account), WhatsApp was use to guarantee respondent confidentiality this application is secured by end to end encryption. On the online form description it was clearly stated that the study is aimed at examining COVID-19 lockdown, locus of control and state anxiety in Plateau State.Thus, each of the researchers send link to the online Google form to their contacts that were as at the time of data collection residing in Plateau State Nigeria. Those that consent to participate were requested to forward the online link also to their contacts that are residents of Plateau state. Consent to participate was sought individually on the description of the online questionnaire. Each respondent was requested to respond to the questionnaire once, Respondent's socio-demographic characteristics, State- Trait Anxiety Inventory (STAI), Form Y-1 and Short Scales for the Assessment of Locus of Control Orientations in Population Surveys were included on the online Google forms. Participants' responses were automatically recorded and saved in the online Google form platform. After two weeks of data collection, the online Google form was stopped from receiving responses.

RESULT

Table 1: Model summary of regression model 1

R^2	F Change	df1	df2	Sig. F Change	Durbin-Watson
.403[a]	26.049	3	402	.000	1.893

The result of the regression model 1 summary revealed that the coefficient of determination $R^2 = 0.40.3$, $F_{(3, 402)} = 0.000$, DW = 1.893 (5% level of significance). This showed that the model can be held for 40.3% change in anxiety. The F-statistic (ANOVA) of the model had closeness of fit which means that the model is statistically significant at 5% ($p \leq 0.05$) level of significance. The Durbin-Watson value of 1.893 shows that autocorrelation between the variables under consideration have multicollinearity.

Table 2: Coefficients of Regression Model 1

Model	Unstandardized Coefficients		Standardized coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	38.069	3.416		11.143	.000
COVID-19 Lockdown	7.878	1.114	.325	7.070	.000
Internal Locus of Control	.561	.329	.078	1.708	.088
External Locus of Control	-.993	.243	-.188	-4.088	.000

The result of hypothesis one reveals that the regression coefficient of COVID-19 lockdown in the estimated regression line is 0.325 which indicates that 32.5% of the change in anxiety was accounted for by COVID-19 lockdown. The value of the calculated statistic of COVID-19 lockdown was significant, t = 7.070, $p = 0.000$ ($p < .05$). The hypothesis that COVID-19 lockdown will significantly predict anxiety is supported. Table 2 shows the details of the result.

The result of hypothesis two reveals that the regression coefficient of internal locus of control in the estimated regression line is 0.078 which indicates that 7.8% of the change in anxiety was accounted for by internal locus of control. The value of calculated statistics of internal locus of control was not significant, t = 1.708, $p = 0.088$ ($p > .05$). The hypothesis that internal locus of control will significantly predict anxiety is not supported. Table 2 shows details of the result.

The result of hypothesis three reveals that the regression coefficient of external locus of control in the estimated regression line is 0.188 which indicates that 18.8% of the change in anxiety was accounted for by external locus of control. The value of calculated statistics of external locus of control was significant, t = -4.088, $p = 0.000$ ($P < .05$). The hypothesis that external locus of control will significantly predict anxiety was supported. Table 2 shows details of the result.

DISCUSSION

This study is designed to investigate COVID-19 lockdown, locus of control and anxiety in Plateau State Nigeria. Findings revealed thatCOVID-19 lockdown significantly predict anxiety among residents of Plateau State Nigeria. Lockdown is new to residents of Plateau State, when the state government announced the lockdown decision, most residents of the state indulged in panic buying due to the fear of the unknown. This may explain why result of first hypothesis is significant. Finding of this study is in line with earlier studies. Association of School Psychologists (2020) reported that lockdown may produce anxiety, stress and traumatic symptoms. Similarly, in China, Wang et al (2020) reported that 28.8% of their study participants reported moderate to severe anxiety symptoms.Furthermore, findings showed that among residents of Plateau state Nigeria, internal locus of control did not predict anxiety. Similarly, among athletic men, Fard and Khosravi, (2015) reported that significant relationship between internal and external locus of control and competitive anxiety was not found**.** Furthermore, Farahati, et al (2014) did not find significant relationship between anxiety and internal locus of control. But significant positive relationship was found between external locus of control and anxiety among residents of Plateau Nigeria. This is so because, individuals with external locus of control depends largely on their environment therefore reacted with anxiety over the lockdown period this means when people are highly dependent on their external world reaction to anxiety is high. Finding of this study is in line with the findings of Farahati, et al (2014).Similarly, Shanafelt, et al (2020) reported that COVID-19 pandemic has affected people of all nations, continents, races, and socioeconomic groups. Naser, et al (2020) reported that during outbreaks students and healthcare professionals are put under stressful situation resulting in high risk of developing anxiety.

CONCLUSION

Drawing from the findings of this study, the authors conclude thatCOVID-19 lockdown and external locus of control significantly predict anxiety among residents of Plateau State Nigeria. But internal locus of control did not predict anxiety. Therefore, mental health status of individuals should be taken into consideration during and after the COVID-19 pandemic. It is therefore, recommended that mental health practitioners such as clinical psychologists, psychiatrists and medical social workers should be included as part of the task force combating COVID-19 pandemic considering the possible increase of mental health challenges during and after the pandemic.

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