Compliance with school-based social distancing practices among teachers and head teachers during coronavirus disease 2019 pandemic in vocational enterprises institutes in Abuja, Nigeria

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Abstract: The study ascertained the level of compliance with school-based social distancing practices among teachers and head teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria. Two research questions were raised to guide the study and one hypothesis was formulated and tested at .5 level of significant. The research design used for this study was the descriptive survey research design, specifically, using cross-sectional study. The population of the study was 154 respondents consisting of 91 male and 63 female teachers. Total population sampling technique was used to select the whole population of the study. The instrument used for data collection was compliance with School-Based Social Distancing Practices Scale (S-BSDPS). The reliability indices of the instrument were found to be .88 and .91 using Cronbach Alpha statistical method. The study employed the use of mean to answer the research questions and Analysis of Variance (ANOVA) to test the null hypothesis using Statistical Package for Social Sciences (SPSS) version 25. Findings revealed that, teachers complied with 6 items and failed to comply with 1 item while head teachers complied with 7 and failed to comply with 5 items on the school-based social distancing practices scale. The study recommended that, the education secretariat of the Federal Capital Territory, Abuja should enforce the full compliance with school-based social distancing practices among head teachers during COVID-19 pandemic

Key words: Compliance, Coronavirus, Disease, Social, Distancing, Teachers and Head Teachers

INTRODUCTION

Coronavirus disease 2019 also called COVID-19 is an infectious disease caused by a newly discovered coronavirus. The COVID-19 is known to cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) (American Academy of Family Physicians, 2019). According to World Health Organization (2020), the COVID-19 spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. In an attempt to contain the spread of COVID-19, most governments around the world have temporarily closed educational institutions such as school.
School is socially dense environments where students congregate for many hours of the day striving to achieve a certain goal. School closure policies met with heavy criticism from the public within and outside Nigeria due to the associated loss of productivity. Sadique et al. (2020) indicated that, school closure during pandemic such as COVID-19 could have a negative economic impact and thus, it is potentially a costly intervention for countries to impose. Although, research is still being conducted on the issue, it is unclear how beneficial school closure is with regard to slowing or minimizing the transmission of COVID-19 pandemic on local and national scales. In fact, the efficacy of school closure at preventing disease spread is unknown in general because school closure is often confounded by increased circulation of children outside of school which is difficult to handle (Chao, Halloran & Longini, 2019). In the management of COVID-19 pandemic, it will often be prudent to employ procedures and interventions that will ensure or create conditions of school-based social distancing.

School-based social distancing is deliberately increasing the physical space between people to avoid spreading illness in schools. Hensley (2020) described school-based social distancing as a set of non-pharmacutical interventions or measures taken to prevent the spread of contagious disease such as COVID-19 in schools by maintaining a physical distance between people by reducing the number of times people come into close contact with each other. It involves keeping a distance of six feet (two meters) from others and avoiding gathering together in large groups of students. According to Chen et al. (2020), social distancing is the most effective strategy to reduce the transmission of COVID-19. Social distancing seeks to reduce the effective number of contacts between individuals within a community, and have been shown via post hoc analysis to ameliorate the impacts of previous influenza pandemics, e.g., the 1918 Spanish influenza pandemic (University of Minnesota, 2020). School-based social distancing practices are enforced teachers and head teachers.

Teachers are bedrock of any sound educational system just as education is to any developed nation. As schools are reopened after the forced lockdown, teachers are tasked to comply with the school-based social distancing practices to curb the transmission of COVID-19 pandemic. According to Grubic et al. (2020), teachers need to comply with the school-based social distancing practices such as avoiding students’ congregation during laboratory/workshop activities, dividing classes into smaller groups, moving desks apart, and cancelling classes that bring together students from different classrooms in order to lower the transmission of COVID-19 pandemic in schools. Brooks et al. (2020) stressed that, complying with the school-based social distancing practices should not be adhered by both teachers and head teachers. Head teachers are educational professional trained to pilot the affairs of school system. Sarah et al. (2020) noted that, head teachers need to comply with the school-based social distancing practices such as cancelling assembly, closing of playground, shortening school days per week: 3 days instead of 5, cancelling fieldtrips, and cancelling afterschool activities in order to lower the transmission of COVID-19 pandemic in schools. Zumla et al. (2010) confirmed that, the effectiveness of school-based social distancing practices in curbing the transmission of COVID-19 pandemic could only be achieved with teachers’ and head teachers’ compliance.

Compliance could be seen as the act of conforming in fulfilling certain requirements. Merriam-Webster Dictionary (2021) defined compliance as the act or process of complying to a desire, demand, proposal, or regimen or to coercion. It is expected of teachers and head teachers to comply with the school-based social distancing practices to curb the transmission of COVID-19 pandemic. Rully et al. (2020); Paola and Imran (2020) observed that, compliance with social distancing is needed in order to reduce the spread of viruses...
that are transmitted from person to another. Since social distancing is crucial in curbing the transmission of COVID-19, it is important to know whether individuals will effectively comply with the practice. University of Minnesota. (2020) stressed that, the current circumstances of COVID-19 pandemic are unprecedented and the compliance rate of school-based social distancing over an extended period of time is unknown. Hence, this study sought to provide empirical evidence of the compliance with school-based social distancing practices among teachers and head teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria.

Statement of the Problem
School is a social structure designed to provide essential teaching and learning services aimed at training students with the right attitudes, knowledge and skills to function productively in the society. Unfortunately, the novel COVID-19 pandemic causes high social and economic costs for school system due to closures. According to United Nations Educational, Scientific and Cultural Organization (UNESCO, 2020), the nationwide closures of schools is impacting over 89% of the world’s student population. When schools shut down, more children are recruited into militias, sexual exploitation of girls and young women rises, teenage pregnancies become more common, and child labour grows (Uscher-Pines, 2018). School-based social distancing practices is currently considered the most effective countermeasure against the rapid transmission of COVID-19 in schools. Ridenhour et al. (2020) confirmed that, by utilizing school-based interventions such as social distancing practices, lives and economic losses could be minimized, thereby reducing concerns regarding the transmission of COVID-19. Zumla et al. (2010) confirmed that, the effectiveness of school-based social distancing practices in curbing the transmission of COVID-19 pandemic could only be achieved with teachers’ and head teachers’ compliance. Hence, this study sought to provide empirical evidence of the compliance with school-based social distancing practices among teachers and head teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria.

Aim and Objectives of the Study
The aim of the study was to ascertain the level of compliance with school-based social distancing practices among teachers and head teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria. Specifically, the objectives of the study sought to ascertain the level of:


Research Question
The following research questions were raised and answered:

1. What are the level of compliance with school-based social distancing practices among teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria?
2. What are the level of compliance with school-based social distancing practices among head teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria?

Hypothesis
The following null hypothesis was stated and tested at .05 level of significant:

\[ H_0: \text{There is no significant difference between the mean responses of male and female teachers on the level of compliance with school-based social distancing practices during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria.} \]

Methodology
The research design used for this study was the descriptive survey research design, specifically,
using cross-sectional study. Maninder (2016) described cross-sectional study as the type that involves collection of data from a population at one specific point in time. This design is considered suitable for this study because, it enables the researcher to ascertain the level of compliance with school-based social distancing practices among teachers and head teachers during COVID-19 pandemic at the same time. The population of the study was 154 respondents consisting of 91 male and 63 female teachers from the six area councils in Abuja, Nigeria. Total population sampling technique was used to select the whole population of the study. The instrument used for data collection was compliance with School-Based Social Distancing Practices Scale (SBDS) by Arah et al. (2020). The instrument was designed on five points rating scale of: Highly Complied, Complied. Not Complied, High Not Complied and Undecided, with numerical values of 5, 4, 3, 2 and 1 respectively. The instrument consists of two parts, A and B. Part A contained statement on school-based social distancing practices for teachers while Part B contained statement on school-based social distancing practices for head teachers. The reliability indices of the instrument were found to be .88 and .91 using Cronbach Alpha statistical method. The study employed the use of mean to answer the research questions and Analysis of Variance (ANOVA) to test the null hypothesis using Statistical Package for Social Sciences (SPSS) version 25. Decision on the research questions was based on real limit of numbers while decision on the hypothesis was based on comparing the generated p-value and the stated level of significance (.05).

Results:
Research Question One
What are the level of compliance with school-based social distancing practices among teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria?

Table 1: Mean Responses of Male and Female Teachers on the Level of Compliance with School-Based Social Distancing Practices during COVID-19 Pandemic in Vocational Enterprises Institute in Abuja, Nigeria

<table>
<thead>
<tr>
<th>S/ N</th>
<th>Items</th>
<th>( \bar{X}_1 )</th>
<th>( \bar{X}_2 )</th>
<th>( \bar{X}_3 )</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Avoiding students’ congregation during laboratory/workshop activities</td>
<td>4.08</td>
<td>3.81</td>
<td>3.95</td>
<td>Complied</td>
</tr>
<tr>
<td>2.</td>
<td>Dividing classes into smaller groups</td>
<td>4.04</td>
<td>4.12</td>
<td>4.08</td>
<td>Complied</td>
</tr>
<tr>
<td>3.</td>
<td>Moving desks apart</td>
<td>4.02</td>
<td>3.94</td>
<td>3.98</td>
<td>Complied</td>
</tr>
<tr>
<td>4.</td>
<td>Cancelling classes that bring together students from different class rooms</td>
<td>4.04</td>
<td>4.02</td>
<td>4.03</td>
<td>Complied</td>
</tr>
<tr>
<td>5.</td>
<td>Rearranging classroom to keep students further apart</td>
<td>4.04</td>
<td>3.98</td>
<td>4.01</td>
<td>Complied</td>
</tr>
<tr>
<td>6.</td>
<td>Limiting group activities and interaction between classes</td>
<td>3.92</td>
<td>4.02</td>
<td>3.97</td>
<td>Complied</td>
</tr>
<tr>
<td>7.</td>
<td>Holding classes outdoors</td>
<td>3.02</td>
<td>3.22</td>
<td>3.12</td>
<td>Not Complied</td>
</tr>
</tbody>
</table>

Keys: \( N_1 = \) Numbers of Male Teachers, \( N_2 = \) Numbers of Female Teachers, \( \bar{X}_1 = \) Mean of Male Teachers, \( \bar{X}_2 = \) Mean of Female Teachers, \( \bar{X}_A = \) Average mean of Male and Female Teachers.

Table 1 revealed that, 6 out of the 7 items had average mean values between 3.95 to 4.08 while the remaining 1 item had average mean value of 3.12. This indicated that, teachers in Vocational Enterprises Institute in Abuja, Nigeria complied with 6 items and failed to comply with 1 item on the school-based social distancing practices scales.

Research Question Two
What are the level of compliance with school-based social distancing practices among head teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria?

Table 2: Mean Responses of Male and Female Teachers on the Head Teachers’ Level of Compliance with School-Based Social Distancing Practices during COVID-19 Pandemic in Vocational Enterprises Institute in Abuja, Nigeria
between the social distancing practices among teachers in Vocational Enterprises Institute in Abuja, Nigeria revealed that, head teachers in Vocational Enterprises Institute in Abuja, Nigeria complied with 7 and failed to comply with 5 items on the school-based social distancing practices scales.

**Hypothesis One**

There is no significant difference between the mean responses of male and female teachers on the level of compliance with school-based social distancing practices during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>X̄1</th>
<th>X̄2</th>
<th>X̄3</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>Cancelling assembly</td>
<td>2.08</td>
<td>2.26</td>
<td>2.17</td>
<td>Not Complied</td>
</tr>
<tr>
<td>9.</td>
<td>Closing of playground</td>
<td>4.04</td>
<td>4.22</td>
<td>4.13</td>
<td>Not Complied</td>
</tr>
<tr>
<td>10.</td>
<td>Shortening school days per week</td>
<td>2.20</td>
<td>2.26</td>
<td>2.23</td>
<td>Complied</td>
</tr>
<tr>
<td>11.</td>
<td>Cancelling fieldtrips</td>
<td>4.14</td>
<td>4.18</td>
<td>4.16</td>
<td>Complied</td>
</tr>
<tr>
<td>12.</td>
<td>Cancelling afterschool activities</td>
<td>4.04</td>
<td>4.10</td>
<td>4.07</td>
<td>Complied</td>
</tr>
<tr>
<td>13.</td>
<td>Reducing school activity calendar</td>
<td>2.92</td>
<td>2.44</td>
<td>2.68</td>
<td>Not Complied</td>
</tr>
<tr>
<td>14.</td>
<td>Altering school schedules to prevent mixing</td>
<td>3.92</td>
<td>4.01</td>
<td>3.97</td>
<td>Complied</td>
</tr>
<tr>
<td>15.</td>
<td>Limiting access to visitors from outside the school district</td>
<td>3.92</td>
<td>3.96</td>
<td>3.94</td>
<td>Complied</td>
</tr>
<tr>
<td>16.</td>
<td>Limiting movement within the school</td>
<td>2.04</td>
<td>2.14</td>
<td>2.09</td>
<td>Not Complied</td>
</tr>
<tr>
<td>17.</td>
<td>Discouraging face-to-face meetings in schools</td>
<td>3.80</td>
<td>4.00</td>
<td>3.90</td>
<td>Complied</td>
</tr>
<tr>
<td>18.</td>
<td>Cancelling all extra-curricular activities</td>
<td>4.12</td>
<td>4.18</td>
<td>4.15</td>
<td>Complied</td>
</tr>
</tbody>
</table>

Table 2 revealed that, 4 out of the 11 items had average mean values between 3.90 to 4.16 while the remaining 7 item had average mean value between 2.09 to 2.68. This indicated that, head teachers in Vocational Enterprises Institute in Abuja, Nigeria complied with 7 and failed to comply with 5 items on the school-based social distancing practices scales.

**Discussion of Findings**

Findings on the level of compliance with school-based social distancing practices among teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria revealed avoiding students’ congregation during laboratory/workshop activities, dividing classes into smaller groups, moving desks apart, cancelling classes that bring together students from different classrooms, rearranging classroom to keep students further apart, limiting group activities and interaction between classes, were complied with and holding classes outdoors was not complied with. This implied that, teachers in Vocational Enterprises Institute in Abuja, Nigeria complied with school-based social distancing practices during COVID-19 pandemic. The findings concords with the findings of Masters et al. (2020) on social distancing in response to the novel COVID-19 in the United States that revealed about two-thirds of participants (65.0%) reported practicing more social distancing compared to before the COVID-19 outbreak. The educational implication of the findings is that, teachers in Vocational Enterprises Institute in Abuja, Nigeria were contributing in minimizing the transmission of COVID-19 by complying with school-based social distancing practices. This could guarantee a safe learning environment to achieve effective learning.

Furthermore, the Analysis of Variance for the test of significant difference between the mean responses of male and female teachers on the
level of compliance with school-based social distancing practices during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria revealed not statistical significant different. This implied that, both male and female teachers in Vocational Enterprises Institute in Abuja, Nigeria complied with school-based social distancing practices during COVID-19 pandemic. This finding is in harmony with the finding of Masters et al. (2020) on social distancing in response to the novel COVID-19 in the United States that revealed no statistically significant differences in social distancing behaviors by gender, urbanity, race, monthly family income, or political affiliation. The none significant difference between the mean responses of male and female teachers could be due shared similarities in their behavior towards COVID-19.

Findings on the level of compliance with school-based social distancing practices among head teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria revealed: closing of playground, cancelling fieldtrips, cancelling afterschool activities, and altering school schedules to prevent mixing. Others include limiting access to visitors from outside the school, discouraging face-to-face meetings in schools and cancelling all extra-curricular activities were complied with and cancelling assembly, shortening school days per week, reducing school activity calendar, and limiting movement within the school were not complied with. This implied that, head teachers in Vocational Enterprises Institute in Abuja, Nigeria do not adequately comply with school-based social distancing practices during COVID-19 pandemic. The finding is in agreement with the finding of Sas (2020) on compliance with social distancing rules during COVID-19 in Poland 2020 that revealed 15 percent of the society sees keeping the social distance rules was not something they followed. The educational implication of the findings is that, head teachers in Vocational Enterprises Institute in Abuja, Nigeria were not helping reasonably in minimizing the transmission of COVID-19 by violating some of the school-based social distancing practices. This is considered a threat to a safe learning environment to achieve effective learning.

Conclusions
Based on the findings from the study, it is concluded that insight into the level of compliance with school-based social distancing practices among teachers and head teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria is provided. The study revealed not significant difference between the mean responses of male and female teachers on the level of compliance with school-based social distancing practices during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria. The results of this study are particularly important in developing effective strategies for enforcing the compliance with school-based social distancing practices among teachers and head teachers during COVID-19 pandemic in Vocational Enterprises Institute in Abuja, Nigeria. Though, the study is limited to the level of compliance with school-based social distancing practices among teachers and head teachers. There is need to ascertain the compliance level of student in order to generalize the findings of the study.

Recommendations
Based on the findings from the study, the following recommendations were made:

1. The education secretariat of the Federal Capital Territory, Abuja, Nigeria should encourage teachers in Vocational Enterprises Institute in Abuja to hold large classes outdoors to lower the transmission of COVID-19 pandemic

2. The education secretariat of the Federal Capital Territory, Abuja should enforce the full compliance with school-based social distancing practices among head teachers during COVID-19 pandemic.

REFERENCES


