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# PRINCIPALS' SANITARY SELF-CONCEPT AND FAECES MANAGEMENT PRACTICES IN SECONDARY SCHOOLS IN CROSS RIVER STATE, NIGERIA

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## ABSTRACT

*Human faeces-related diseases account for many deaths in the country. Proper faeces management and adequate sanitation have become the focal agenda all over the world. Principals' self concept, perception, or predisposition toward sanitation in secondary schools in the study area has been observed as one of the factors militating against effective faeces management practices in their schools. Most principals especially in the rural secondary schools tend to neglect the issue of faeces management due to poor funding, inadequate faeces management methods and inability of government to employ the right personnel to manage the faeces. To achieve this purpose of the study, one specific objective was raised which was converted to one research question and then transformed to research hypothesis for the study. Literature was also reviewed in line with the research variable. Survey research design was used for the study. The research area is Cross River State. The target population of the study was 273 principals of public secondary schools in the three Education Zones of Cross River State (Ministry of Education, Calabar, Cross River State; 2015/2016 academic year). The instrument employed for data collection was the questionnaire, which was designed by the researcher to test the items. Cronbach Alpha method of reliability was used to determine the reliability estimate of the instrument which was 0.64. Independent t-test analysis was used for data analysis. The findings of the study revealed that principals' sanitary self concept significantly influence their faeces management practices in secondary schools in Cross River State, Nigeria. It was recommended among others that principals should ensure that more toilet facilities are provided in their schools to meet the demand of both staff and students; and should be made accessible to them to prevent the dangers involved in moving long distances especially in the rural areas before using the facilities.*

**Keywords**: Principals, Sanitary self-concept, Faeces management, Secondary schools, Cross River State, Nigeria



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## INTRODUCTION

Human faeces and poor sanitation have been linked to the transmission of numerous communicable diseases that affect students in secondary schools. World Health Organization reports that approximately 2.2 million mortality occurring yearly are due to diarrheal disease and that a tenth of the population in the third world countries are severely infected with intestinal worms associated with indiscriminate faeces and waste disposal (Harhay et al, 2010). In addition, environmental friendly faeces disposal and handling methods help to occlude excreted pathogens from infiltrating into the ambience. Therefore, for optimal healthy living, it is germane to treat and contain human faeces in-situ as possible before it is discharged into the environment (LeChevallier et al, 2020).

In school, the person who is to see to the management of faeces is the head-teacher in primary school and principal. As representative of government in school, the principal is an embodiment of various attributes which added together can help carry out certain functions in school well or poorly. One of such attributes is principals' sanitary self-concept. This may have both positive and negative impacts on faeces management practices in our secondary schools.

Principals' sanitary self-concept in relation to their faeces management practices in secondary schools depends on their physical, academic and social understanding and self-instinct. Principals' positive self-instinct toward the physical school environment will enable them to plan well on how to take care of the school surroundings in terms of sanitation of sanitary facilities and proper management of faeces. Principals' social self-concept determines their interaction between teachers and students and vice versa. These positive interactions from time to time will assist in their faeces management practices in their schools.

Principals' self-concept has a role to play in faeces management. Principals' low esteem in the supervision and inspection of toilet facilities in schools may influence their faeces management practices in their schools. Reasons for principals' participation and involvement in faeces management are related to environmental motivation, social pressures, attitudes and economic incentives (Bartlett, 2005).

In Cross River State, secondary schools that are in high demand of infrastructures and faeces management methods like latrines are those that keep their environments and latrines clean. Students that are not brought up in a good, clean, healthy and conducive learning environment, find it difficult to inculcate better hygiene culture as they grow up and this in most cases lead them to suffer from faeco-orally transmitted infections.

Open defecation in uncompleted buildings, bushes, behind the classrooms, open fields, gutters, defecation in polythene bags and wrap and throw of faeces continue to be widespread in some rural and urban secondary schools in Nigeria due to poor faeces management methods with their public health and economic consequences (Water, Sanitation & Hygiene, 2010). If faeces are defecated indiscriminately in our various schools in Nigeria with no adequate faeces management methods, it may lead to environmental pollution of both rural and urban schools which may result to serious health issues. As source of infections, the diseases associated with improper disposal of faeces include; typhoid, dysentery, cholera, hookworm, viral hepatitis, poliomyelitis and shigellosis (Park, 2007).

Faeces management methods such as simple pit toilet, ventilated improved pit toilet, water closet, pour flush and trench toilet should be provided in secondary schools in Cross River State. There is strong evidence which suggests that individual or group awareness creation

and attitudes towards faeces management are critical in the effort to respond to the faeces management challenges (Kofoworola, 2007).

Much more serious problem that affects faeces management in secondary schools is that most of the schools do not have sanitary facilities such as pit latrines thus leading to unhealthy and filthy environment. This had led students to defecate in uncompleted buildings, bushes around the schools, open spaces, gutters, behind the classrooms and they even wrap and throw faeces by the fence of the schools. These problems are set-back to human health of students and staff which has called for principals to take the issue of faeces management in their schools seriously. In an attempt to solve the problem prompted the researcher to investigate principals' self concept and faeces management practices in secondary schools in Cross River State, Nigeria.

**Research Objective of the Study**

1. To investigate the extent to which principals' sanitary self-concept influences faeces management practices in secondary schools in Cross River State.

**Research question**

1. To what extent do principals' sanitary self-concept influence faeces management practices in secondary schools in Cross River State?

**Hypothesis**

1. Principals' sanitary self-concept does not significantly influence their faeces management practices in secondary schools in Cross River State.

**Methods**

This study used survey research design. This design was chosen because it provides acceptable and quantitative description of the features of the whole population through a chosen sample. It also permits inference and generalization to be drawn from a representative sample of the population. The research area is Cross River State.

The target population of the study was 273 principals of public secondary schools in the three Education Zones of Cross River State (Ministry of Education, Calabar, Cross River State; 2015/2016 academic year). No sampling technique was adopted since the entire population was used for the study. Questionnaire was used for data collection. The instrument was personally developed by the researcher and then presented to experts in educational measurement and evaluation for vetting before it was used for the study. Cronbach Alpha method of reliability was used to determine the reliability estimate of the instrument. The reliability coefficient was 0.64 (see table 1). Two hundred and seventy three (273) copies of the questionnaire were administered personally by the researcher and with the help of one assistant to the principals in their various secondary schools who constituted subjects for the study. The researcher explained the rationale for the study to them and appealed to them to freely and truthfully provide information for the study. At the end of the administration, 273 copies of the questionnaire were returned but only 270 copies of the questionnaire were completely filled which was then used for the analysis.

TABLE 1

Cronbach alpha coefficient of reliability estimate of subjects of principals' sanitary self concept and faeces management practices in secondary schools (N=20)

| S/N | Variables | No. of items | $\overline{X}$ | SD | α |
|---|---|---|---|---|---|
| 1. | Sanitary self-concept | 5 | 15.05 | 1.39 | 0.64 |

## Results and Analysis

### Hypothesis one

Principals' sanitary self-concept does not significantly influence their faeces management practices in secondary schools in Cross River State.

The independent variable was principals' sanitary self-concept. The dependent variable was faeces management practices. Independent t-test analysis was used on the data collected to test the hypothesis which states that principals' sanitary self-concept does not significantly influence their faeces management practices in secondary schools in Cross River State at .05 level of significance; the results are presented in table 2. The results presented in table 2 showed that principals' sanitary self-concept significantly influence their faeces management practices in secondary schools in Cross River State. More secondary school principals have negative sanitary self-concept as indicated in table 2 (N = 152: 14.30) than those with positive sanitary self-concept (N =118:15.52). Meanwhile, comparing the mean difference on their faeces management practices, it was revealed that there was a significant difference as those principals with positive sanitary self-concept have better faeces management practices than those principals whose sanitary self-concept were negative (t = -4.111, P < .05).

Based on this result, it therefore implies that the null hypothesis stated was thus rejected. This means that principals' sanitary self-concept significantly influence their faeces management practices in secondary schools in Cross River State.

TABLE 2

Independent t-test analysis of influence of principals' sanitary self-concept on their faeces management practices in secondary schools in Cross River State

| | Sanitary self-concept | N | $\overline{X}$ | SD | MD | t-cal | df | Sig. |
|---|---|---|---|---|---|---|---|---|
| Faeces management practices | Negative | 152 | 14.30 | 2.34 | -1.22 | -4.111 | 268 | .000* |
| | Positive | 118 | 15.52 | 2.50 | | | | |

*Significant at P < .05, t = - 4.111, df = 268

### Discussion of findings

Hypothesis one: Principals' sanitary self-concept and faeces management practices in secondary schools.

The findings of this hypothesis revealed that principals' sanitary self-concept significantly influenced their faeces management practices in secondary schools in Cross River State. This assertion was as a result of the findings discovered in this study. More secondary school principals have negative sanitary self-concept as indicated in table 2 (N = 152: 14.30) than those with positive sanitary self-concept (N =118:15.52). Meanwhile, comparing the mean

difference on their faeces management practices, it was revealed that there was a significant difference as those principals with positive sanitary self-concept have better faeces management practices than those principals whose sanitary self-concept were negative ($t = -4.111$, $P < .05$).

This finding was supported by Rotowa and Enisan (2012) who observe in the study carried out using selected secondary schools in Ondo State, Nigeria, that principals and students' ratio in the perception of school sanitation in relation to faeces management practices was significantly high. They both were of the views that greater percentages and numbers of schools have sanitary facilities and water infrastructure to clean their toilets always. The results obtained also noted that most schools especially in the rural communities provide pit toilets and ventilated improved pit (VIP) toilets for both the staff and students which are regularly swept and washed with water and detergents under the supervision of their principals.

Also, Asiyai (2012) reiterates that principals of secondary schools in Nigeria have the notion that faeces has to be managed sustainably but because of the constraint of poor financial allocation to schools to provide basic facilities and to supply water regularly for the toilets, the management of faeces became a challenge. Even when the septic tanks and soak-away pits are filled up, evacuation became a serious problem. In most schools in the cities, water are been bought with money by the principals and this created a very big financial burden to school administration.

The researcher disagreed with the findings of this study. He was of the opinion that since more secondary school principals have negative sanitary self-concept as indicated in table 2 (N = 152: 14.30) than those with positive sanitary self-concept (N =118:15.52), it means that some principals have the perception of not promoting sustainable environmental sanitation in their schools. This may affect sanitary facilities provided in their schools interms of cleanliness and maintenance.

## Conclusion

Having gone through the findings of the study, it was observed and discovered that principal's good sanitary self-concept significantly influences their faeces management practices in secondary schools. To yield positive faeces management practices in secondary schools, principals should have positive mentality toward sustainable sanitation of their school environment, proper maintenance of toilet facilities and monitored students to avoid the practice of open defecation in nearby bushes and uncompleted buildings within the school premises in order to make secondary schools environment safe, hygienic and healthy for both staff and students during school hours. This may also prevent them from suffering from faeces related diseases.

## Recommendations

Based on the findings of the study, the following recommendations were made:

1. Principals should ensure regular cleaning of their school environments including the tiding-up of classrooms, uncompleted buildings and toilet facilities so as to give their schools aesthetic out-look.
2. Principals should ensure that government provides adequate sanitary facilities to both staff and students to prevent indiscriminate defecation in their schools.
3. Principals should carry out adequate sanitation in their schools in order to improve latrine conditions and ensure proper management of faeces generally in their schools.

4. There should be formation of sanitation clubs among the students in secondary schools to ensure better sustenance and promotion of sanitary practices among them. This may enable them to organize school sanitation voluntarily so as to keep their school premises and sanitary facilities clean.

**REFERENCES**

Asiyai, R. I. (2012). Assessing school facilities in public secondary schools in Delta State, Nigeria. *Ethiopian International Multidisciplinary Journal, 6* (2), 192-205.

Bartlett, C. (2005). Storm water knowledge, attitude and behaviours: a 2005 survey of North Carolina residents. Sacramento, California, storm-water unit, division of environmental analysis. *Biology Education, 30* (4), 243-248.

Harhay, M.O; Horton, J. & Olliaro, P.L (2010).Epidemiology and control of human gastrointestinal parasites in children. *Expert Review Anti-infection Therapy Journal*, 8:219-234.

Kofoworola, O. F. (2007). Recovery and recycling practices in municipal solid waste management in Lagos, Nigeria. *Waste Management, 27* (9), 1139-1143.

Le Chaevallier, M.W.; Mansfield, T. J. & Gibson, J. M. (2020). Protecting wastewater workers from diseases risks: personal protecting equipment guidelines, *Water Environment Resources Journal*, 92:524-533.

Park, K. (2007). *Textbook on preventive and social medicine*. India: Banarsidas Bhanot.

Rotowa, O. O. & Enisan, G. (2012). Management of faeces and solid waste in selected schools in Akure, Nigeria. *International Journal of Business and Management Tomorrow, 2* (5), 1-9.

Water, Sanitation & Hygiene (WASH), (2010). *Economic impacts of inadequate sanitation in India*. New Delhi, India: World Bank.