

STUDENTS' WASTE DISPOSAL: A DISCIPLINARY PROBLEM IN TERTIARY INSTITUTIONS

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Abstract

Indiscriminate disposal of waste by students constitute one of the major disciplinary problems that impede the prospects of the philosophy of education. This paper dealt with the students' waste disposal in tertiary institution in Nigeria. Amongst the major disciplinary problems in tertiary institutions in Nigeria solid and liquid waste disposal constitute perennial problems to both the school management and students as well. Two research questions and two hypotheses guided the study. The population comprised all the fourth year students (2746) in the thirteen faculties of Nnamdi Azikiwe University, Awka, except faculty of Agriculture that had only second year students as at 2013/2014 academic session. The sample was 819 drawn randomly using 30% of students' population in each faculty. The instrument for data collection was a 20 item questionnaire. The reliability of the instrument was determined using Cronbach Alpha method at the value of 0.85, this was considered adequate. Findings showed that students indiscriminately dispose wastes e.g. pieces of papers, wrappers from junk foods, groundnut shells, corn curbs, posters, urinate around classroom blocks, offices, defecate in unauthorized places. Based on the findings, it was recommended among others that school management should organize workshops, seminars to change students psyche about waste disposal while the government should enhance provisions of needed facilities for proper disposal of waste in schools.

Keywords: Students' Waste Disposal, Disciplinary Problems, Tertiary Institutions.

1.0 Introduction

Disciplinary problems pose serious challenges to the attainment of the desired educational objectives and yearnings of the society towards qualitative education. It has remained a cankerworm eating up the frantic efforts of stakeholders to deliver qualitative education and realizable goals of the nation's philosophy of education as embedded in 2004 National Policy on Education.

Mkandaire (1998) succinctly posits that '... some senior scholars have complained about problems of "discipline" among their juniors...' This scenario presents the level of indiscipline that has permeated the tertiary institution that would have been a citadel of learning and pedestal for credible character formation in the society. Whenever discipline is lacking in the school, the system gradually crumbles and the school environment becomes unsafe for the teachers, learners and the society. The entire culture and climate of any school portray the disciplinary tendencies of the students therein. In effect Selfert and Vomberg (2002) categorically stated that, Students' discipline is a prerequisite to almost everything a school has to offer students.

Disciplinary problem crops up at the instance of a student's refusal or non-compliance to school rules and regulations. Over the years, students' disciplinary problems were handled with varied methods to ensure order in the learning environment and the society at large. Students disciplinary problems include: lateness, irregular school attendance, indiscriminate disposal of wastes, littering, truancy, impersonation, misuse of school property, cultism, abuse and neglect on student teacher relationship, wrong dress code, examination malpractice, sorting, misuse of ICT compliant, certificate racketeering /forgery, bullying, abuse of seniority and fagging, immoral behaviours etc. This study solely focussed on indiscriminate disposal of wastes e.g. littering.

Disciplinary approaches enunciated to curb students' indiscipline include suspension, expulsion, compulsory sweeping, cleaning, civil rights issues among others. However, some students have argued that educational managers failed to understand their plight and reasons behind their unacceptable behaviours and in effect met uncommensurate punishment to them. Indiscipline has been conceptualized as a cankerworm and a major problem bedevilling the efforts of educational management in tertiary institutions in Nigeria.

Suffice it to say is the importance of grasping the meaning of discipline which is a relative concept to define. In this regard, African Research Review (2009) opined that discipline as a concept has proved elusive to define in precise and unequivocal terms, because most people have widely divergent views about the term. Discipline in school organisation includes any rational approach used by teachers to overcome the problems of the school environment.

Nakpodia (2010) defines discipline as training that develops self-control, character, orderliness and efficiency. Similar to this are the views of Hardin (2004) that discipline could be viewed as both a noun and a verb. Discipline as a verb connotes what educators do to help students behave acceptably in school; while as a noun, it depicts the set of rules established to maintain order. Consequently, Nakpodia (2010) further referred to 'discipline as methods of modelling character, teaching self control and acceptable behaviour.' Also Reyes (2006) succinctly explained thus, 'to be discipline is then, subject to content, either a virtue , which may be referred to as discipline procedure or euphemism for punishment, which may also be referred to as disciplinary procedure.'

An overview of these definitions portend that discipline is all about desirable efforts for behaviour modification of the students geared towards ensuring a decorous environment for effective learning outcome. Hence, Charles (2009) categorically stated that, "discipline is the sum of educative efforts, including the teaching process,

the process of character shaping, the facing and setting of conflicts and the development of trust". When students discipline fails to affect the academic environment where learning and academic attainment are realized, it becomes a lopsided discipline. To address a holistic students' discipline, both the academic and environmental aspects must be considered.

Students' indiscriminate disposal of waste in school generally border on indiscipline which pose health challenges and environmental degradation. Any human habitation with attendant activities is bound to generate by-products known as wastes. Glossary of environmental statistics (1997) defined waste as 'materials that are not prime products (that is products produced for the market) for which the generator has no further use in terms of his/her own purpose of production, transformation or consumption and of which he/she wants to dispose.' However the teething problem hinges on how these by-products are disposed so that they don't constitute environmental nuisance in the school setting and society at large. For example polythene used for many purposes are littered in university environment indiscriminately with attendant negative effect on public health and environmental hazard. Accordingly, Akunro, Ikumawoyi and Oluogungba (2012) opined that, 'polythene for assorted items poses various threat to public health and adversely affects flora and fauna as well as the environment.

These wastes generated by undergraduates are categorized into solid, liquid and gaseous substances. In a similar vein, Bassis (2004) earmarked the three types of wastes by their consistency as follows: solid waste which he explained as waste materials that contain less than 70 percent water. They include garbage food wastes, rubbish paper, plastic, wood, metal, used containers, glass, demolished products bricks, masonry, sewage treatment residues, sludge from domestic sewage and discard materials. Liquid wastes are water that contain 1% solid, may contain high concentration of salt and metals. While gaseous wastes are substances in the atmosphere that are generated by the activities of man in such a concentration that interfere with health, safety, man's comfort, animals and vegetation.

In tertiary institutions, the wastes generated in the learning environment are more of solid and liquid. Smith (2009) aptly captured this when he noted that, 'the output of daily waste depends on dietary habits, lifestyles, living standards, the degree of urbanization and industrialization. In view of the foregoing and for the purpose of this work however, only solid and liquid wastes which are majorly generated in tertiary institutions would be discussed.

Students seem to indiscriminately litter their learning environment, urinate and desecrate arbitrarily in unauthorized places e.g. behind classroom blocks,

laboratories, canteens, restaurants, public conveniences, etc. Regrettably, Egun (2011) observed that ‘every available non-utilized space is immediately seen as a potential urinary/toilet and used.’ In some cases the public conveniences provided are kept in bad condition that people dread making use of them in order not to contract one disease/illness or the other. In some occasions, proper evacuation of heaps of refuse dumped in authorised sites are neglected that they turn into offensive odour, stench, constituting health hazard to inhabitants of the area. It is said that mean environment begets mean children. In effect, learning activities in an uncongenial environment would result to defective output, and this invariably affects physical and mental well being of the students.

In another development, family background and upbringing immensely contribute to daily habits and behavioural pattern of many people. In essence, indiscriminate disposal of solid and liquid wastes in schools could be associated with what obtains in various family settings. In such situations, some residential students in university hostels may see nothing abnormal with filthy environment.

Against this backdrop, the study examined students’ waste disposal: a disciplinary problem in tertiary institutions. The need to investigate the disciplinary problems and suggestions on how to re-channel the psyche of undergraduates to proper disposal of wastes spurred the conduct of this research.

1.1 Statement of the Problem

Learning environment is fraught with students disciplinary challenges of which indiscriminate disposal of solid and liquid wastes constitute remarkable concern to school administrators and stakeholders of education. Neglecting this aspect of the learning process would dastardly affect the frantic efforts to achieve the philosophy of Nigerian education as enshrined in the National Policy on Education. The objectives of the nation’s constitution addressing issues on education would also be truncated if the students’ disciplinary attitude to waste disposal is not properly addressed.

To ones dismay, undergraduates abysmally ‘decorate’ their lecture halls with banana peels, groundnut shells, corn curbs, sachet water bags, biscuit wrappers, empty can drinks to mention but a few. In their hostels, used sanitary towels, used papers litter and in some cases block the toilets, some students urinate and defecate on bare floors of public conveniences. At other times, the porters negligence to duties constitute environmental nuisance in the residential apartments of the undergraduates in the universities. This unhealthy scenario is mostly experienced during the weekends and examination periods. When there is epileptic power outage resulting to water

shortage, the conveniences are heaped with mounds of faeces waiting for the attention of hostel porters.

Moreover, a cursory look at the inadequate provision of basic utilities/amenities in the hostels by the school management and government constitute some disciplinary problems. For instance, the researcher is not oblivious of accommodation problems whereby a floor accommodating fifty to hundred students may have few conveniences. During examination periods, students rushing for 8a.m papers may experience congestion at their conveniences and as a result, some may indiscriminately use the toilets or shower in unauthorised places. In the light of the foregoing, the study considers students' disposal of solid and liquid waste, a disciplinary problem that must be addressed if the desirable objectives of the educational sector would be achieved. This in essence spurred the research.

1.2 Research Questions

1. What are the solid and liquid wastes indiscriminately disposed by students which pose disciplinary problems in tertiary institution?
2. How does inadequate disposal of wastes by students constitute disciplinary problems?

1.3 Hypotheses

1. There is no significant difference between male and female students method to disposal of wastes in tertiary institutions.
2. There is no significant difference between non-residential and residential students method of waste disposal in the learning environment of tertiary institutions.

2.0 METHOD

Descriptive survey design was adopted for the research. The population of the study comprised all the fourth year students (2746) in the thirteen faculties (Nnamdi Azikiwe University Awka), except faculty of Agriculture that had only second year students as at 2013/2014 academic session. The sample for the study was 819. The instrument for data collection was a 20 item questionnaire. The instrument was validated by three experts, one in Measurement and Evaluation and two in the department of Educational Management and Policy, Nnamdi Azikiwe University, Awka. The reliability of the instrument was determined using Cronbach Alpha method and the value was 0.85, this was considered adequate. The data collected were analysed with mean and t-test. Any item with a mean score of 2.50 and above is considered as being positive and accepted whereas any mean score less than 2.50 is negative and rejected.

Table 1: Mean responses of students on disposal of solid wastes

S/N	Question	SA	A	SD	D	Total	Mean	Decision
	Students dispose solid waste indiscriminately in academic environment through:							
1	Littering of classrooms with sachet water bags, biscuit, groundnut and orange peels	248	406	43	122	819	2.95	Accepted
2	Indiscriminate littering of the environment with polythene bags	183	384	80	172	819	2.71	Accepted
3	Littering of the school learning environment with wrappers from junk foods	237	418	59	105	819	2.96	Accepted
4	Dropping of waste papers in class rooms and school premises indiscriminately	202	457	56	104	819	2.92	Accepted
5	Indiscriminate disposal of empty can drinks e.g. water and minerals	236	349	31	203	819	2.75	Accepted
6	De-phasing of public conveniences with toilet tissues and waste papers	126	209	209	275	819	2.23	Rejected
7	Blocking of Water system toilet with waste paper indiscriminately	78	203	209	329	819	2.04	Rejected
8	Throwing away of used weavons in unapproved sites within the school premises	48	159	226	386	819	1.84	Rejected
9	Throwing away of corn cubs in unauthorised places within the school environment	92	305	137	285	819	2.25	Rejected
10	Disposal of sanitary towels in school environment indiscriminately	85	225	209	300	819	2.12	Rejected
11	De-phasing of school environment with posters especially during students' election	198	376	87	158	819	2.75	Accepted
12	Blocking of corridors with infrastructures abruptly	101	266	158	294	819	2.21	Rejected

Table 1 indicates that the mean response of students to items 6, 7, 8, 9, 10 and 12 were less than 2.50. This shows that undergraduates dispose wastes indiscriminately, hence the need to enlighten and reposition their psyche towards proper waste disposal strategy. It was also observed that indiscriminate disposal of solid waste impinge on the efforts of the school management in ensuring efficient and effective academic outcome.

Table 2: Mean responses of students on disposal of liquid wastes.

S/N	Question	SA	A	SD	D	Total	Mean	Decision
13	Urinating indiscriminately in any space within the learning environment	113	320	143	243	819	2.37	Rejected
14	Defecating in polythene bags and around the classroom environment	77	193	243	306	819	2.05	Rejected
15	Indiscriminate urination around classroom blocks, halls administrative offices and laboratory	118	358	143	200	819	2.48	Rejected
16	Unwillingness to flush school conveniences after usage	127	319	140	233	819	2.42	Rejected
17	Indiscriminate spilling of water and urination on the floor of toilets	240	324	72	183	819	2.76	Accepted
18	Defecating on the floor of public conveniences	81	219	254	265	819	2.14	Rejected
19	Urination on the floor of toilets unwholesomely	144	252	141	282	819	2.32	Rejected
20	Spitting, sneezing and disposal of cough in school environment illicitly	187	415	55	162	819	2.77	Accepted

Table 2 shows that the mean responses of students on all the items except items 17 and 20 were below 2.50. This shows that undergraduates indiscriminately dispose liquid wastes in school environment, the devastating effect on health, academic attainment and the general outlook of the school environment notwithstanding. Analyses of the items show that many students lack the requisite knowledge for adequate waste disposal.

Test of hypothesis:

H₀₁: There is no significant difference between male and female students method of wastes disposal in tertiary institutions.

Table 3: t-test of mean difference of male and female students' waste disposal waste in tertiary institution.

Variables	N	X	SD	DF	Sign Level	t-calc	t-table	Decision
Males	346	2.41	1.542	889	0.05	0.217	1.96	Not significant
Females	473	2.48	1.573					

The result in table 3 shows that the calculated t-value at 889 degree of freedom and 0.05 level of significance is 0.217. Since the calculated t-value is less than the critical table value of 1.96, the null hypothesis is therefore accepted.

Ho2: There is no significant difference between residential and non residential students' waste disposal in tertiary institutions.

Table 4: t-test of mean difference of non-residential and residential students' waste disposal in tertiary institution.

Variables	N	X	SD	DF	Sign Level	t-calc	t-table	Decision
Non-residential	44	2.44	1.559	889	0.05	0.040	1.96	Not significant
Residential	775	2.45	1.562					

From the result presented in table 4, the calculated t-value at 889 degree of freedom and 0.05 level of significance is 0.040. Since the calculated t-value is less than the critical table value of 1.96, the null hypothesis is therefore accepted.

3.0 Discussion

From the findings and analyses given in the above tables, it is evident that undergraduates in tertiary institutions indiscriminately dispose wastes. Regrettably, this drastically deface the flora, fauna, environmental outlook of the school and affect health status of the students and staff in the school. No school can effectively and efficiently deliver the desired educational objectives under such condition. Adequate disposal of wastes should be a life-style, order in tertiary institutions to enable the students not only study in a conducive environment (without which effective studies is impossible) but also achieve the dividends of sound learning, character and development. Hence, Norris (2001) opined that, 'the underlying aim of higher

education is to ensure that the potential of our students is developed to the full and that they receive an education and training that is internationally recognized.' Truly, no tertiary institution can fully develop the potentials of her students in an environment that is uncongenial. Therefore the need for adequate waste disposal method by the students' crops up invariably.

Categorically, it is only a disciplined mind that can maintain an adequate refuse disposal culture within the school and society at large. In effect Nakpodia (2010) affirmed that 'a disciplined mind is an asset to any society, and the school is part of the process for training the youth in other to produce a balanced and discipline citizen. Hence the adage that 'the school is a silent teacher of morals' should be taken seriously. Based on this platform, the school needs to create an enabling environment to educate students on the import of proper waste disposal culture.

Table one highlights inadequate disposal of different types of waste such as waste paper, toilet tissues used in defacing public conveniences, corn curbs, posters, sanitary towels etc. From the analysis, it was found that the respondents strongly agreed that students indiscriminately disposed these waste products within the school environment. This situation may be as a result of poor home training, poor sanitary regulation and monitoring by the management and inadequate provision of refuse incinerator, equipment, dumping sites by the school authority and government coupled with lackadaisical attitude of hostel porters.

Other factors that need re-visitation for adequate disposal of wastes in tertiary institutions concern improved funding by the government. Underfunding of tertiary institution in Nigeria grossly impinge on the development and non realization of the desires of education. In effect, Faniran (2012) observed underfunding as the greatest problem facing university development today. He further stated that, 'the economic downturn of the world over as a result of major recession which began in the industrialized countries due to oil glut and gross mismanagement of the Nigerian financial resources are largely responsible for the hopeless financial situation in which Nigerian universities are found today.'

Data obtained from students indiscriminate disposal of liquid waste in table two indicate that respondents strongly agreed that undergraduates urinate indiscriminately around the classroom blocks, halls, administrative offices, laboratory, and in any space around the classroom environment. Here, enlightenment through seminars, workshops, proper hygiene advocacy should be publicized, for this would engender change of psyche towards adequate disposal of solid and liquid wastes within the citadel of learning.

Hypothesis one states that there is no significant difference between male and female students method of waste disposal in tertiary institutions. The result in table three shows that the calculated t-value of 0.217 is less than the critical value of 1.96 at 891 degree of freedom and 0.05 level of significance. Since the calculated t-value is less than the critical value, the null hypothesis is therefore retained. Similarly, this implies that both male and female students in tertiary institutions dispose wastes illicitly. By implication, their potentials cannot be developed fully since the learning experiences are taken place in an environment that is not conducive.

Hypothesis two shows that both residential and non residential students dispose wastes indiscriminately in tertiary institutions. This implies that the location from where the students are coming from do not determine their method of waste disposal. In essence, whether they reside within or outside the school environment, illicit disposal of waste is a way of life. Additionally, the need for proper home upbringing remains a necessary ingredient for correcting this anomaly in tertiary institutions and the society at large.

4.0 Conclusion

The study investigated students' waste disposal: a disciplinary problem in tertiary institutions in Nigeria. Findings from the research showed that undergraduates dispose wastes in their institutions illicitly, health hazard and environmental challenges notwithstanding. The study noted that, through seminars, workshops, adequate funding for provision of needed waste incinerators, even recycling equipment will address the disciplinary problem regarding inadequate waste disposal in tertiary institutions. Also issues about adequate disposal of wastes must be treated with kid gloves by the government, school management and students. Since it was found from the study that both male and female students, residential and non residential students alike engage in illicit disposal of solid and liquid wastes in tertiary institutions within Nigeria, the need to proffer solutions to the problem becomes imminent.

5.0 Recommendations

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

1. There should be formation of student vanguardists to monitor and supervise the observance of rules and regulations on sanitation in schools within the hostels and different faculties.
2. The school management should package seminars and workshops to enlighten and change the psyche of students towards proper method of waste disposal.
3. Government should enhance the provision of necessary equipment for wastes disposal and enforce the process of waste recycling so that schools will be environmentally friendly for requisite teaching and learning outcome.

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