

The Knowledge, Attitude And Practice Towards Solid Waste Management Among Mogadishu Residents – Somalia. Somali National University As A Case Study

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ABSTRACT

This research we proposed *the knowledge, attitude and practice towards solid waste management among Mogadishu residents – Somalia*. Solid waste management is one of the major challenges faced by many countries around the globe. Inadequate collection, recycling or treatment and uncontrolled disposal of waste in dumps can lead to severe hazards, such as health risks and environmental pollution. Similarly there is problem in Africa. Africa is facing a growing waste management crisis. While the volumes of waste generated in Africa are relatively small, compared to developed regions, the mismanagement of waste in Africa is already impacting human and environmental health. Specially in Somalia show that solid waste management is a growing crisis that engulfs all urban centers within the country, because of a turbulent history, especially over the last quarter century. The purpose of this study is to assess the knowledge, attitude, and practice of recycling solid waste management in Banadir region, Mogadishu – Somalia. However, this study is used quantitative approach conducted in Shebelle campus, Km4 campus and Gaheyr campus in Mogadishu Somalia. The numbers of students in all faculties from batch five to batch eight are 4,467 Students and the sample size will be 367. Findings of the study Knowledge level of the Majority of respondent 330 (89.2%) were have knowledge. While the most respondents 134 (36.5%) were finding over TV. The relationship between the knowledge, attitude and practice was significantly positive as the respondents majorities have said. This study is significant for staff and students by Increasing their safety and health, Reducing and eliminating adverse impacts of solid waste materials on human health and the environment surrounded. Finally recommend to be aware that improper waste disposal is a threat to environment.

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INTRODUCTION

Wastes have adverse effects on the environment as well as public health, thus; necessitating the need to management and control wastes historically. As a means to deal with and manage wastes, communities in developing countries often turn to knowledge, attitude, practices, disposal techniques of waste (open burning and dumping) as the only option to handle waste materials and promote good hygiene and human health (Al-Khatib et al., 2015).

As the priority in many developing nations to deal with increased industrial waste, attitude, practices, and knowledge as well as waste type, urbanization form instrumental variables in waste management (Oyake, 2016).

The waste management systems originated from the ancient times, with the first attempt to manage wastes by Greeks taking place in A.D, 4 century. The challenges the Greeks faced encompasses high population growth, limited space, hygienic complexities among others making the waste management system alignment difficult.

The Roman Empire was most likely the first civilization in Europe to have on organized urban waste management labor force,

already in the fourth century BC (Vesilind et al., 2002). Work was carried out by a cleaning crew, who loaded piles of waste onto horse-drawn wagons using shovels. Waste was taken either outside city gates or somewhere else far from civilization (Pichtel, 2005). City authorities could impose fines for the improper disposal of waste. A board informed citizens not to leave waste in the street and indicated where they should go to dispose of it (Kelly, 1973). In another step serving to keep the city clean overall, Emperor Vespasian (AD 69–79) ordered the installation of public flush toilets (Kelly, 1973). By AD 300, the number of such facilities in Rome increased to 144 (Bilitewski et al., 1997).

Problem statement

Currently the problem of solid waste management is a major challenge in Somali National University campus, especially and the capital of Somalia in general. Several studies have been conducted on knowledge, attitude, practices and waste management.

A study by Arora and Agarwal (2011) indicated that there was low attitude towards waste management by university students. Further the findings revealed no correlation between waste management and knowledge, attitude, and practices while

there was a significant correlation between knowledge and practices in waste management.

Perception and attitude on disposal of wastes study by Fearon, and Adraki (2014) in Tamale Metropolis, Ghana, depicted that household attitude have significant impact on the motives to use dustbins in the future.

However, in our knowledge there is no previous study related to this title conducted in Somali National University. Therefore this study is aiming to fill the gaps and to determine the level of knowledge, attitudes and practice of recycling solid waste management among Somali National University students.

RESEARCH METHODOLOGY

Methodology includes a description of research design, research population, research instrument and data gathering procedure, data analysis, ethical consideration, and limitation of the study. It comprises several sub sections which are usually presented in the order given below.

Research Design

This study will employ through explanatory research design. The purpose affecting the variables involves in this study and helped to achieve all the objectives of research. However, this

study is used quantitative approach; Quantitative is any data collection technique (such as a questionnaire) or data analysis procedure (such as graphs or statistics) that generates or uses numerical data. In addition the method used acquire the data in this study is survey method.

Survey method is a designed to collect primary or secondary data from a sample, with a view to generalizing the results to a population. (Collis & Hussey, 2003).

Research Population

The study will be conducted from the batch five-batch 8 of all the faculties of Somali National University Students only. The researcher will select 367 as respondent(s) randomly from the batch five to batch eight students.

Sample Size

According to the formula, the sample size will be 367 respondents.

Data Analysis

In this study, the data required will be collected through distributing of questionnaires; the Questionnaire will be distributed to the students from batch five to batch eight Thus, Educate and well aware people will be the most appropriate respondents for this study. Therefore,

researcher will use quantitative approach in the analysis of the data; quantitative research focuses on examining a problem based on testing a theory and analyzing it using statistical techniques. In order to investigate the influence of knowledge, attitude and practice towards solid waste management, the collected data will be analyzed quantitatively using SPSS (Statistical Package for Social Sciences).

DISCUSSION OF MAJOR FINDINGS

The study was investigated *Knowledge attitude, and practice towards solid waste management among SNU students in Mogadishu – Somalia*. Further to achieve this objective, the respondent had to response several question by ticking according to their perceptions, previous awareness and knowledge.

Data on these objectives was analyzed using SPSS descriptive statistics tool that indicate the frequency, the percentages, and the correlation as following; questionnaire from knowledge attitude and practice. The researcher identified the following main findings in the study after data analysis and interpretations.

The majority of the respondent's Gender in this study 245(66.8%) were Male. Where The Majority age of participants 314 (85.6%) were between 18 – 23 years of age,

while 37 (10.1%) were between 24– 29 years. The majority of respondent marital status were married 27 (7.4%) and 330 (89.9%) were Single. The level of batch of the majority in our study 118 (32.2%) were batch seven. Solid waste management Knowledge of the Majority of respondent 330 (89.2%) were have knowledge. While the most respondents 134(36.5%) were finding over TV.

Among the respondents of this study, the most common factors that the respondents agree to effect solid waste management were public knowledge, attitude and practices, collection frequency and environment

The main objective of this study was to assess the knowledge, attitude, and practice of recycling solid waste management among Somali National University Students in Banadir region, Mogadishu – Somalia. The correlation between knowledge, attitude and practice are positive relationship. These findings support earlier studies that concluded that Karan district community have good level of knowledge as well as have positive attitude but their practice towards solid waste management was poor.

CONCLUSION:

During the study, the researcher investigated *Knowledge attitude,*

and practice towards solid waste management among Somali national university Students in Mogadishu – Somalia.

Based on the findings of this Study, The followings are the conclusions of the study:

- The most of students have a knowledge solid waste management and they heard most of them over TV and radio.
- Paper and carton are the most type of solid waste comes from university campuses. Based on the respondents of students 165(45%) chooses paper and cartoon.
- This study found that the most factors affect solid waste management is the public knowledge, attitude and practices, collection frequency and environment.
- The relationship between the knowledge, attitude and practice was significantly positive as the respondent's majorities have said.

RECOMMENDATIONS:

In the light of findings and conclusions of the study, the researchers suggest the following recommendations to the educationist community:

1. To encourage people to separate solid waste with proper way.
2. To make regular solid waste collection, once a day or a week in the campuses.
3. To encourage all the students by

making them, take the responsibility of solid waste management.

4. To provide adequate waste bins and waste collection process in the university campus, it is the root of proper solid waste management.
5. To be aware that improper waste disposal is a threat to environment.

FURTHER RESEARCH.

The researchers recommend the following research for further studies:

1. The importance of waste management to environmental sanitation.
2. The impact of gender attitude and perception towards waste management
3. The 3Rs of managing solid waste: Reduce, Reuse and Recycle.
4. Recycling significance to waste management.

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APPENDIX B STUDENTS INFORMATION SNU



Sannad tacliimeedka 2018---2019

NO	Magaca Kulliyadda	Tirada lagu qoray			Tirada isdiiwaan gelisay		
		Wiilal	Gabdho	Wadar	Wiilal	Gabdho	Wadar
1	Caafimaad	52	36	88	55	35	90
2	Beeraha	80	20	100	65	16	81
3	Qaanuunka	58	31	89	33	24	57
4	X Xoolaha	58	34	92	36	18	54
5	Waxbarasahda	166	78	244	108	58	166
6	Dhaqaalaha	53	28	81	49	30	79
7	Injineeriya	90	2	92	91	2	93
8	D.Islaamka	47	49	96	16	12	28
9	Culumta Bulshada	60	34	94	17	10	27
Wadar Guud		664	312	976	470	205	675

Sannad tacliimeedka 2019---2020

NO	Magaca Kulliyadda	Tirada lagu qoray			Tirada isdiiwaan gelisay		
		Wiilal	Gabdho	Wadar	Wiilal	Gabdho	Wadar
1	Caafimaad	69	34	103	66	33	99
2	Beeraha	77	29	106	61	23	84
3	Qaanuunka	58	37	95	47	23	70
4	X. Xoolaha	51	30	81	34	16	50
5	waxbarasahda	284	105	389	184	82	266
6	Dhaqaalaha	55	26	81	54	25	79
7	Injineeriya	102	4	106	91	4	95
8	D.Islaamka	26	17	43	20	11	31
9	Culumta Bulshada	51	14	65	11	3	14
10	Sayniska	180	34	214	168	35	203
Wadar Guud		953	330	1283	736	255	991



Sannad tacliimeedka 2020---2021

NO	Magaca Kulliyadda	Tirada lagu qoray			Tirada isdiiwaan gelisay		
		Wiilal	Gabdho	Wadar	Wiilal	Gabdho	Wadar
1	Caafimaad	69	36	105	67	34	101
2	Beeraha	73	30	103	68	30	98
3	Qaanuunka	71	41	112	53	30	83
4	X. Xoolaha	82	30	112	62	22	84
5	waxbarasahda	380	145	525	172	54	226
6	Dhaqaalaha	68	34	102	67	31	98
7	Injineeriya	102	3	105	97	3	100
8	D.Islaamka	19	43	62	15	38	53
9	Culumta Bulshada	146	127	273	106	108	214
10	Sayniska	160	18	178	151	16	167
	Wadar Guud	1170	507	1677	858	366	1224

Sannad tacliimeedka 2021---2022

NO	Magaca Kulliyadda	Tirada lagu qoray			Tirada isdiiwaan gelisay		
		Wiilal	Gabdho	Wadar	Wiilal	Gabdho	Wadar
1	Caafimaad	88	53	141	87	51	138
2	Beeraha	88	69	157	59	35	94
3	Qaanuunka	55	49	104	45	41	86
4	X. Xoolaha	57	41	98	37	22	59
5	waxbarasahda	293	173	466	113	61	174
6	Dhaqaalaha	115	82	197	109	79	188
7	Injineeriya	237	16	253	225	15	240
8	D.Islaamka	52	46	98	34	33	67
9	Culumta Bulshada	113	103	216	79	62	141
10	Sayniska	282	86	368	254	70	324
11	Caafimaadka Guud	64	29	93	36	30	66
	Wadar Guud	1444	747	2191	1078	499	1577

Diiwaaniyaha Guud
Xasan Maxamed Cabdi



The statistics of Somali national university students

APPENDIX C SOLID WASTE PICTURES





SHABEELE COMPUS