

**STUDENT'S KNOWLEDGE AND PRACTICES OF
SOLID WASTE MANAGEMENT IN QUAID -I-
AZAM UNIVERSITY,
ISLAMABAD**



SHABANA BIBI

DEPARTMENT OF SOCIOLOGY

Quaid-I-Azam University, Islamabad

2014

**STUDENT’S KNOWLEDGE AND PRACTICES OF
SOLID WASTE MANAGEMENT IN QAUID-I-
AZAM UNIVERSITY ISLAMABAD**



**“Thesis submitted to the Department of Sociology, Quaid-I-Azam
University, Islamabad, for the partial fulfillment of the degree of Masters
of Sociology”**

By

Shabana Bibi

Department of Sociology

Quaid-I-Azam University, Islamabad

2014

ACKNOWLEDGEMENT

In the name of Allah, the most merciful and the most beneficial. All praises to Allah for His blessings on me in completing this thesis.

First of all, I am grateful to Dr. Muhammad Zaman, my supervisor for all I have learned from him and for his continuous help and support in all stages of this thesis. I would also like to thank him for being an open person to ideas, and for encouraging and helping me to shape my interest and ideas. I would also like to extend my thanks to Dr. Fiyyaz from the Department of Statistic in QAU.

I would like to thank my family, especially my parents and brothers for their continuous love and their supports in my decisions. Without whom I could not have made it here. I would like to thank my university fellows for giving information about my topic. I especially thanks to my friends Afia ali, Shahina Khalil, Amna Wazir and Maryam Zaman for their cooperation and assistance during the research.

Shabana Bibi

Abstract

Solid waste has become a serious problem of whole country, especially the developing countries of the world. There were 70 million tons of waste generated per year. Solid waste was by product generated by both human and animals. The researcher has disused culture lag theory and risk society in this study. The universe of the study was Quaid-I-Azam University Islamabad. The university has accommodated 8000 students at a time. 121 students participated as respondents. The data was collected through questionnaire and data analysis was done by SPSS (Statistical Packages for Social Sciences). The significant finding of this study was that 32.2% respondents consider the university to be their second home. However 51.2% usually use dustbin in the university area. 49.6% respondent believe that waste disposal was the responsibility of students. 47% agreed that waste affects student health in university. 60% respondents believed that waste disposal was the responsibility of administration. 61% respondent agreed that waste management was responsibility of hostel in university. All these findings show that the higher the rate of knowledge, higher will be the practice.

Table of Contents

Chapter No. 1	1
INTRODUCTION	1
1.1 Background of the study	4
1.2 Types of solid waste.....	5
1.3 Research question	6
1.4 Objective of the study.....	7
1.5 Significant of the study.....	7
Chapter No. 2	8
REVIEW OF THE RELEVANT LITERATURE	8
2.1 Assumptions.....	16
Chapter No. 3	17
THEORETICAL FRAMEWORK	17
3.1 Theory of cultural lag.....	18
3.1.1 Assumptions	19
3.2 Theory of risk society.....	20
3.2 .1 Propositions	21
3.3 Hypotheses.....	22
3.3.1 Null Hypothesis (H0).....	22
3.3.2 Alternate Hypothesis (H1)	22
Chapter No. 4	22
CONCEPTUALIZATION AND OPERATIONALIZATION	23
4.1 Conceptualization	24
4.1.2 knowledge.....	24
4.1.3 practice.....	25
4.2 Operationalization.....	26
Chapter No. 5	28
RESEARCH METHODOLOGY	28

5.1 Universe	29
5.2 Unit of Analysis (Target Population).....	30
5.3 Sampling Frame	30
5.4 Sample Size.....	30
5.5 Tools for Data Collection	30
5.6 Techniques for Data Collection	31
5.7 Pre-testing	31
5.8 Data Analysis	31
5.9 Opportunities and Limitations of the Study.....	32
5.10 Ethical Concerns	32
Chapter No. 6	33
RESULTS	33
6.1 Findings	34
Chapter No. 7	62
DISCUSSION AND CONCLUSION	62
7.1 Suggestions	68
0 REFERENCE.....	69
ANNEX 1	73

List of Tables

Table 6.1 Age.....	34
Table 6.2 Gender.....	34
Table 6.3 Education	35
Table 6.4 Family	35
Table 6.5 Marital status.....	36
Table 6.6 Family income	37
Table 6.7 Feel university like home.....	38
sTable 6.8 Usually used dust bins in university.....	39
Table 6.9 University and cleanliness	39
Table 6.10 Throwing waste in university	40
Table 6.11 Waste effect on students mind.....	41
Table 6.12 Disposal of waste materiel are responsibility	41
Table 6.13 Burring of used materiel	42
Table 6.14 Keep the environment of university clean	42
Table 6.15 Waste materiel responsibility administration	43
Table 6.16 Open burning has negatve effect health	43
Table 6.17 Disposal of waste responsibility hostel.....	44
Table 6.18 Solid waste mange is big problem	45
Table 6.19 Solid waste is product of student	45
Table 6.20 Plastic, bags and rappers waste has problem	46
Table 6.21 Health environment is good for students	46
Table 6.22 Using dust bin and waste disposal	47
Table 6.23 Dust bins are most important for university area.....	47
Table 6.24 Waste is major environmental issues.....	48
Table 6.25 Diseases are caused by improper waste	48
Table 6.26 Solid waste cause Air pollution	49
Table 6.27 Solid waste cause land pollution.....	49
Table 6.28 Solid waste are cause water pollution.....	50

Table 6.29 Sweepers of QAU are doing their job well.....	51
6.2 Hypothesis Testing.....	57
Table 6.30 Association between education and cleanness.....	58
Table 6.31 Used dust bin and healthy environment.....	58
Table 6.32 Throwing waste and effect mind	58
Table 6.33 Association Between waste materiel and environmental cleannes	59
Table 6.35 Association between waste product and waste mitral	60
Table 6.37 Association solid waste problem and dust bin important	61
6.3 Figgers	50
6.3.1 Figger Department of students.....	50
6.3.2 Figger Wastes cleanness responsibility of students.....	51
6.3.3 Figger Students trowing waste in university.....	52
6.3.4 Figger Wastes effects on students mind.....	53
6.3.5 Figger Waste collection responisibity of adminstration.....	54
6.3.6 Figgers Open buring neggative effect on students health.....	55
6.3.7 Figger Solid wastes are producte of students.....	56

Chapter No. 1

INTRODUCTION

Solid waste management is a universal problem. It is a problem of developing countries like Pakistan. They are still having the problem because their budget is not enough for their basic needs. Developed countries can manage the solid waste because they have high income. The governments of developing countries are unable to overcome the problem despite spending high amount on solid waste management. “The urban areas of Asia were spending US \$ 25 billion on solid waste management per year. This figure will increase to at least US \$ 50 billion in 2025. Today’s daily waste generation rate is about 760, 000 tons. By 2025, this rate will increase to about 1.8 million tons per day” (Laura Thomas and Overseen 1999).

At present the urban areas of Asia produce about 760,000 tons of Municipal Solid Waste (MSW) per day, or approximately 2.7 million per day. In 2005 the level was increased to 1.8 million tons of waste per day, or 5.2 million per day. The local governments in Asia spend 25 billion dollar per year in urban areas on solid waste management. This amount is used at a high level in high income countries. An estimated 90 percent used in high income countries, 50 to 80 percent in middle income countries and only 30 to 10 percent spent in low income countries for solid waste mangemnt (Thomas Laura, overseen may 1999).

In Japan municipal government is responsible for solid waste management services. They spent about 2,280 billion yen in 1993 on waste services. The

government of Japan spends 45 % of total budget on facilities, 4% on burning plant collection and 6% for final disposal. In Malaysia about 70% of communal solid waste budget is spent on the waste collection. The city of Ahmad Abad in India, spends about 86% of solid waste budget on waste collection. 90% of Indonesian solid waste management budget is spent on collection, sweeping street, transportation and maintenance according to solid waste management in Asia (Laura Thomas and Overseen 1999).

Solid waste includes all the waste material which are arising from human and animal activities. The researcher called these as unwanted things. Solid waste contains many materials like plastic bags and rappers. It occurs in high level in urban population. It is true that high population is the main reason of solid waste. In urban areas solid waste is also increasing day by day. It is a big problem for Pakistan because as an underdeveloped country Pakistan needs attention towards the important needs of their population. Pakistani society produces about 54888 tons of solid waste per day. It includes plastic bags, rubber, paper, cardboard glass, food waste animal waste, leaves, grass, bones and wood. The total rate of waste produced from all type of community controlled areas differs from 1.896kg/ house/ day to 4.29 kg/ house/ day in a few major cities (Pak-EPA, 2005). Collection rate of solid waste in Pakistan was 51% to 69% of the total waste generated (Pak-EPA 2005).

According to Anjum (2006) waste management has become a serious environmental and public problem in all countries, especially in developing countries.

1.1 Background of the Study

Quaid-I-Azam University (QAU) Islamabad is among the best universities of Pakistan. This University was established on July, 1969 in Islamabad under the act of national assembly. It started teaching and research programs for PhD and MPhil degrees, then it started Masters, Bachelor and recently it has started undergraduate programs. The total strength of student in QAU is 8,000. Many students are from different areas of Pakistan. Present time some international students are also studying in this university. The deviation in the student's knowledge and practice of waste management causes issue of health and environmental problem. In the university there is no proper solid waste management. The management as well as the students does not care about the disposal of solid waste. Waste material is dumped around the university hostel. Students are not using dust bins in the university because of lack of proper waste management system. They throw plastic bags, wrappers and cans in open area in the university.

1.1 .1 Types of solid waste in university

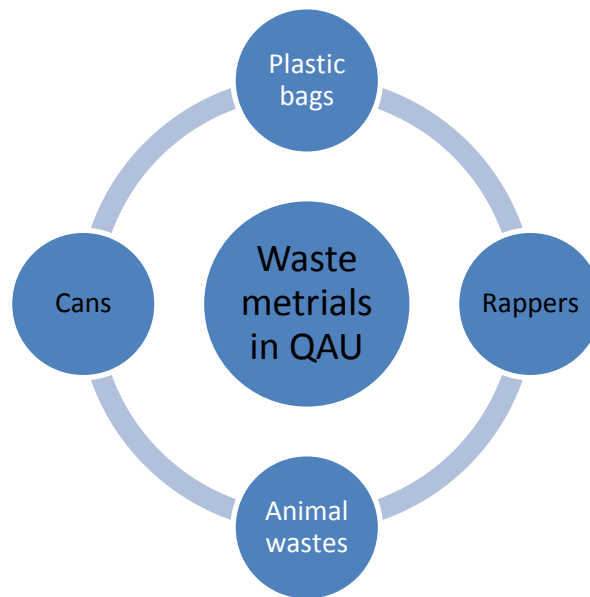


Fig No 2.1

In Quaid-I-Azam university solid waste material was not only products of student but these are also produced by animals. Waste includes plastic bags, rappers, cans and animal waste. Students throw all these in open areas in the University.

Plastic Bags

Plastic bags are product of student's lack of awareness about the practice of trash-bins, because the management has failed to develop a culture of observing the sanitation and environmentally healthy practices.

Cans

Cans of soft drinks are littered all over the campus without getting attention of the sanitary staff.

Rappers

Like elsewhere, students at QAU bring with them packets of junk food like Lays and Kurkure. The rappers of these and many other similar foods never go to the trash-bins.

Animal Waste

Animal waste was one of the major problems in QAU. The university does not have physical demarcation of prohibiting animals and outsiders from entering the university premises. These animals cause a lot of unhygienic waste around the campus.

1.2 Research Question

Quaid-i-Azam University Islamabad is one of the top ranked university of the country and selected students get admission in the university. Ideally, they are supposed to be educated and well verse about the environmental conservation. However, one can see the piles of solid waste on the campus. The researcher was interested to know the level of knowledge and practices of the solid waste management. Do the students have gap between the knowledge and the practices of the solid waste management at the Quaid-i-Azam University Islambad?

1.3 Objectives

- 1- To find out, why students in QAU are not caring about solid waste and why they do not use dust bins in university.
- 2- Explain, why the students of Quaid-I-Azam University do not practice their knowledge.
- 3- To find, the administration role of QAU in university about environment.
- 4- To find, the relationship between knowledge and practices about solid waste management.

1.4 Significance of the Study

This study would be the first of its nature to raise the student awareness about their environment and to discuss their responsibilities in university area. They would know about solid waste effect on student health and mind. It help the student to understand the phenomenon of solid waste in the QAU. It can also provide base for further studies regarding the impacts of environment on education and mental health of the students.

Chapter No. 2

REVIEW OF RELEVANT LITERATUR

A literature review is a text written by someone to elaborate the serious points of present knowledge including practical results, as well as theoretical and methodological influences to a particular topic. Literature reviews are secondary sources, and as such, do not report any new or innovative work. Also, a literature review can be understood as reviews of an abstract achievement.

According to Abdullah (2006) waste management has become a serious environmental problems of the world. The developing countries because of industrial activities and quick population growth produced solid waste that polluted the environment (Rahil Anjum 2013).

According to Mahar, Ahmad and Khan (2007) in new settlement like Islamabad, Lahore, Faisalabad and Peshawar due to rapid urbanization growth rate and natural high growth of population and rising per capita. According to 2004 research the average 387.6 ton per day waste was produced in Islamabad the coverage collection was very low and that was below 60 % (Anjum. 2013)

Kwaw (1995) argued that half million tons of waste generated in central London which was transported 64 kilometer away to be dumped. In 2003 Keller pointed out the cost of building, transportation and manages the landfill sites in America. More importantly, Martin and Lankester (2001) explained that the solid waste substance resulted from human activities were no longer

wanted or needed by their user. According to them piles of rotting food, plastic bags, cans, bottles and others materials build up in the streets, sometimes make huge, dangerous and stinking piles. It was further said that in houses trash bins were not removed regularly due to lack of awareness of hygienic principles (Abdulai 2011).

Nie, Niu and Bai (2008) argued that with the rapid urbanization in China, the issue of solid waste management had been increasingly creating environmental, health and other problems for the municipal authorities. The municipal solid waste was creating environmental issues in China (Nie,Niu and Bai 2008:1973-1980).

Braunegga, Bona, Schellauf et al. (2007) argued that due to lack of reutilization recycling technologies the lower income countries faced massive problems in reducing the hazards. Countries like Pakistan who even struggled with garbage collection did not contribute to keep their environment clean with the same ratio of contributing to the pollution of their environment.

Rada, Istrate and Ragazzi. (2009) discussed the importance of economic and environmental aspect of the management of recyclable materiel. The size of collective stream of recyclable matreial was of course greater than the amount of recycled material (Rada,Istrate and Ragazzi 2009:615-661).

Li and Huang. (2012) argued that the most developed countries were rapidly urbanizing because people from small towns were moving to big cities. The

big city people were moving to urban areas made it challenging for municipal authorities to manage the hygienic conditions by controlling disposed material (Li and H uang 2012:439-453).

Adeyemo, Oyadiran and Afemikhe. (2013) argued that in developing countries the management of waste had become a problem because environment laws, and policies were not well implemented .This issues has created a major problem in such societies. They did not take care food of waste and other discarded materieel.

According to Nigeria report (2011) food waste was the cause of environmental pollution and it also costs them billion per year. The consequence of the problem was that many people died in the area.

Kumar, Khan, Ahmad et al. (2010) argued that waste management was major health problem in developing countries. The health staff was not caring the health facilities in surrounding population. They used syringes, drip bottle, blood bag without disposing of the wrappers properly. According to a report heath care staff used, 12000 million injections were used per year without disposing of the wrappers improperly. Waste production was high in high income countries as compared to low income countries. Even doctors and other health care staff were careless in disposing solid waste.(Kumar, Khan and Ahmad 2010. 22(4):101-1040)

According to Sokan. (2011) about 960 million tons of solid waste was produced in India per year in industrial, agriculture and other processes, 350 million tons of organic waste was produced from farming only. 290 million were inorganic waste of industrial and mining sector and 4.5 million tons were dangerous of nature (Sokan 2011).

Rahman (2009) argued that common people were not aware of the hazards of solid waste, if not disposed of properly. The same waste could be used for useful purposes after recycling in more advanced societies (Rahman 2009).

Banga, Margaret (2011:30) argued that the rising tendency of mobility of people towards cities, people's endeavour for better living standard, fast development and rapid increase in population have enhanced the generation of solid waste in cities of Uganda. Unluckily the increment in these things is not equivalent to the increment in the competence of relevant municipal authorities to deal with the problem. The researcher conducted a case study in the city of Uganda and found that 59.4% of households in Kampala are affiliated in some kind of separation of trash. Some of trash is buried or burnt. Research showed that people did not separate trash because they could not pay for bins for waste.

Ehrampoush and Moghadam. (2005) argued that the poor disposal of solid waste was one of the problems of different but majority of societies. The solid waste management was recently started in developing countries the formal

and informal community people were not aware of solid waste. There was no awareness about waste impact. Environmental attitude of young people ultimately had a direct role in providing knowledge based solution to the coming environmental program. The adult knowledge, attitude and practices about solid waste management in a society were not sufficient. (Ehrampoush and Moghadam 2005.2 (2) : 26-31).

Desmond, Margaret (2010:22) argued that production of waste material in Ireland has augmented after 1990s, because under this era it went through the process of progress. The results of this progress are positive as well as negative. Positive in this way that people become prosperous and their living standard become better, on the other hand this development brought with it the curse of solid waste. The strain generated by augmented waste production and lack of transportation has, had a number of unwanted results like the export of waste, illicit dumping, fly tipping and burning of solid waste.(Desmond 2010 at Landon).

Chen (2010) argued that Municipal Solid Waste in china, it was a large MWS greater in the world and total number of MWS it produced countries to increase recently government had made a greater help of china international cooperation. There polices and regulation and international countries all time encouraged. Their regulation and polices were tool for municipal solid waste management in china. The law of PR China on the environment all pollution

caused by solid waste legislation specifically solid waste management and pollution control. This law was doing their responsibility about solid waste management, pollution controlling the responsibility of law (Chen 2010: 716-724).

Kumar, Khan, Ahmad et al. (2010) argued that hospital wastes in Pakistan per year is 250,000. Hospital waste had reported because of poorly handling from a staff and administration. This led to environmental and health consequences with hospital as well as outside of population. In a hospital every person were generating wastes include hospital staff, nurses, patients, sweepers and administration. They had no Health Care Waste Management (Kumar, Khan and Ahmad 2010:101-10).

Henry. (2006) argued that municipal solid waste management worked in a collection of transfer, resource recovery, recycling and treatment. The main goal of this management was to protect the health of people and provide better environment for people in sustainable development society. They had provided opportunities for the growth and productivity of people in public and private sector. The rural areas solid waste quantity was low as compare to industrial areas. The pollution, growth especially in urban area because rural people migrated to urban areas and pollution increased in urban areas (Henry 2006:92-100).

Ghose, Dikshit and Sharma (2006) argued that in developing countries, the main and recent issues were solid waste. Total 80 million rupees spent in solid waste management. In 1901 the India population was 11% and again in 2001 their population increased and that was 26%. Because population was not a controlling factor and high level population was based on solid waste.

The key development in waste management focused on preventing the production of waste through waste minimization and re use of waste material through recycling. The European Union suggested that per year 2 billion tons of wastes were produced in member states. In 2004 the UK produced about 335 million tons of waste and included 220 million tons of controlled waste from household and industrial household. 9% of total was produced in the UK.

Takenak and Genera (2007) argued that Asian countries were concerned with their ever increasing amount of solid waste in their municipalities. The growing solid waste was a sign of population increasing. A lack of awareness, technical knowledge, lawmaking, policies and plans were major issues for solid waste management in Asian developing countries (Ghose 2006:1287-1293).

Glusti (2009:2229) argued that humans' actions always generated waste. Poor management of waste can become a cause of pollution of water, soil and environment, which has a very negative effect on our environment. To get rid

of this trouble landfill system is used, which is unsafe for human health because it cause many diseases like cancer. On the other hand incineration is also injurious because it emits many harmful gases which are not only worsening human life but it is also a source of global warming. Poor people earn money from recycling of solid waste, as they have direct contact with the waste. So they become victims of parasites and intestinal infections.

Assumptions

- Solid waste had become serious environmental and health related issue.
- Solid waste increased in developing counties. It included plastic bags, robbers, can, bottles and garbage.
- Population growth lead to an increase in solid waste
- Solid waste has effects on ecosystem.
- Solid waste management was the main and important issues of sustainable development.
- Open burning was dangerous for healthy environment.
- Solid waste can cause economic degradation.
- Migration of towards urban areas lead to an increase in solid waste production.

Chapter No. 3

THEORETICAL FRAMEWORK

A theoretical frame work refers to how the researcher not only questions, but ponders and develops thoughts or theories on what the possible answers could be, and then these thoughts and theories are grouped together into themes that frame the subject. It is the process of identifying a core set of connectors within a topic and showing how they fit together.

3.1 Culture Lag Theory

Culture lag referred to the culture took time to catch up with technology discoveries. The social problems and conflicts caused by culture lag because it was not only for idea but it was also related to their explanation and modification. It was to identification and explains of social problem and conflicts.

According to Ogburn (1922) that culture lag was common due to tendency of material culture to evolve and changed rapidly to voluminously while non-material culture tend to resist change and remain fixed for a far longer period of time. He discussed that material and non-material culture in 1922 work in social change. He explained that material culture include the physical object that people created ,for example car, clothe, building, computer and that were man made things. Non-material culture include the things for example ideas, polices, languages rules,custom included knowledge.

3.1.1 Proposition

Youth of any nation has an access to technology. Especially youth was more indulged in information technology. Mostly they do have knowledge about the solid waste management but minority is even not aware of it. In fact having awareness and knowledge the students would be least bother of destroying their own ecosystem. They never practice their knowledge about waste management in their surroundings. Quaid Azam University Islamabad located in a beautiful area of hills. But the students were polluting their own university. They could arrange different campaigns regarding the importance of solid waste management. They could motivate the other students of different universities by utilizing internet networks.

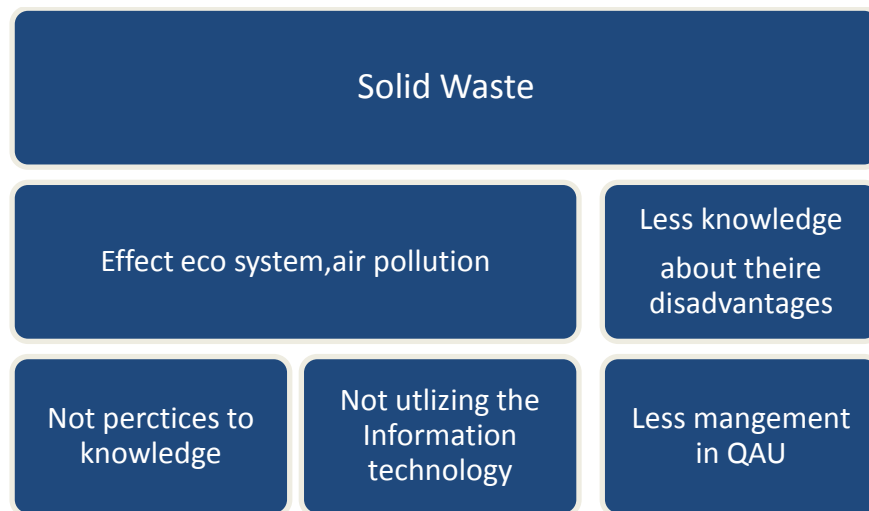


Fig No 3.1

In Quaid I Azam University Islamabad, solid waste management is one of the major issues because university student and staff were not interested in this issue. Every person threw waste in the university.. Student have knowledge but not practice it.They damaged their own ecosystem, not utilizing information technology.

3.2 Risk Society Theory

The risk society theory written by Ulrich Beck gave 1992 to “New Modernity”. In this book he told some characteristic of traditional society and early modern and modern society. In traditional societies people lived in extended family. They had high believe in church not interested in education. In 17th century traditional society began to transform in early modernity society people moved toward modernity. People had less belief in church as compare to tradition societies and 20th century people transform early modernity to modern society. They became more educated skillful, knowledge and communication based. The industrial, political, culture, globalization came in to being. Knowledge spread all over the world changed; no any gender discrimination in a society, and women started to work in outside of the home. Ulrich told when human transformed early modernity to modern society then they created risk in society. They created different goods and services in a society. Goods and services created a problem for human and whole ecosystem. There were two type of risk One natural risk and other was man manufacture risk. Both was dangerous for human in society; nature risk

means earthquakes ,famine ,diseases and land sliding, Manmade risk that included flood ,assault ,war and ozone depletion (Beck 1992 : 272)

3.2.1 Proposition

Our state was under developed state. It was not technologically advanced. The tragedy with this country was that it always became victim of both risks natural and manmade risk. In Quaid -I- Azam university students became victim of man made risk. It included solid waste (cans, rappers, plastic bags, food wastes). They have knowledge about solid waste but the student do not practices it. That risk is not only dangerous for university student but it also affect the ecosystem of whole world. Waste created different kind of diseases.

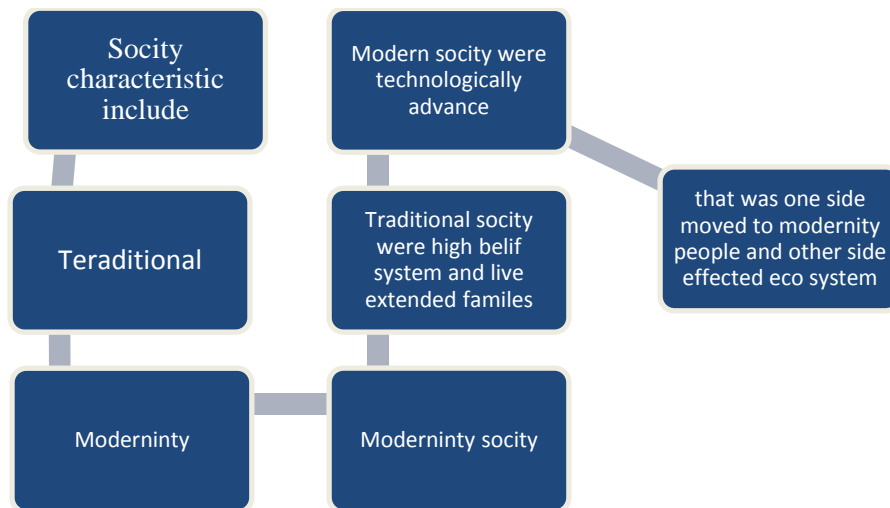


Fig 3.2

Society has three characteristics, these are traditional, early modernity and modern society; all societies have different characteristics. Traditional society's people were living in extended families and had high belief in churches. Modern society's people are technologically advanced. Technology on one side provides facilities for human life and on the other side creates problems for human health by air pollution, land pollution and water pollution.

3.3 Hypothesis

3.3.1 Null hypothesis (H₀)

“Higher the level of knowledge, higher will be the practices.”

3.3.2 Alternate hypothesis (H₁)

“Lower the level of knowledge, lower will be the practices.”

Chapter No. 4

CONCEPTULIZATION AND OPRATIONALIZATION

4.1 Conceptualization

Conceptualization refers to the process of clarification of one's concepts with existing words and examples. To break the research topic into variables and defined it according to the previous existing knowledge is called conceptualization. A variable and concept had many dimensions and indicators, to specify that variable in research and use the most nearest meaning in the research.

4.1.1 Knowledge

According to Encyclopedia Britannica "Knowledge refers to the concept formation; epistemology; perception; mind; philosophy of; and learning theories" (Encyclopedia Britannica 1973: 859).

Knowledge means knowing something, or awareness about something. For Webster dictionary knowledge is learning by study. However Collins Dictionary define knowledge.

According to Collins Dictionary

"Knowledge means the facts, feelings or experiences known by a person or group of people and it also refers to the state of knowing, awareness, consciousness or familiarity gained by experience and learning" (Collins Dictionary Tenth Edition 2009: 913).

The above definition has described knowledge human skills and experience. However Encyclopedia Britannica is deferring from above definition.

According to Webster Comprehensive Dictionary

“Knowledge means a result or product of knowing, information or understanding acquired through experience, practical ability or skill and it is any process, or state of knowing, cognition” (Webster comprehensive Dictionary 1998:706).

All above dictionaries are defining knowledge their concept are same about knowledge but the dimension are different to each other.

4.1.2 Practice

According to Encyclopedia Of Britannica “Repeatquiring performance of an act with the intention of improving or efficiency in it” (Encyclopedia Britannica,1973: 173).

A practice means that, to carry out and to regularity. According to Webster dictionary the definition of practice means to perform a knowledge however the definition Encyclopedia Britannica defer from above definition.

According to Encyclopedia Britannica

“Practice refers to a usual or customary action or proceeding, repetition or exercise of an activity in order to achieve mastery and fluency or in other words the condition of having mastery of a skill or activity through repetition” (Encyclopedia Britannica 1295).

Perceptual learning is provided by investigating the effects of practice and take practices of daily exercise. However Webster New World College Dictionary explain the above definition in a different way.

According to Webster New World College Dictionary

“Practice means to do or engage in frequently or usually; make a habit or custom or to do repeatedly in order to learn or become proficient; exercise or drill one self in and to put into practice” (Webster New World College Dictionary, 2000.1129).

The conclusion of above definition is that all concept were similar and performance or act means practice.

4.2 Operationalization

Operationalization is a process used in social sciences with conceptualization and the main reason behind this is to clarify the definition of concept in the research. Definitions of concepts are for the familiarity and cause confusion

when directly used in the research, so researcher explains the phenomenon according to their own framework and this process is called operationalization.

The operationalization of recent research concepts is as follow:

Knowledge

Knowledge was the awareness of the students as to how waste material should be disposed of? The Quaid -I- Azam University students threw waste material, in green places. They had awareness about the solid waste but they did not practice it. Throwing waste in QAU included plastic bags, food waste, rappers and cans. They knew solid waste has effects on the surrounding. Student knew it was hazardous for health and caused different diseases but they could not control their habit to do so.

Practice

Practices meant how students dealt with solid waste material (What they do) and practices means that are regularly used people. The researcher defined practice as using Dust bins regularly, Proper management was important to control throwing the waste out.

Chapter No. 5

RESEARCH METHODOLOGY

Methodology shapes methods or techniques to be used in the research. Each study, depending upon the nature of the study and circumstances in the field, uses different methods for data collection. This research carried out using following methods, tools and techniques in order to gather reliable and valid information.

5.1 Research design

This study covered the basic components of research, i.e. description and explanation in order to fulfill primary as well as secondary sources of information. This covered accessible books, journals and, relevant websites. Moreover, effort made to distribute a structured questionnaire to students of universities and employers of the organization.

5.2 Universe of the study

The research study was conducted in Quaid I Azam University Islamabad. The total number of student in the university was 8000. This University was established on July 1969 in Islamabad under the act of national assembly and started teaching and research programs for PhD and MPhil degrees and then it started Masters, Bachelor and recently it has started undergraduate programs. Many students were from different areas of Pakistan.

5.3 Target population

Target population was the male and female student of QAU. They were the potential producer of waste material in university. However the populations from which respondent were sampled includes people aged 20 year or above 35 year student male and female student.

5.3 Sampling technique

Sampling is the subset of the whole population. In this research purposive sampling was used. All respondents were male and female students in QAU because the research topic is about throwing solid waste by both gender in the University. The second reason was that total population had an equal chance of being selected.

5.4 Sample size

The total population of the area was very large to conduct a research on. So the researcher collect data from 121 respondent. There were 51 male respondents and 70 female students.

5.5 Tools for data collection

Questionnaire was used to collect the data because individual response about solid waste was most important for data collection. It was easier for researcher

to conduct data. The researcher saved their time through questioner and specific result got of data.

5.6 Technique for data collection

Technique for data collection was face to face technique because it gave researcher a best change for interaction to respondents.

5.7 Pretesting

Before collecting the data field visit were done. A pre-testing of 5 to 10 questionnaires was conducted as to avoid the errors in the questionnaire. Pretesting was done on the student of university and hostel. Pretesting was a best formula to make strong questioner.

5.8 Data analyses

In this research study once data have been collected the second step usually includes the analysis of these data, the researcher collected during research. There are different techniques and tools are used in research study to draw the accurate result I have used the Statistical Package for Social Science 16.5 version.

5.9 Opportunities and Limitation of the study

The researcher used questioner that was big opportunity because it saved the time. Statistical package of social science (SPSS) was the best opportunities for data analyzed. In QAU sample size was high the researcher easily

collected data, all respondent understood the questionnaire, there was no need for guidance them. The data analyzed by (SPSS) it gave correct percentage and frequencies.

5.10 Ethical concern

Researcher direct personal involvement in the social lives of others people during field research introduce ethical concerns.

- When researcher visited to collect the data. The researcher did not behave illegally with the respondents.
- While talking about the confidentiality of research, the researcher had hide the identity of his respondents. Therefore, all the responses collected were purely unbiased.
- The researcher had cared a lot about the privacy of the respondents.
- The researcher did not force any respondent who was unwilling to provide information.
- Researcher was not asked about their personal data without their permission.

Chapter No. 6

RESULTS

This chapter shows the frequency and percentage of the respondent of whole study. Frequency means the amount of or quantity of a particular things and percentage means out of hundred how much? The researcher discussed their responses of the respondents as :

Table No 6.1 Age of the Respondents

Age	Frequency	Percent
20-25	116	95.9
25-30	3	2.5
30-35	2	1.7
Total	121	100.0

The above table describes the age of the respondents. The table shows that the majority of the respondents with 95.9 percent are between the ages of 20 to 25 years. While the remaining 3 respondents with 2.5% were between 20 to 30 years of the age.

Table No 6.2 Gender of the respondents

Gender Category	Frequency	Percent
Female	70	57.9
Male	51	42.1
Total	121	100

Above table shows the gender of respondents, in which 70 respondents were female and 51 respondents were male. Majority of female students were 57.7% respondent and 42.1 respondents were male respondents.

Table No 6. 3 Level of education

Education	Frequency	Percentage
Bachelor	15	12.4
Master	103	85.1
Doctorate	03	2.5
Total	121	100

In this table we find out the education of the respondents. The table describes that majority of the respondents with 85.1 percent were Masters and 12.4 percent Bachelors while minimum of the respondents were Doctorate and their percentage is 2.5.

Table No. 6.4 Marital Status

Marital status	Frequency	Percent
Single	113	93.4
Married	07	5.8
Divorce	1	0.8
Total	121	100.0

The above table describes the marital status of the respondents. The table shows that majority of the respondents with 93.4 percent were single, while 5.8 percent respondents were married and .8 % were divorced in QAU.

Table no.6.5 Family Structure

Family structure categories	Frequency	Percent
Extended	05	4.1
Joint	68	56.2
Nuclear	48	39.7
Total	121	100.0

The above table shows about the type of family structure of the respondents. The table shows that majority of respondents were living in joint family their percentage was 56.2%. While rest of the respondent with 39.7 percent were from nuclear family and 4.1% respondent were living in extended family structure. Maximum respondents preferred to live in joint family structure.

Table No.6.6 Family Income per month

Family income	Frequency	Percentage
less than or equal to 25000	30	24.8
26000-50000	43	60.3
Above 50000	48	100.0
Total	121	

In this table find out the monthly income of the respondents, that majority of the respondents family income was above 50,000. While the other remaining respondents with 60.3 percent had income between 26000 to 50000 and 24.8% respondents income was less or equal to 25000 family income.

Table No.6.7 Feeling the university is like home

University like home categories	Frequency	Percentage
Strongly agree	33	27.3
Agree	39	32.2
Disagree	32	26.4
Strongly disagree	10	8.3
Do not know	7	5.8
Total	121	100

The above table shows you feel university as their home. 27.3% respondents were strongly agreed and 32.2% respondents were only agreed. While rest of the 26.4% respondents were disagreed and 8.3% respondents were strongly disagreed. Minority of the respondents 5.8% were do not know.

Table No.6.8 Usually used Dust bin in university

Usually use dust bin	Frequency	Percentage
Strongly agree	45	37.2
Agree	62	51.2
Disagree	9	7.4
Strongly disagree	3	2.5
Do not know	2	1.7
Total	121	100

Above table shows do you used dust bin. The majority of respondents were agreed about the usage of dust bin and their percentage were 51.2. While 37.2% respondents were strongly agreed, the other 7.4% respondents were disagreed while the rest of the respondent with 2.5 % were strongly disagreed. The remaining 1.7% respondents were did not know about the usage.

Table No.6.9 Cleanliness is responsibility of students

Cleanness	Frequency	Percentage
Strongly agree	60	49.6
Agree	44	36.4
Disagree	13	10.7
Strongly disagree	3	2.5
Do not know	1	0.8
Total	121	100

The table describes,university cleanness was responsibility of students the majority of the respondent with 49.6% were strongly agreed dus 36.4 % respondents were agreed while the rest of the respondent with 10.7 % were

disagreed and 2.5% respondents were strongly disagreed remaining of the respondent with 0.8% were did not know.

Table No.6.10 Throwing waste in university

Throwing waste	Frequency	Percentage
Strongly agree	56	46.3
Agree	51	42.1
Disagree	7	5.8
Strongly disagree	3	2.5
Do not know	4	3.3
Total	121	100.0

Above table shows the knowledge of respondents about solid waste that students are throwing waste in university. Majority of 56 respondents with 46.3% were strongly agreed while 42.1% respondents were agreed and 5.8 % respondents were disagreed rest of the respondent with 2.5% were strongly disagreed and 3.3% respondent are did not know.

Table No.6.11 Waste is effect on student mind

Effect student mind	Frequency	Percentage
Strongly agree	53	43.8
Agree	57	47.1
Disagree	6	5.0
Strongly disagree	1	.8
Do not know	4	3.3
Total	121	100

Above table shows waste effects on student mind in the university. The majority of respondents 43.8 % were strongly agreed and 47.1 % respondents were agreed remaining 5.0% respondents were disagreed and 0.8 respondents were strongly disagreed, while 3.3% respondents did not know.

Table 6.12 Disposal of waste material responsibility

Waste material category	Frequency	Percentage
Strongly agree	24	19.8
Agree	21	17.4
Disagree	52	43.0
Strongly disagree	21	17.4
Do not know	3	2.5
Total	121	100.0

Above table shows disposal of waste material responsibility of students. The majority of respondents were disagreed and their percentage was 43.0%. 19.8% respondents were strongly agreed and 17.4 % respondents were agreed and 17.4% respondents were strongly disagreed and 2.5% respondents did not know.

Table No. 6.13 Burying of used martial

Burying category	Frequency	Percentage
Strongly agree	24	19.8
Agree	43	35.5
Disagree	30	24.8
Strongly disagree	8	6.6
Do not know	16	13.2
Total	121	100

Above table shows burying of used material is management. That the majority of respondents were agreed their percentage was 35. The 24.8% respondents were disagreed. 19.8 % respondent strongly agreed and 13.2% respondents did not know about solid waste

Table No 6.14 Keeps the environment of university clean

University clean	Frequency	Percentage
Strongly agree	31	25.6
Agree	45	37.2
Disagree	34	28.1
Strongly disagree	5	4.1
Do not know	6	5.0
Total	121	100.0

Above table shows solid waste management keep the university clean . Majority of respondents were agreed their percentage was 37.2 % and 28.1% respondent were disagreed and 25.6 % respondent were strongly agreed and 5.0 respondent did not know and 4.1% respondents were strongly disagreed.

Table No.6.15 Waste martial is responsibility of the administration

	Frequency	Percentage
Strongly agree	35	28.9
Agree	60	49.6
Disagree	18	14.9
Strongly disagree	5	4.1
Do not know	3	2.5
Total	121	100.0

Above table shows that was disposal of waste material is responsibility of QAU administration in the department. 49.6% respondent were agreed and 28.9 % respondent were strongly agreed and 14.9 % respondents were disagreed and 4.1 respondents were strongly disagreed and 2.5 respondents did not know.

Table No.6.16 Burning has negative effect on student's health

Negative effect	Frequency	Percentage
Strongly agree	71	58.7
Agree	39	32.2
Disagree	6	5.0
Strongly disagree	1	.8
Do not know	4	3.3
Total	121	100

Above table shows open burning had negative effect on student health .Majority of the respondent were strongly agreed and 32.2% respondent were

agreed and 5.0% respondent were disagreed and .8% respondents were strongly disagreed and 3.3% respondents did not know.

Table No.6.17 Disposal of waste material is responsibility hostel

Hostel	Frequency	Percentage
Strongly agree	28	23.1
Agree	61	50.4
Disagree	25	20.7
Strongly disagree	3	2.5
Do not know	4	3.3
Total	121	100

Above table shows disposal of waste material is responsibility of QAU administration in the department. The majority of respondents were agreed. and 28.9 % respondents were strongly agree and 14.9 % respondents were disagree and 4.1% respondents were strongly disagreed and 2.5% respondents did not know.

Table No.6.18 Solid waste management is big problem of QAU

Management	Frequency	Percentage
Strongly agree	57	47.1
Agree	48	39.7
Disagree	12	9.9
Strongly disagree	1	.8
Do not know	2	1.7
Total	121	100

Above table shows solid waste management was big problem of QAU. 47.1% respondents were strongly agreed 39.7% respondents were agreed and 9.9 % respondent were disagreed and 0.8 % respondents were strongly disagreed and 1.7 % respondents did not know.

Table No 6.19 Solid waste is product of student

Product	Frequency	Percentage
Strongly agree	18	14.9
Agree	57	47.1
Disagree	35	28.9
Strongly disagree	5	4.1
Do not know	6	5.0
Total	121	100

Above table shows that solid waste was product of student. 47.1% respondent were agreed and 28.9% respondents were disagreed and 14.9 % respondents were strongly agreed and 4.1% respondents were strongly disagreed and 5.0% respondents did not know.

Table No 6.20 Plastic bags and rappers waste has problem

	Frequency	Percentage
Strongly agree	65	53.7
Agree	43	35.5
Disagree	11	9.1
Do not know	2	1.7
Total	121	100

Above table shows plastic bags and rappers had problem. Majority of respondents were strongly agreed, and 53.7% respondents were agreed 35.5% respondent were agreed and 9.1% respondent were disagreed and 1.7% respondents did not know.

Table No 6.21 Healthy environment is best for student

Healthy environment	Frequency	Percentage
Strongly agree	95	78.5
Agree	22	18.2
Disagree	3	2.5
Strongly disagree	1	.8

Above table shows clean healthy environment is best for student. 95 respondents were strongly agreed and 18.2% respondents were agreed and respondents were disagreed and 0.8% respondent was strongly disagreed out respondent in QAU.

Table No 6.22 Using dust bins is good method for waste disposal

Disposal	Frequency	Percentage
Strongly agree	50	41.3
Agree	55	45.5
Disagree	10	8.3
Strongly disagree	1	.8
Do not know	4	3.3
Total	121	100

Above table shows using dust bin was best method for waste disposal. The majority of respondents were strongly agreed, and 45.5% respondent were agreed while 8.3% respondent were disagreed and .8% respondent was strongly disagreed and 3.3% respondents did not know.

Table No 6.23 Dust bins are most important for university area

Dust bin category	Frequency	Percentage
Strongly agree	83	68.6
Agree	34	28.1
Disagree	4	3.3
Total	121	100

Above table shows dust bins are most important for university area that the 68.6% respondents were strongly agreed, and 28.1 respondents were agreed and 3.3 % respondents were disagreed.

Table No 6.24 Solid waste is major environment issues

Environment issues	Frequency	Percentage
Strongly agree	61	50.4
Agree	50	41.3
Disagree	6	5.0
Do not know	4	3.3
Total	121	100

Above table shows solid waste is one of the QAU's major environment issues. 50.4 % respondent were strongly agreed and 41.3 respondents were agreed and 5.0% respondents were disagreed and 3.35 respondents did not know.

Table No 6.25 Diseases are caused by improper waste management.

Diseases caused	Frequency	Percentage
Strongly agree	50	41.3
Agree	55	45.5
Disagree	11	9.1
Strongly disagree	1	.8
Do not know	4	3.3
Total	121	100

Above table shows that improper waste caused diseases. Majority of respondents were agreed, which is 45.5 % while 41.3 respondents were strongly agreed and 9.1% respondents were disagreed and 0.8% respondent was strongly disagreed and 3.3 % respondents did not know

Table No 6.26 Solid Waste and Air Pollution

Ari pollution category	Frequency	Percentage
Strongly agree	71	58.7
Agree	41	33.9
Disagree	8	6.6
Strongly disagree	1	.8
Total	121	100

Above table shows solid waste was caused by air pollution. There 58.7 % respondents were strongly agreed and 33.9% respondents were agreed and 6.6% respondents were disagreed and .8% respondent was strongly disagreed out of 121 respondent in QAU.

Table No 6.27 Solid Waste is caused by Land Pollution

Land pollution category	Frequency	Percentage
Strongly agree	75	62.0
Agree	46	38.0
Total	121	100.0

Above table shows solid waste was caused by land pollution, 62.0% respondents were strongly agreed and rest of the respondent were agreed of waste causes by land pollution.

Table No 6.28 Solid Waste caused by Water Pollution

Water pollution category	Frequency	Percentage
Strongly agree	64	52.9
Agree	50	41.3
Disagree	6	5.0
Strongly disagree	1	.8

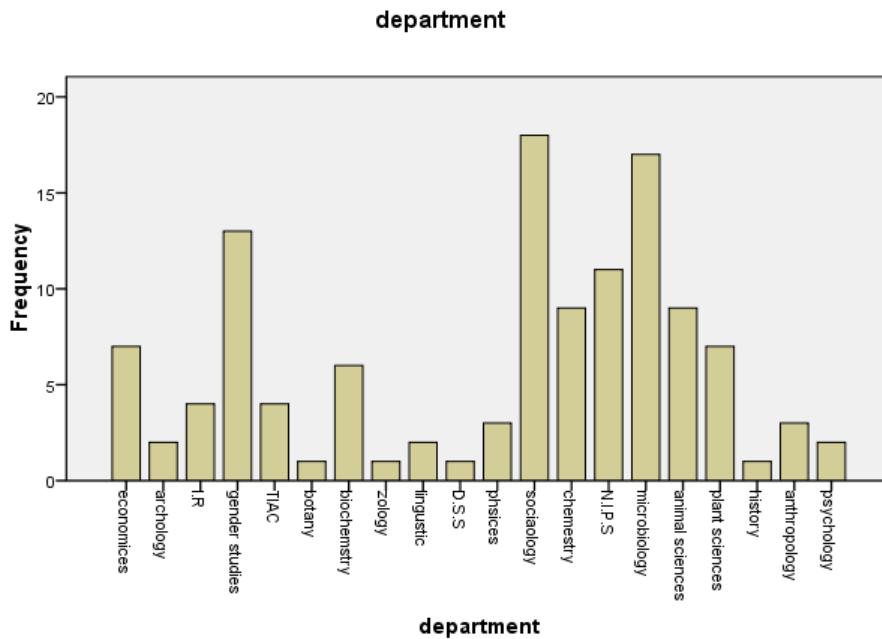
Above table shows solid waste was caused by water pollution, that the majority of respondents were strongly agreed 52.9% respondents were

strongly agree and 41.3% respondents were agreed and 5.0 % respondents were disagreed and .8% respondents were strongly disagreed.

Table No 6.29 Sweepers are doing their job well

Sweeper category	Frequency	Percentage
Strongly agree	17	14.0
Agree	34	28.1
Disagree	45	37.2
Strongly disagree	18	14.9
Do not know	3	2.5
Total	121	100

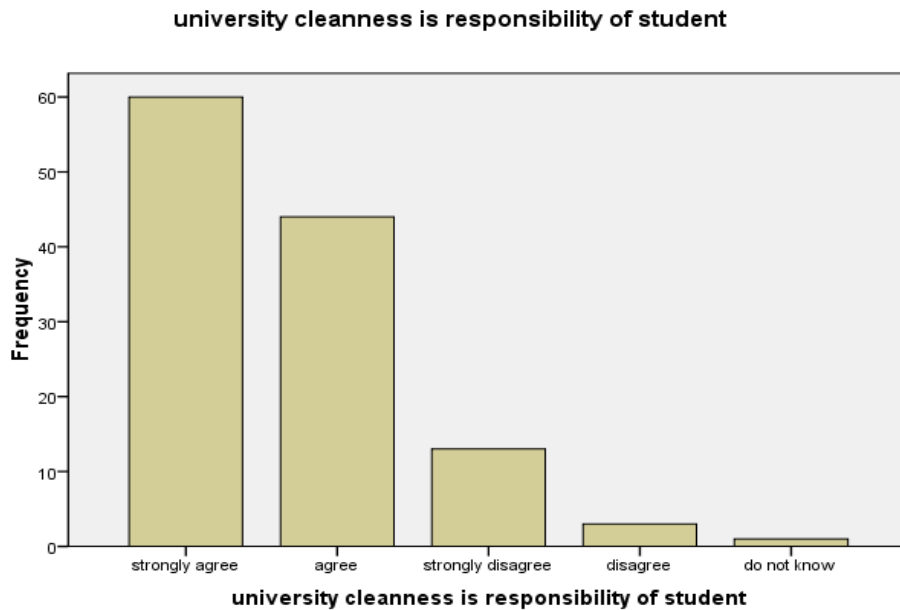
Above table shows sweeper of QAU were doing their job well, the majority of respondents were disagreed. 37.2 % respondents were disagreed sweepers doing job well and 28.1% respondents were agreed and 14.9% respondents were strongly disagreed and 14.0% respondents were strongly agreed and 2.5% respondents did not know.



Figger no 6.1

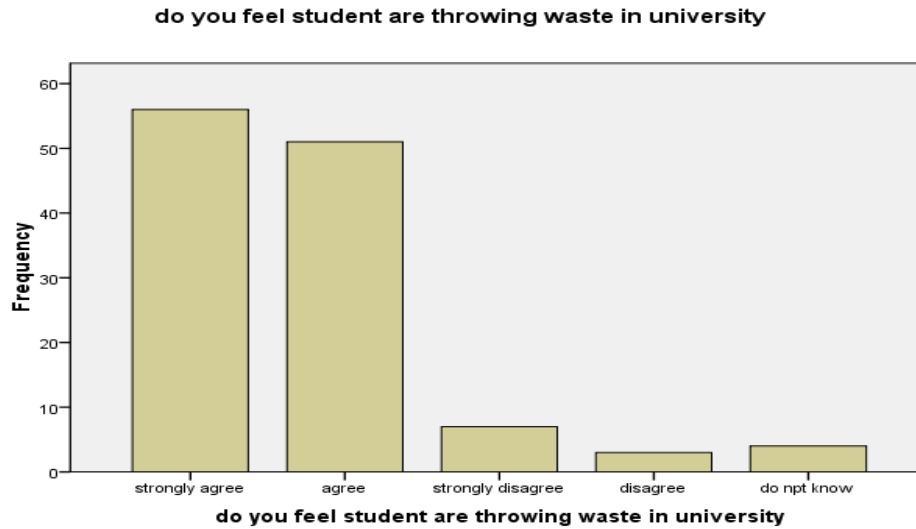
This chart shows the departments of respondents in QAU. Horizontal line represent the Department of respondent while vertical line shows the frequencies. Seven respondents were from Economics Department. Two respondents were from Archeology Department, four respondents were from International Relationship Department, 13 respondents were from Gender studies Department, six respondents were from Biochemistry Department, one respondent was from Botany Department, one respondent was from Zoology, one respondent were from Linguistic, one respondent was from D.S.S, three respondents were from Physics, 18 respondents were from Sociology, nine respondents were from Chemistry, eleven respondent were from N.I.P.S, seventeen respondents were from Micro biology, nine respondents were from

animal sciences, seven respondent were from plant sciences, one respondent was from History ,three respondents were from Anthropology,two respondents were from Psychology Department.



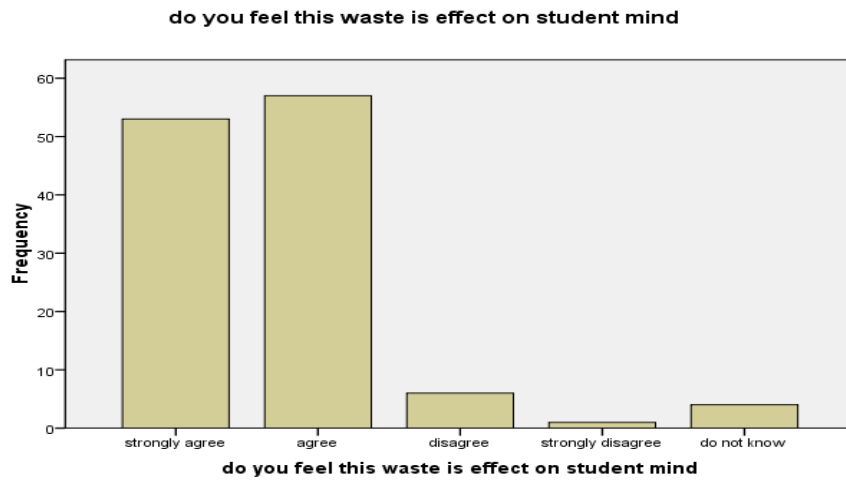
Figger no 6.2

This chart shows university cleanness was responsibility of students. Horizontal line represent that cleanliness is responsibility of student while vertical lines shows the frequency. 60 respondents were strongly agreed, 44 respondent were agreed, 13 respondents were disagreed, 3 respondents were strongly disagreed and one respondent did not know about cleanness as responsibility of student in university. Thus according to majority of the respondents it was a responsibility of every individual to keep it surrounding clean.



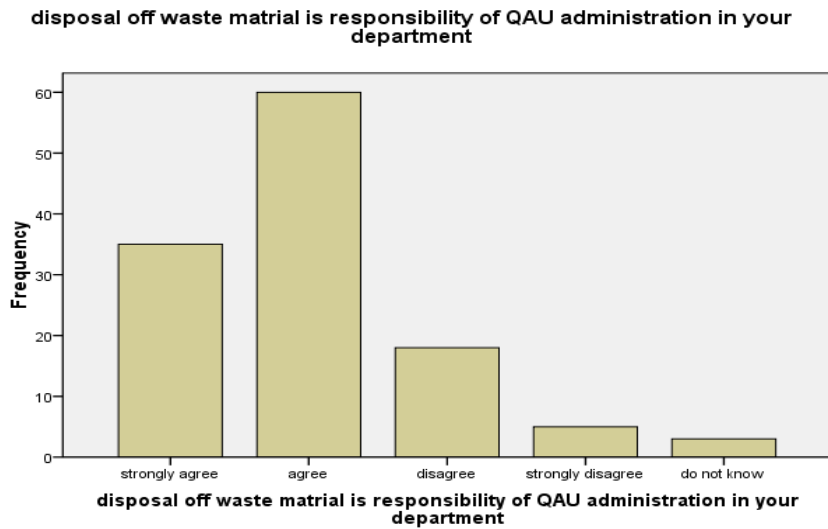
Figger no 6.3

This chart shows throwing waste in university. Horizontal line represent throwing waste while vertical lines shows the frequency. 56 respondents were strongly agreed, 51 respondent were agreed, 7 respondents were disagreed, 3 respondents were strongly disagreed and 4 respondents did not know about throwing waste in university. It shows that majority of the people were throwing wastes in open spaces rather than disposing them in proper ways.



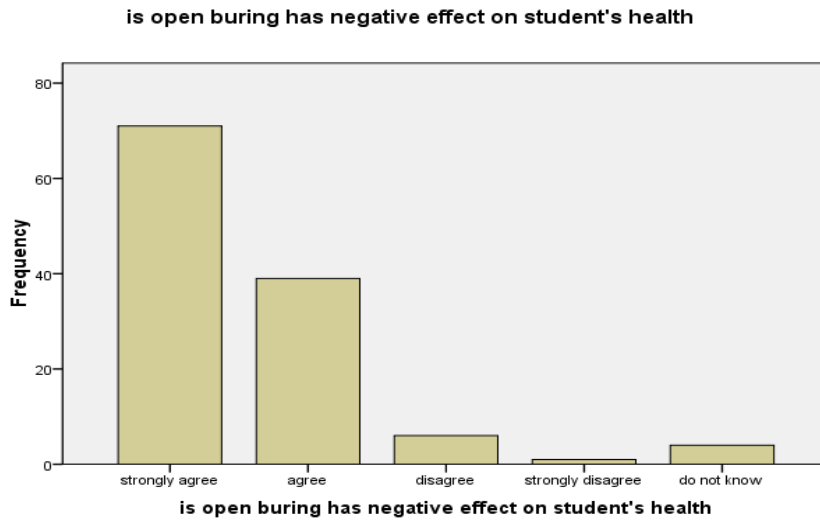
Figger no 6.4

This chart shows waste materials have an effects on student mind. Horizontal line represent waste effect while vertical lines shows the frequency. 53 respondents were strongly agreed, 57 respondents were agreed, 6 respondents were disagreed, one respondent was strongly disagreed and 4 respondents did not know about waste effect on student in University.



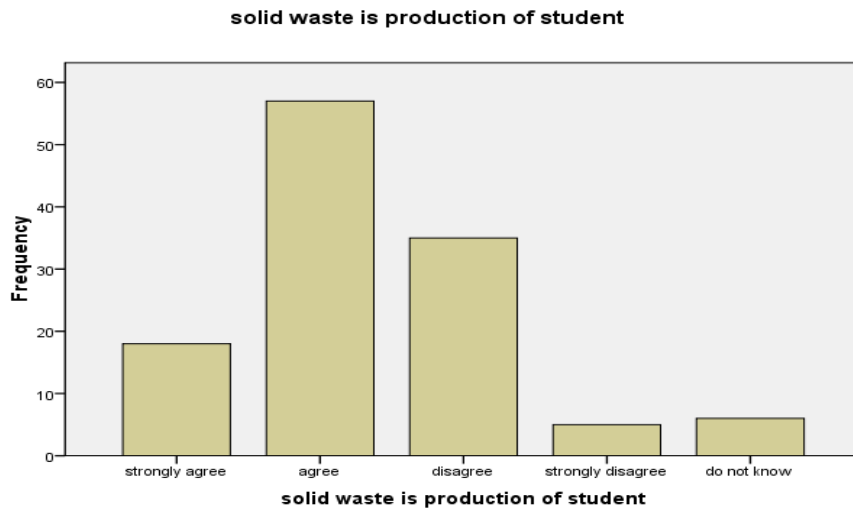
Figger no 6.5

This chart shows solid wastes responsibility of administration in university. Horizontal line represent disposal of waste martial was responsibility of QAU administration in a department while vertical lines shows the frequency. 35 respondents were strongly agreed, 60 respondent were agreed, 18 respondents were disagreed, 5 respondents were strongly disagreed only three respondent did not know



Figger no 6.6

This chart shows that open burying of wastes has a negative effect. Horizontal lines represent negative effect on students while vertical lines show the frequency. 71 respondents were strongly agreed, 39 respondents were agreed, 6 respondents were disagreed, one respondent was strongly disagreed and 4 respondents did not know. It is therefore important to dispose of the wastes properly in order to avoid its negative consequences on human health.



Figger no 6.7

This chart shows that solid waste was product of student in university. The Horizontal line represent product of students while vertical lines shows the frequency. 18 respondents were strongly agreed, majority of the respondents were agreed while 35 respondents were disagreed, dus 5 respondents were strongly disagreed and rest of the respondents did not know.

Hypothesis Testing

The researcher used chi square test to find association dependent and independent variable.

Chi square test

The researcher used chi square test for crosstabulation. It showed association between two variables dependent and independent variable.

Table.no 6.31 Chi-Square Tests

Association between qualification and cleanness responsibility

Qualification and Cleanness University	Value	Df	Asymp.sig.(2-side)
Pearson chi square	25.652	8	.001

The relationship between the education and university cleanness responsibility of student of QAU is significant in the direction of the alternate hypothesis. Pearson chi-square is 25.652 degree of freedom is 8 and P value less than .005. Therefore the alternate hypothesis is accepted and the null hypothesis is rejected.

Table.no 6.32 Chi-Square Tests

Association between used dust bin and healthy environment

Use dustbin and Healthy enviromrnt	Value	Df	Asymp.sig.(2-side)
Pearson chi square	44.303	12	.000

The relationship between used dust bin at the QAU and healthy environment is significant having a significance level of 0.00.ss Therefore the alternate hypothesis is accepted and the null hypothesis is rejected

Table.no 6.33 Chi-Square Test

Association between throwing waste and effect student mind

Throwing waste and effect students mind	Value	Df	Asymp.sig.(2-side)
Pearson chi square	92.634	16	.000

The relationship between throwing waste and effect student mind is significant in the direction of the alternate hypothesis. Pearson chi-square is 92.634 degree of freedom is 16 and P value less than .005 . Therefore the alternate hypothesis is accepted and the null hypothesis is rejected

Table.no 6.34 Chi-Square Tests

Association between disposal of waste and environmental cleanness

Disposal of waste and environmental cleanness	Value	Df	Asymp.sig.(2-side)
Pearson chi square	47.998	16	.000

The relationship between solid waste management keep the environment of university clean and disposal of waste material is significant in the direction of the alternate hypothesis. Pearson chi-square is 47.998 degree of freedom is 16 and P value less than .005. Therefore the alternate hypothesis is accepted and the null hypothesis is rejected.

Table.no 6.35 Chi-Square Tests

Association solid waste and solid waste caused by water pollution

Solid waste and water pollution	Value	Df	Asymp.sig.(2-side)
Pearson chi square	33.531	12	.001

The relationship between plastic bags, rubber waste had become a major problem in QAU is responsibility of QAU and solid waste caused by water pollution is significant in the direction of the alternate hypothesis. Pearson chi-square is 33.531 degree of freedom is 12 and P value less than .005.

Therefore the alternate hypothesis is accepted and the null hypothesis is rejected

Table.no 6.36 Chi-Square Tests

Association between solid wastes and waste materials responsibility

Solid waste and waste material responsibility	Value	Df	Asymp.sig.(2-side)
Pearson chi square	42.922	16	.000

The relationship between solid wastes as product of student and waste materials responsibility of students is significant in the direction of the alternate hypothesis. Pearson chi-square is 42.922 degree of freedom is 16 and P value less than .005. Therefore the alternate hypothesis is accepted and the null hypothesis is rejected

Table.no 6.37 Chi-Square Tests

Association between diseases and caused by land pollution

Diseases and land pollution	Value	Df	Asymp.sig.(2-side)
Pearson chi square	22.961	4	.000

The relationship between diseases are caused by improper waste management in QAU and solid is caused by land pollution is significant in the direction of

the alternate hypothesis. Pearson chi-square is 22.961 degree of freedom is 4 and P value less than .005. Therefore the alternate hypothesis is accepted and the null hypothesis is rejected.

Table.no 6.38 Chi-Square Tests

Association solid waste problem and dust Bins important

Waste problem and dust bin importance	Value	Df	Asymp.sig.(2-side)
Pearson chi square	41.759	10	.000

The relationship between solid waste problem of QAU and dust bins are important for university area is significant in the direction of the alternate hypothesis. Pearson chi-square is 41.759 degree of freedom (DF) is 10 and P value less than .005. Therefore the alternate hypothesis is accepted and the null hypothesis is rejected.

Chapter No. 7
DISCUSSION, CONCLUSION AND SUGGESTIONS

Discussion

This chapter is divided into three parts. First there was a discussion of the general summary of the findings and second was about the conclusion of the study and third is about suggestion for the further research, solid waste management their impact, causes, advantages and disadvantages. Solid waste include animal waste, human waste, medical waste and food waste. Solid wastes is generated at high level in whole the world especially in developing countries. Rich countries easily solved the problem because their management system was strong. They created different kind of management group to control solid waste. They spent high level of expenditure to solve the problems it. Management of solid waste reduced adverse impact on the environment and human health and support economic development and improving quality of life. Food waste percentage was 50% in all over the world. In Pakistani society it was estimated that 54888 tons per day of solid waste generated. It include plastic bags, garbage ,cans, food, leaves, grass, bones , wood. In Pakistan 40 % were food waste generated. It was serious problem of Pakistan because underdeveloped countries did not solve the problem. In Japan 45% Japanese yen were spent on solid waste. India spend 86% dollar on solid waste and Indonesia spent 90% on solid waste. Because it was dangerous for human life.

The universe of the research was Quaid -I- Azam university Islamabad (Islamabad University).Solid waste management was the biggest problem of

QAU Islamabad. The students of university had knowledge about solid waste but they did not practice it. The researcher found out why students not used their knowledge. The objectives on this study was to find the environmental issues created by solid wastes. The sample size of the study was 121. The researcher used sampling techniques for data collection. Questioner was used for tool for data collection in this study. The researcher found that 95 respondents were strongly agreed that healthy environment should be provided to the students. 71 respondent were strongly agreed that open burning had negative effect on student health. 47.1 percent respondents were agreed that waste effect on student mind in QAU. 58.7 percent respondent were strongly agreed that solid waste was caused by air pollution, 62 % agreed that trash was caused by land pollution and 52.9 % agreed to water pollution. The relationship between the education and university cleanliness responsibility of student of QAU was in $P < 0.005$ which was the direction of research hypothesis. This study had both male and female student in QAU. The respondent age from started 20 to above 35 age people with the help of question researcher found out result according to hypotheses. The relationship between used dust bin at the QAU and healthy environment was good for student was $P < 0.005$ which was in the direction of research hypotheses. The relationship between throwing waste and effect student mind was $P < 0.005$ the direction of research hypotheses. The relationship between solid waste management kept the environment of university clean and disposal of waste

material was $P < 0$ in the direction of research hypotheses. The relationship between plastic bags, rubber waste has become a major problem in QAU was responsibility of QAU and solid waste caused by water pollution $P < 0.005$ in the direction of the research hypothesis. The relationship between solid wastes was product of student and waste materials responsibility of students was $P < 0.005$ which is in the direction of the research hypothesis. The relationship between diseases were caused by improper waste management in QAU and solid was caused by land pollution was $P < 0.005$ in the direction of the research hypothesis. The last hypotheses testing that the relationship between solid waste problem of QAU and dust bins were important for university area is $P < 0.005$ in the direction of the research hypothesis. In this study all associations were less than 0.005 so over research a hypothesis was accepted. These statistic results the situation of solid waste mangemnet in QAU. the student play the role about solid waste.

Conclusion.

This chapter discussed the whole study's main parts objectives, literature review, theory and finding of the study. The main objectives of the study was the people have knowledge about solid waste management but they did not practice it in Quaid I Azam University. The students were throwing waste in open areas. The researcher wanted to know this point that why they did not use dustbin in university. Researcher found the issue reason and their solution in university. The role of administration is a key factor regarding this issue. Modern society created high population and it was caused High wastes included food waste, plastic, rappers. So it has effects on ecosystem. Healthy environment was need for human health. This was responsibility of authority. They should manage the problem and provided to the employees and workers a healthy environment.

The cultures lag theory and risk society had been discussed in this study because the high modernity provided facilities on one side they creates problem for society. The theory discussed material and non-material culture that was related to man made things and natural things. People created problem in a society. In QAU students polluted their own institution. They threw waste materials plastic bags, rapper and food waste that were man made risk. The researcher found out that the solid waste management in QAU Islamabad. the most significance points are: It was stated that the environmental issue of Pakistan was failed to provide proper management

system about solid waste especially in urban area. It failed to promote basic management system in educational organization. It was failed to utilize the budget on solid waste. The responsible people in the solid waste management are failed to utilize the resources. In Quaid-I-Azam University Islamabad, the students suffered from solid waste. Its effect the student health and mind. The lack of knowledge also cause of solid waste. The university students were not felt cleanliness is responsibility of them. Both gender male and female student were not used dust bin at the QAU. Student not know healthy environment best for students. Majority of the students were threw plastic bags, rubber waste in open areas; it's become a major problem of water pollution. Solid wastes not only product of student but it's also product animal in university.

Suggestion

The researcher give suggestion to improve further study on this topic. That was solid waste management system is weak in QAU. Human waste and animal waste was found everywhere. To improve this problem researcher gave some suggestion and they are as follow:

Dust bin would be available at the university. The QAU administration should be active in this activity. This is the responsibility of student to keep the university clean and would avoid throwing waste product in university. Because surrounding cleanness is best for student. The QAU sweeper are not doing their job properly.

Everyone need to put waste material in to dustbins. It was not only the duty of sweeper to clean university area but it is responsibility of very individual. QAU hostels do not dispose waste. Waste disposes dust bins should be used in university. The waste product need to be buried instead of burning. Sweeper had to be careful about their job. Organizations had to arrange the seminars about solid waste management in university. Solid waste treatment plant need to be constructed in university. Make boundaries of university to avoid the entry of animals. Improve sanitation facilities in QAU. Instead of plastic bags students would advise to use cloth bags that can be reused easily because plastic bags were difficult to destroy and their burning causes many problems.

Reference

- Abdulai, Mahamadu. 2011. "Causes and effects of indiscriminative waste disposal the case of Tema metropolis".
- Adeyemolai, Florence O., Gifty Oluyemi Gboyesola Oyadirana & Juliana Ayafegbehafemikhe. 2013. "Knowledge, Attitude and practice on waste management of people living the university area of Ogbomosho, Nigeria." *International Journal of Environment, Ecology, Family and Urban Studies*. 3 (2) 2013, 51-56
- Anjum Raheel. 2013. "Willing to pay for solid waste management services: a case study of Islamabad".
- Banga, Margaret. 2011. "Household Knowledge, Attitudes and Practices in solid waste segregation and Recycling: The case of Urban Kampala." *Zambia social science journal* 2 (1)2011: 27-39.
- Beck, Ulrich. 1992. "Risk society/toward New modernity" London: SAGE Publication Pp272
- Braunegg, G., R. Bona, F. Schellaufer & E. Wallner. 2007. "Solid Waste Management and Plastic Recycling in Austria and Europe". *Taylor & Francis*. Pp 1755-1767
- Chen, Xudong, Yong Geng Tsuyoshi Fujita. 2010. "An overview of municipal solid waste management in China. Pp 716-724
- Collins, William Sons and Harper "Dictionary of Collins" 2009: 913.

Encyclopedia Britannica 1973 *Helan Hemingway Benton*,30 (viii) 173.

Encyclopedia Britannica,1974. *Helan Hemingway Bentan*, 30 (v) 839.

Gajalkshmi.S and S.H.abbasi.2008. “solid waste management by compositing state of the Art.taylor and Farancis

Henry k Rotich, Zhao,Yongsheng ,Dong Jun. 2006. “Municipal solid waste mangement challenges in developing country kenya case study.” pp 92-100.

Kumar, Ramesh, Ejaz Ahmad Khan, Jamil Ahmed, Zulfi khan,Mohamed magan, Nosheen,Muhammad Ibrahim Mughal. 2010. “Healthcare waste management (HCWM) in Pakistan: current situation and trainingoptions”. First received 15 May 2005; accepted in revised form 13 September 2005. *Taylor & Francis*, 2010;22 (4).

Kumar, Ramesh, Ejaz Ahmad Khan, Jamil Ahmed.2010. “Healthcare waste management (HCWM) in Pakistan: current situation and trainingoptions”.2010;22 (4).

L.Giusti.“A review of Waste Management Practices and their Impact on Human Health.”Elsevier, 2009:2227-2239.

Lia, Yongping & Guohe Huang .2012.“Modeling Municipal Solid Waste Management Systemunder Uncertainty”. *Taylor & Francis*. 439-453

M, Ehrampoush, Baghiani Moghadam. 2005. “Survey of Knowledge, Attitude and Practice of Yazd University of Medical Sciences Students about Solid

Wastes Disposal and practices of Yazd University of Medical sciences students about solid wastes disposal and Recycling.” *Iranian jnv health sci Eng.* 2(2)pp.26-30.

M.Ghose, Dikshit, Sharam. “A GIS based transportation model for solid waste disposal--a case study on Asansol municipality”. 2006 : 1287-1293.

Margaret Banga.2011.“Household knowledge, attitude and practices in solid waste segregation and recycling: The case of urban Kampala.” *Zambia social science journal*, PP 27-39.

Margaret Desmond,.2010. “Municipal solid waste management in Ireland: Assessing for sustainability.”*Routledge*, 2010:22-23.

Nie, youngfeng , Dongjie Niu & Qingzhong Bai. 2008. “The management of municipal solid waste in China”, *Taylor & Francis*.2008:1973-1980.

Ogburn,William.F.1922.”social change with respect to culture and relion of nature”. SAGE Publication Pp

Rada.C.E , Istratea.I.A and Ragazzi.M .2009. “Trends in the management of residual municipal solid waste”. *Taylor & Francis*. 651–661

Rahman, Aatur Mohammed.2009. “Study on the traditional practices for solid waste recycling homes”. PhD coordinator Centre for Global Environmental Culture (CGEC) IUBAT”.*Zambia Social Science Journal*.2011:27-39

S. Virginia and Thatcher . “Webster comprehensive Dictionary” (1)1998:706.

Agnes, Michael. IDG Book India (p) Ltd “Webster New World College dictionary” 2000:1129.

William Collins sons and Co.Ltd “Collins Dictionary”.Sixth editon.2009:1295.

ANNEXURE

About solid waste management in QAU

Student Knowledge and Practices of Solid Waste Management in Quaid-I-Azam University Islamabad

Shabana Bibi

I am student of the Department of Sociology, Quaid I Azam University Islamabad and working on my MSc. Sociology Thesis. My topic of research is “Student knowledge and practices of solid waste management in QAU. Your opinion in this regard will be appreciated.

1- Name (optional).....

2- Age?

- a) 20-25
- b) 25-30
- c) 30-35
- d) 35-40

3- Gender?

a. Male

b. Female

4- Qualification?

a. Bachelor

b. Master

c. doctorate

5 – Family?

a) joint,

b) nuclear,

c) extended

6 - Marital status?

a) Single

b) Married

c) Divorced

d) Another

7 - Family income? Per month

a) less than or equal to 25000

b) 26000-50000

c) Above 50000

8- Department.....

9 - Are you usually used dust bin at the QAU?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

10 – Do you feel that the university is like your home?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

11 - University cleanness is responsibility of student?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

12 - In university area disposal of waste material only responsibility of student?

- a. Strongly agree

- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

13 - Is solid waste management burying of used material?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

14 - Is solid waste management keeps the environment of university clean?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

15 - Disposal of waste material is responsibility of the QAU administration in your department?

- a. Strongly agree
- b. Agree
- c. Disagree

- d. Strongly disagree
- e. Do not know

16 - Disposal of waste material is responsibility of the QAU hotels?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

17 - Is open burning has negative effect on student's health?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

18 - You make use of dust bin?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

19 - Solid waste management is big problem of QAU?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

20 -Solid waste is product of student?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

21 – Plastic bags and rappers waste has become a major problem in QAU.

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

22- Healthy environment is good for student.

- a. Strongly agree
- b. Agree

- c. Disagree
- d. Strongly disagree
- e. Do not know

23 – Using dust bins is good method for waste disposal?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

24- Dust bins are most important for university area?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

25 Solid wastes is one of the QAU's major environmental issues?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

26- Solid waste promotes air pollution at QAU?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

27- Diseases are caused by improper waste management in QAU?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

28-Is solid Waste are caused by land pollution in QAU?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

29 Is solid Waste are caused by Air pollution in QAU?

- a. Strongly agree

- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

30 Is solid Waste are caused by water pollution in QAU?

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Do not know

30. Sweepers of QAU are doing their job well?

- f. Strongly agree
- g. Agree
- h. Disagree
- i. Strongly disagree
- j. Do not know

31. What you suggest for improving solid waste management in QAU?

- a)
- b)
- c)

Thank you

