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SCIENCES
ENVIRONMENTAL EDUCATION AND
MANAGEMENT**

**FACTORS INFLUENCING STUDENT INTENTION TO
RECYCLE: A CASE STUDY OF TOBRUK UNIVERSITY
STUDENTS**

MASTER'S THESIS

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To the Management of the Institute of Education Science,

This study has been accepted as Master's Thesis by our jury of Environmental Education and Administration Department.

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ALTINAY AKSAL

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ABSTRACT**FACTORS INFLUENCING STUDENT INTENTION TO RECYCLE: A CASE STUDY OF TOBRUK UNIVERSITY STUDENTS****Almukhtar ALJTLAWE****Master's Thesis, Major Field of Environmental Studies and Management Thesis****Advisor: Assoc. Prof. Dr. Şerife GÜNDÜZ****January 2018, 66 pages**

Due to increasing tons of both industrial and household solid waste generated every year, recycling and reuse of waste for other important purposes have become very vital as this is in line with the proposal set-up by European Union. (Lazarova, 2001). Recycling is regarded as one of the various strategies to reduce the renascence of solid waste which is a key environmental problem. In order to achieve an effective waste recycling, individuals and communities at large has a vital role to play in achieving this goal on the areas of expressing concerns toward environmental sustainability which will prompt their willingness to recycle waste.

This study examined the various factors that influences student intention to recycle. Tobruk university students were adopted as the case study and 350 university students were also adopted as the sample size. In line with the objective and hypothesis of the study, three factors were investigated to be most likely to affect student's intention to recycle which includes lack of awareness, student's perception and general interest in the concept of recycling waste. Questionnaire was used to source for the data, and sourced data were analyzed with statistical package for social sciences in order to determine the correlation, regression, T-test, anova and frequency distribution of the variable. Based on the results obtained from the analysis, it was discovered that "General interest in the idea of recycling waste" has the highest impact on "Student intention to recycle waste (0.936^{**})", followed by "lack of awareness on the benefits of recycling waste (0.803^{**})" and finally "Students perception of recycling of waste to be inconvenient (780^{**})".

Keywords: Environmental education, waste recycling. Tobruk University, environmental awareness.

ÖZET

GERİDÖNÜŞÜME YÖNELİK ÖĞRENCİ YÖNELİMİNİ ETKİLEYEN FAKTÖRLER: TOBRUK ÜNİVERSİTESİ ÖĞRENCİLERİ ÜZERİNDE ÖRNEK BİR VAKA ÇALIŞMASI

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Her yıl tonlarcası üretilen endüstriyel ve ev katı atıklarının başka amaçlar için geri dönüştürülmesi ve yeniden kullanılması, Avrupa Birliğinin öngörülleri açısından önem arz etmektedir.. Geri dönüşüm, önemli bir çevresel sorun olan katı atıkların birikmesini azaltacak çeşitli stratejilerden biri olarak kabul edilmektedir. Etkili bir atık geri dönüşüm için, birey ve topluluklar genelinin büyük bir kısmının, çevresel sürdürülebilirlik konusundaki endişelerini dile getirmeleri, onların atıkların geri dönüşümü için daha istekli olmalarını teşvik etmede önemli bir rol oynamaktadır.

Bu çalışma, öğrencilerin geri dönüşüme yönelimlerini etkileyen çeşitli faktörleri incelemiştir. Tobruk Üniversitesi öğrencisi vaka incelemesi olarak kabul edilmiş ve 350 öğrenci örneklem boyutu olarak ele alınmıştır. Araştırmanın amacı ve hipotezi doğrultusunda öğrencilerin geri dönüşüme yönelimlerini etkileyen muhtemel üç faktör, bilinç eksikliği, öğrencinin algısı ve geri dönüşüm atığı konusundaki genel ilgi, araştırılmıştır. Veri kaynağı için anket kullanılmış ve veriler SPSS kullanarak analiz edilmiş, değişkenlerin korelasyon, regresyon, T-testi, anova ve frekans dağılımı saptanmıştır. Analiz sonuçlarına dayanarak, "Atıkların geri dönüşümü konusundaki genel ilginin " en çok "Öğrencilerin geri dönüşüm atölyesi (0.936 **)" üzerine en fazla etkisi olduğu, bunu takiben "geri dönüşüm atıklarının yararları konusundaki bilinç eksikliği (0.803 **)" ve son olarak " Öğrencilerin rahatsızlık verici olmasından dolayı atıkları geri dönüştürme algısı (780 **) "olduğu belirtilmiştir.

Anahtar Kelimeler: Çevre eğitimi, atık geri dönüşümü. Tobruk Üniversitesi, çevre bilinci.

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ABBREVIATION CHART

TU: Tobruk University

SPSS: Statistical Package for Social Sciences

EC: European Commission

EU: European Union

R: Regression

df: degree of freedom

Sig: significance

F: frequency

B: Beta

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CHAPTER I

INTRODUCTION

This part of the research comprises of Problem statement, Problem phrase, aim of the research, importance of the research, premises of the research, limitation of the research and definitions.

1.1 Problem Statement

In a society with a habitual habit of disposing things, more so due to their cheap cost and design to last for a shorter period of time. Also the reintroduction of this same products that are alike in resemblance with little improvement in its function, make consumers to get rid of this similarity. Not with standing that it is still fully efficient (Cox and king, 2013). Therefore, the present economic scheme is built on a rectilinear replica from which supplies are drawn and effortlessly gotten rid of once their importance becomes irrelevant.

In this present time, mostly all EU member countries engulf as much as 0.45 tons of resource every day. This figure tends to be much higher in the United States of America. (EES committee, 2013). Though municipal solid waste results in only 10% wastes, which is considered a little amount, its detrimental toll on the environment is very high. For instance, from 1940 to 2010, there has been skyrocketing increase in production of plastics with a roughly 10% increase yearly. Hence showcasing its increasing detrimental effect as it is mostly non-biodegradable (Plastics Europe, 2010).

The high rate in production of plastic increases the chances of them finding their way to the ocean and other water bodies in form of small-scale fragments, which according to the United Nations Environment Program abbreviated UNEP, in 2011 considered these to be microplastics. Such poses a direct threat to aquatic lives and an indirect threat to humans, mostly for fish consumers. As ironic this might sound, the very plastics in form of microplastics that are wrongly disposed by humans still indirectly ends up their plates.

A 2014 UNEP survey reported on the detrimental implications reflected on the economy encountered by the pelagic natural community with record financial

aggregates of up to 13 billion US dollars per annum. High proportions for both macro and microplastics that are washed into oceans have their sources from littering. Waste litter is associated with “items that are disposed by a person, however, it can involve any substance that is disposed in an unacceptable location, without regards to the original source” (Bruni, & Tabanico, 2013).

With regards to the latter, that means the individual dropped or littered unpurposefully, for instance, a paper scrap dropped from an individual’s pouch. This then raises a query on the proper action plan to be meted out as regards inappropriate consumption as well as the implications thereof. In accordance with the 2008 European Commission offscouring (waste) grading of the European Union, a most definite and appropriate remedy would be to decrease consumption, hence generating lesser garbage which subsequently, would dissipate its negative toll on the environment. The second step according to the grading of waste is to “re-utilize” this same substance while the tertiary grading is “reprocessing” the substance (according to the European Commission of the year 2008). The quaternary phase of the gradation of waste is “reclamation” and this points to the recovery for instance say energy through the combustion of the substance (according to the European Commission of the year 2008). The fifth strategy in the hierarchy of the management of waste is “to dispose” which involves the burying of waste often regarded as sanitary landfills by the European Commission of the year 2008).

With this current sky rocketing usance rate, a much longer time will be required to revolutionize the mind sets of people from high rate of consumption of products. Currently, recycling of waste is the appropriate and most satisfactory alternative for curtailing the damage to the economy incurred via the adoption of landfilling and incineration and also reduce the burden on the geographical surrounding and our general well-being as well (according to the European Commission of, 2011).

As a means of encouraging as well as upsurging reusability, the European Union adopted certain means ranging from the: guideline of the “European Commission of 2011 on a supply (resource) effectual Europe, the “Landfill directive of Europe” (according to the European Commission of 1999) in addition to other environmental goals to be achieved before year 2020. The European Environment

Agency, EEA of 2013 provides a second strategy which is to set goal such that by 2020, all EU member states must have recycled 50% of their refuse municipal waste. Currently, the European Union has topped up their endeavors by adopting a motion that targets the encouragement of circular economy. In such an economy, products sustain an effective supply during the course of their entire developmental cycle.

Let's take as an illustration, following a product's attainment of the final phase of its existence, it won't be discarded but its raw materials and vital components are harvested, harnessed and re-cycled for another type of product. In such manner therefore, will be nothing like "*waste*" again (Ellen McArthur Foundation, 2011).

1.2 Problem Phrase

- Scholars assume that there exists an association between social-physiology and capacity to reuse.
- This study will look into a segment of the social-physiological attitudes towards reusing in Libya with Tobruk school understudies as a relevant investigation.
- Environmentalist focused on that landfills will soon accomplish their most extraordinary points of confinement. From now on, there won't be spots to store this solid waste.
- Investigation of perspectives and subjective standards that effect reusing desire
- Poor understanding of family perspectives towards reusing has been recognized as one of the weaknesses towards the accomplishment of solid waste reusing.
- Environmental preparing has been proposed as one of the factors that impacts reusing.

1.3 Objective

The objective of this study is to find out the various factors that have posed as a challenge in attaining effective waste recycling attitude among Libyan students at Tobruk university as a case study.

1.4 Importance of the Research

The criticalness of reusing for nature, social requests and the all-inclusive community who live in them are inspected already. Also, data about understudies' reusing behavior can be a basic mechanical assembly for technique inventors or for the individuals in charge for executing reusing available plans. These grabbed data could be instrumental in executing definite evaluations for growing understudy bolster in reusing plans. Also, considering reusing behavior of TU understudies is moreover captivating when viewed at an academic paradigm. There has been a grasping of diverse examinations for mulling over reusing behavior of MSW yet by far most of these examinations were composed at family's reusing conduct (Menezes and Rebelo, 2004) and two or three investigations looked into understudies' reusing conduct on grounds. As an example, an examination was coordinated in 2006 by Kelly and colleagues at Massey University, New Zealand by strategies for a survey based on paper. The aim for the evaluation centered on understudies' and attitude of staff towards reusing plans on ground, and moreover courses in which collaboration in the back and forth movement reusing plan can be extended (Kelly *et al.*, 2006). All-inclusively, participants of the examination showed content for the reusing plan set up. Regardless, individuals yearned for more information on where to put the misfortune and also making reusing more worthwhile by giving all the all the more reusing workplaces (Kelly *et al.*, 2006).

More so, a noteworthy piece of the project grasped quite recently has been based on "the distinctive effects concerning two or three variants while not endeavoring to merge these elements into a greater hypothetical structure" (Lindsay and Strathman, 1997). Furthermore, analyses coordinated about reusing conduct a long time earlier and in better places are not able to elucidate TU understudies' reusing conduct. For example, in 1995 Schultz, Oskamp and Mainieri fought that while reusing appeared at first exhibited it was still respectably dull and high effort was required to reuse. Thusly, individuals stressed over the earth will likely reuse. In spite of the fact that nowadays reusing is more profitable and "biological concern" won't not clear up any more drawn out why individuals reuse. Along these lines, this scientific write-up intends restraining the opening and investigate for features which affect UT understudies' desire to reuse.

1.5 Hypothesis

Hypothesis 1

H1: Lack of awareness of the benefits of recycling affects student's intention to recycle waste.

H0: Lack of awareness of the benefits of recycling doesn't affect student's intentions to recycle waste

Hypothesis 2

H1: Student perceive recycling of waste to be inconvenient.

H0: Student don't perceive recycling of waste to be inconvenient

Hypothesis 3

H1: Students are generally uninterested in the idea of recycling waste.

H0: Students are generally interested in the idea of recycling waste.

1.6 Limitations

A segment of the obstructions in this examination join

- Non-capacity of the respondents to attempt all the Questions provided
- The study will simply evaluate Tobruk university students, which is not up to one- fourth of the country's population, hence the examination can't be totally seen as a certified depiction of the Libya understudies impression of the thought.

1.7 Definitions

The popularly used concepts in this study are given little illustrations as presented below:

Waste recycling: Recycling entails a sustainable effort to curtail the deterioration effect of human endeavors and industrialization on the environment. In the light of this, governments all over the world have adopted ways with the intent of promoting the act of recycling among the populace. Government intervention programs can be in different ways, ranging from legislative down to individual or organizational voluntary programs. For instance, provision of waste separation bins in communities, recycling promotion.

Companies and mandatory recycling policies. These afore mentioned schemes are mostly geared towards motivating people to practice recycling (Calvin et al., 2017).

Environment: The term encompasses both living and non-living things around us and in the earth. The environment comprises of the interaction of all living species. It is a complete ecological unit that function as natural systems (Maria et al., 2013).

Environmental education: It entails a consistent learning process in various disciplines which brings out ability, experience and above all, knowledge on how to solve problems associated to the environment. Hence, paving way for healthier and cleaner environment for the future generations (Zhaohua et al., 2016).

Environmental awareness: Dissemination of information related to the environment and its problems (Agnes et al., 2013).

Environmental sustainability: A state in which the demands conferred on the environment can be actualized without reducing its capacity to allow the existence of life both in the present and in the future.

CHAPTER II

THEORETICAL FRAMEWORK

2.1 Definition of Environmental Education

Environmental education involves exploration of the unknown, continuous improvement and constant education on issues related to the environment (Melaina et al., 2015). Issues related to the environment provides both individual and students with vital experiences that aid them to promptly be part of activities as well as increased interest in science (Melania et al., 2015).

2.2 Environmental Education and Its Importance

Environmental education can lead to changes in individual's behavior and the adoption of pro-environmental decisions. Environmental education is a way of reorienting our thoughts and actions towards biosphere. It is also a conveyor of social transformation towards environmental sustainability (Laura et al., 2018). Environmental education faces two unavoidable challenge. First, the ecological challenge, that deals with educating both young people and adults so as to direct their behaviors and values to be in harmony with nature. The second part deals with social challenge that causes people to radically change the management structures and redistribution of the earth resources.

2.3 Definition of Waste Recycling

The needed efficiency in the recycling of waste is invariably more important than ever as industrialization and urban settling has resulted in skyrocketed increase in human consumption. Raw materials sourced from materials in the natural environment are transformed into finished goods, used and subsequently discarded into the environment which accumulates and becomes a threat to the environment. Waste recycling entails on how to use our waste as raw materials for the creation of other finished goods, hence curtail its disposal and accumulation in the environment (Katya and Stina, 2017).

2.4 Education for Waste Recycling

Issues related to the environment have gained massive prominence in our world today because of its relevance and urgency. Education for waste recycling play a vital role in order to disseminate information that provides alternative to curtail waste management in the environment.

2.5 Creation of Awareness of Waste Recycling

Creation of waste recycling awareness can best be achieved through the media as the media happens to be one of the best channel for dissemination of information to the populace (Laura et al., 2018).

2.6 The Situation of Waste Recycling at Tobruk University

Tobruk University (TU) is one of the prominent universities in Libya with the majority of its students living within the campus dormitories. For the year 2016-2017, 9707 students were admitted into TU with close to 5000 students living in vicinities provided by the university (Tubruk University, 2014a) The university dormitory management is in charge of ensuring the convenience of students living within the University Premises. Currently, accumulated waste pile is gotten rid of for 2 times in a week while paper waste is collected twice a week. Glassware holdings were located adjacent the housing side whereas plastic waste could be disposed of at the campus very close to the super grocery store. Nevertheless, university enrollees had the liberty of disposing of voluminous waste close to the public waste vessels two times in a week. Students are well informed on the rules and regulations including waste disposal method prior to signing the housing agreement with the university management. Still on emphasis related with recycling of waste, TU of recent, launched a small project for recycling in the dormitories. The objective and goal of the project is to make available recycling sites where “residual waste, paper, and plastic” can be collected. These sites were placed at strategic points in the hallway and in front of all the multi-purpose halls. If the majority of the university enrollees and tutors utilize the available amenities for reprocessing, the project would turn out a massive success. Though the university is offering students numero opportunity to recycle, it appears students are not maximizing the use of all amenities in full scope. Often, based on my own notice, huge garbage is deposited into a landfill close to enrollees’ dormitories. There appears to be an overall indifference as regards

the significance of reprocessing and the repercussions following such behavior to the surrounding. Such is perturbing with considerations to the ever progressive rise in student population yearly. These students attending TU ought to be viewed as a significant community as regards to involving in pro-environmental attitudes using reprocessing. University enrollees are greatly erudite persons with increased possibility of having to work in areas of being able to positively affect a wider circle of other persons. As a further illustration, according to a study conducted in 2009 by Christakis and Fowler, a student with acquired knowledge on the importance of recycling, will most likely continue in that same manner later years of life and will affect more persons with regards to their perception to reprocessing. As a strategy to encourage the need of recycling, TU as a higher institution for learning is in a better position to pose as a representation in proper environmental behavior through the adoption of an allover reprocessing arrangement and organisation around their study environments. For a reprocessing system to be productive on university campus there is the necessity for understanding the various elements that can govern the students' motive to reprocess. On the discovery of these factors, a recycling project will deem successful in TU.

Human behavior is vital to all work of human existence and manifests on a greater dimension of speculations and prototypes which tends to expound on it. The Theory of Reasoned Action is the initial focus that puts out the proposition which states that the behavior of humans is as a result of a person's "motive" of carrying out a particular behavior for which objective is hence shaped through "perspective focused on such behavior" "subjective rule" (Fishbein & Ajzen, 1975). Such a stand point presumes that persons could variably affect the outcome of the real behavior hence forgetting occasions for which persons lack control over the situation. Further in 1991, Ajzen reviewed the theory of reasoned action by adopting alternative variants into the replica that explains an person's capability of being in charge above the behavior. Such a variant has been considered to be "perceived behavioral control" and the extended replica, termed theory of planned behavior. The theory of planned behavior is a fundamental behavioral speculation that can be implemented to Certain attitude and out to be further expanded with other variables that are specific to studies on attitude/behavior (Ajzen, 1991).

Lots of variables are investigated in-line with recycling behavior. Notwithstanding, including all these may cause a model that is very extensive to weigh recycling attitudes. Hence, four more variables were adopted for this study so as to expatiate on the theory of planned attitudes. First, previous surveys discovered that a person is bound to often reprocess if the person thinks reprocessing is a morally acceptable attitude such as is according to Chu and Chiu in 2003,. Hence, sensed moral ineptness is added to the simulation. Second, persons' previous exposure with recycling is asserted to prognosticate future reprocessing behavior in a previous study by Phillips and Read in 2004. Third, certain elements for example ineptness of reprocessing is very vital in the person's motive to recycle according to a 2006 study carried out by Leiss and Ganesh,. Lastly, cognition on the area of reprocessing, such as proper segregation of materials by type into appropriate bins, can go a long way to increase peoples' motivation to recycle (Hurin & Zelezny, 1998).

Also, there are several studies within the field of applied behavioral analysis centered on varying explicit and implicit assumptions that individual's behavior towards recycling can be manipulated through rewards and punishments (Calvin, et al., 2017). An alternative theory to this can also be referred to as "Attitude approach". Also various other approaches have been proposed on the attitude of individuals towards recycling ranging from value- attitude behavior model, the S-O-R model, the speculation of planned behavior and the speculation of reasoning education (TRA) (Ramayah et al., 2012). However, numerous studies have inn some way researched the possible role of demographic and socio-economic variables as well as general environmental attitudinal roles for example environmental concerns and environmental responsible consumerism (Michele *et al.*, 2004).

Such devastating nature of the present solid waste management in various cities among developing countries is rapidly becoming a huge social and environmental problem. In line with this, there have been series of awareness and promotion to encourage recycling- oriented practices to guarantee justifiable growth by reducing the depletion of natural resources and decreasing environmental problems. Inverse logistics (IL) is the course of design, implementing and regulating an efficient and charge effective flow of raw resources, in-process inventory, processed goods and coherent info from the point of intake to the point of origin for the sole purpose of recollecting value or proper disposal (Christian, et al., 2011) The

definition of IL was known during Council of Logistics Management (CLM) meeting in the United States in early 1990s. The part of logistics is in relation to manufacturing returns, source decrease, reuse of materials, recycling, clean up, restoration and reproduction (Grac et al., 2015). The large amount of waste is in connection with economic action, consumption of resources as well as the growth of the economy.

Growth in the economy in most Southeast Asian countries have increased urban growth, roughly to 8%–10% per year. For instance, In Thailand the rate at which waste is generated is considerably high due to economic development, massive industrialization attitudes of consumers and increasing urban population.

Numerous solid waste increase without adequate treatment and control caused quite a number of negative impacts and is currently gaining momentum as a social and environmental concern. However, some wastes are vital to be mixed with virgin raw resources for the creation of new materials. For instance, over a million tons of recyclable paper is brought in annually for the sole purpose of producing paper (Agnes et al., 2013). This shows a problem with IL management of waste in Thailand. The IL for the management of waste in Thailand includes many participants. Initial IL implementation in Thailand was carried out by informal sector (Maria, et al., 2013). There is low understanding on carrying out of good practices.

2.7 Factors Affecting Recycling Of Waste

2.7.1 Recycling Perceived As Great Responsibility

The theory of masterminded direct conjectures that persons are dominated by benchmarks bestowed on them by the community which is revealed in creating biased standard. While such subjective guideline gets the person's lead because of what different people think, scientists proposed that the speculation of organized direct does not get measures the general population put upon herself/himself. For example, a couple of individuals will not take an interest in a particular direct since by conviction to them, it is the proper thing to do irrespective of the perspective of other people's thoughts. Subsequently, Sharifah et al, (2015), among others, included conclusions of individual models while investigating student's lead regarding "shoplifting, lying and getting away assignments". The purpose of their examination was to research to what degree the theory of orchestrated direct measures hones named misleading. Their examination found saw moral duty no ifs ands or buts adds

to guaging if a person would be untruthful, meanwhile this smallerly influences "shoplifting and tricking". By the end of day, Sharifah et al, (2015), proposed that "evident great responsibility seems to add to the improvement of desires to perform deceitful practices" paying little respect to the likelihood that the extra advantage of including PMO is limited. Sharifah et al, (2015), concurs with Beck and Ajzen (1991) that incorporating a portion of individual principles is fitting when evaluating conduct that could be put on a "decent or good estimation". With respect to the above-mentioned debate, reusing can add to decreasing landfill and ocean waste or other common antagonistic outcomes. From now on, one could battle that to reuse or not can be a moral decision as to reusing conduct, Sharifah et al, (2015), attempted saw moral duty and found a self-ruling effect on behavioral desires. Sharifah et al, (2015), hypothesize in a comparative plan, a man who considers to reuse or not most likely joins singular measures in the essential initiative process. Regardless, their examination did not insist this supposition. In particular, saw moral responsibility couldn't illuminate reusing conduct, be that as it may it contributes toward the plan of the intent to reuse.

2.7.2 Situational Factors

According to the theory of masterminded direct, saw behavioral control covers factors, for instance, nonappearance of reusing inclination, that is, data which concerns the type of waste to free, and bearing straightforward admittance to reusing workplaces, that is, the manner in which supportive is reusing for the person. In any case, in a 2004 study carried out by Tonglet and colleagues, they demonstrated that obvious behavioral dominance does insufficiently tackle circumstantial factors. Along these lines, the speculation of organized lead is stretched by the segments of data and weight about reusing.

2.7.3 Non-awareness of recycling and its importance

An enormous gathering of research has attempted to illuminate why individuals reuse. A couple of examinations met up to the resolution that "learning" on reusing, that is to say, which waste to disengaged and into which repository to dump, it is an essential element towards illuminating reusing conduct. Above all, Sharifah et al, (2015), found learning as well as data for reusing basic for society's enthusiasm to appreciate a reusing plan. Interventions to manufacture reusing need to

move a long way from the inaccurate conviction that people know everything about how to reuse. The point of how was significantly more basic than instructing people concerning why reusing is fundamental. The less people consider which materials to confine the more effort is relied upon to incite dissatisfaction and withdrawal in reusing plans. In any case, data on how to reuse is only an illuminating variable for people's reusing conduct in case they are not accustomed with reusing. Should people reuse routinely, data/learning does not add to elucidating reusing conduct

2.7.4 Recycling perceived as inconvenience

By observed good responsibility, past experience and finding out about reusing, the weight of reusing has been determined to affect reusing conduct in countless. Sharifah et al, (2015), found that persons possessing a wider moving perspective concerning reusing will most definitely reuse in case it was useful for them to do accordingly. Inquisitively, a comparable finding associated with individuals that did not ponder the earth. While reusing was made "straightforward and supportive" those social affairs not stressed over the earth would achieve high reusing rates as well. Sharifah et al, (2015), found out that among understudies the weight of reusing expect an essential part, while the essence of reusing did not affect reusing conduct. Students' wisdom about the solace of reusing would affect their view about the criticalness of reusing. From now on, if understudies saw reusing as severely planned they would most likely consider it not basic.

Nevertheless, their examination showed that once understudies are more stressed over more noticeable's advantage of the social occasion they would see reusing as less severely masterminded and consequently as more basic. This finding has an inverse result if an understudy is more narcissistic. To be particular, understudies that contemplate themselves would consider reusing to be less useful. Another consolidate of researchers supporting trouble as factor illuminating reusing conduct. Sharifah et al, (2015),. In their examination they drove a mail diagram to see whether the convenience of reusing and open reusing workplaces impacts family's occasion to reuse. Their disclosures exhibit that families will presumably reuse once in a while if reusing would be seen as beneficial which is supported by open reusing workplaces. Additionally, families exhibited availability to extend the measure of different materials reused if it would be useful for them (Ceren Oztekin, 2017)

Sharifah et al, (2015),) meet up at a tantamount conclusion in their examination about on grounds reusing conduct. That is, understudies and agents of the school would most likely appreciate the grounds reusing plan should they find it more useful. For example, by producing all the more reusing workplaces available (Ceren Oztekin, 2017).

With a particular ultimate objective to achieve, clearness about the importance of the elements considered will right away plot the conception of the dependent and free factors already outlining the hypotheses and models.

2.8 Past behavior towards recycling

Past lead is said to influence the way we bear on later on. Nevertheless, there is no expansive simultaneousness with respect to past direct in the speculation of masterminded lead. At first, past lead is roundabout spoken to by the variables of the theory of masterminded direct under the conditions that all components identifying with the lead are known and held predictable (Ramayah et al., 2015). In case past lead shows an effect on future direct it is a result of a missing section in the model and to estimation change (Ramayah et al., 2015). Past direct has only an indirect effect on point through dispositions and subjective standard (Ramayah et al., 2015).

Or, on the other hand perhaps, they affirm that past lead specifically influences desire. Be that as it may, past direct is not the purpose behind future lead, yet rather spellbinding in a lead more regularly will enhance the likelihood to play out a comparative direct later on. According to that line of thought, general reusing conduct in the work environment and paper reusing conduct. In their examination people who used to reuse paper at home will presumably reuse paper at the working environment. In any case, reusing paper at home does not affect the reusing behavior of various materials at work environment. In this way, they battle that past direct can simply make predicative claims about future reusing conduct in case it is concerning a comparative lead and material (Lee et al., 1995).

In a later report among families in the United Kingdom. "Past reusing foundation" quite impacts reusing conduct and is expanding the estimation of the speculation of orchestrated lead and should be fused into the model when testing reusing conduct. An examination about consumerism furthermore found that past

lead was uninhibitedly anticipating future direct (Ramayah et al., 2015). Likewise, they found that the effect of past lead is not related to the estimation technique picked as ensured by (Ramayah et al., 2015). With everything considered, investigation has exhibited that past lead can freely influence desire and future direct. Concerning reusing, it can be acknowledged that a man who has a great part of the time reused will continue doing as such if all conditions have proceeded as some time recently. Thus, past direct is joined to test whether past reusing conduct impacts future lead.

2.9 Defining recycling behavior and waste

Regardless of anything else, what is believed to be misuse, what is reusing and what is reusing conduct? In spite of the way that the term waste can be tested, its definition is immediate to the extent which materials are considered as waste in this examination. This examination focuses on solid city waste which is portrayed as takes after. "Metropolitan waste will be misused, assembled and handled by or for locale. It envelops misuse from families, as well as lumbering waste, relative waste from exchange and commerce, bureau structures, foundations and privately owned merchandises, yard and garden waste, street sweepings, the substance of litter compartments, and market cleansing waste." (OECD, 2013a).

While diverse examinations discuss direct, reusing and finally reusing conduct the articulation "reusing conduct" is getting less thought.

Remembering the true objective to describe reusing conduct we look at Stern's article about "colossal natural direct" (2000). Stern describes basic normal direct fundamentally as an act that changes or adjusts resources from the earth or that impact the "movement of the earth" when in doubt (2000). In a minute definition Stern solidifies the individual's need to guarantee nature with his lead, which scrutinizes as takes after "direct that is grasped to change (conventionally to benefit) the earth" (Stern, 2000). Another game plan of makers, Grac et al, (2015) portray "ace natural lead" as "direct that purposely tries to confine the negative impact of one's exercises on the standard and made world (e.g. constrain resource and imperativeness use, usage of non-noxious substances, and diminish misuse creation)". These definitions are valuable for understanding reusing conduct, since reusing is believed to be helpful for the earth. According to Waite "Reusing is a greatly far reaching term implying the difference in squander (as discarded material with no worth) into a profitable material". Agnes et al, (2013) embrace a more summed up system to

portraying any kind of lead. Specifically, "lead is made out of four parts: the movement played out, the goal at which the action is facilitated, the setting in which it is performed, and the time at which it is performed". Along these lines, reusing conduct is portrayed as disengaging waste (action) at UT in the going with three months. The season of three month is picked, in light of the fact that it leaves enough space to speak to change. For instance, if the day and age is one week it could happen that seven days before filling in the study. The understudy was kept from reusing as a result of unexpected conditions. While the day and age is longer, the impact of unexpected events decreases. On the negative side, if the day and age is too long understudies may disregard to review how consistently they have reused their waste.

2.10 Related Literature Review

Triguero (2016) proposed that theory of planned behavior (TPB) is an expectation in perspective of the doubt that perspectives causally influence through the mediation of behavioral desire which, along these lines, is controlled by attitudes towards the direct, subjective principles, and saw behavioral control. TRA, TPB has overall given better conjectures of less controllable practices, for instance, snoozing, taking vitamins.

Siti et al, (2010), pointed out that the TPB may not be an autonomous and satisfactory depiction of attitude– direct associations and that it is, "on a basic level, open to the joining of additional markers if it can be exhibited that they get an imperative degree of the vacillation in objective or lead.

Saripah Abdul Latif (2012) proposed that intentionally reviewed demonstrate supporting the development of six one of a kind components to TPB: conviction amazing quality, past direct/inclination, saw behavioral control versus self-amplessness, moral measures, self-identity, and loaded with feelings. Since this paper presents observational evidence supporting the benefit of supplementing TPB with self-character measures in the gauge of reusing, we ought to compel our thought in regards to the written work supporting the handiness of the development of self-identity to TPB. Before doing in that capacity, in any case, we might need to point out that the subjective utility viewpoint of human direct gathered by TPB may not be reasonable or, at any rate may not be sufficient—for all zones of human lead.

Azilah et al, (2015), in a fundamental review of the written work on reusing, ensured that laypeople sanely orchestrate normally arranged direct inside the region of moral quality, so that for them it is not a component of processing the amicability among costs and points of interest, yet rather a part of feelings on great and terrible. According to Calvin et al, (2014), a model of magnanimous direct should be grasped to consider factors progressing recycling.

Ramayah et al, (2012), put forth that (a) singular characters, involving self-definitions to the extent phenomenal and eccentric characteristics; (b) part characters, conceptualized as a significance of self as a man who has out a particular social impact; and (c) social identities, reflecting unmistakable confirmation of the self with a get-together or class. These three portions of character seem to cover the whole extent to identity definitions and measures gave by both social recognition and character speculation.

Lucia et al (2004). proposed that these three sections of character may be envisioned as spotlights on the social intergroup continuum, with singular identity at the social shaft, social character at the intergroup post, and part character some place in the center.

The central articles proposing to consolidate the TPB with self-identity factors appeared in the late 1980s. They showed that considering oneself to be "the kind of person who will continue in school" added an important responsibility regarding the illumination of understudy upkeep decisions, openly from miens and benchmarks.

Giuseppe et al, (2008) prescribed that "part identity" might be more apropos in predicting repeated practices than one-time hones, and that its impact should be more grounded the more the specific part character considered is noteworthy, maintained by basic others and associated with a widened casual group

Calvin et al., (2014), showed that both part identity and auras are tremendous and self- governing markers of the intention to give blood and that repeated and ceaseless practices augment the part lifestyle as "blood supplier."

A substitute approach to manage the examination of the association among identity and lead has been grasped by Gibbons and his accomplices considering

dangerous direct in youths.

Michele et al (2004) proposed that looking at customer lead regardless of the reasonable differences between the two spaces, both research bunches impelled a practically identical claim: both buyer direct and dangerous lead have a delegate importance past their useful and target features and results they are connected with a photo of "celebrated people" or with the "model" of the general population who play out these practices. For example, obtaining a recreations auto is connected with the kind of individual who is provocative, engaging, young, and socially well disposed.

Triguero et al, (2016) proposed that, before partaking in a given lead, people differentiate themselves and the model they associate with that direct. The closer the match between the self-thought and the model, the more important is the energy for taking part in the direct.

Fabian et al, (2017), prescribed that a man, before acquiring a given thing, overviews the match between the photos related with this purchase and her/his mental self- representation. As showed, independent from anyone else congruity theory, the more conspicuous the consonance between the client's mental self-view and the photo of the appreciated buyer of that thing, the more noticeable the desire to purchase the thing.

Our measure reviewed the vicinity/expel between the photos of the regular person who performs isolated gathering and deny exchange and the parts of mental self-view. The technique contained four phases.

In any case, in the midst of pilot looks at, little cases of subjects having a place with a comparative social setting from which the basic example was chosen given the traits saw as typical for the common person who performs isolated assembling and denies exchange.

Secondly, in the guideline examination, the individuals were given the most as regularly as conceivable refered to descriptors or short definitions that rose up out of the pilot contemplate and were requested to rate how well the average person who performs isolated assembling and decrease exchange was delineated by each of the modifiers/definitions (model) and how well they themselves were depicted by each of the comparative enlightening words/definitions (singular identity).

Third, simply those modifiers/definitions with suggests higher than the midpoint of the scale insinuating the typical individual were used for examination, since they were seen as typical for the photo or the model related with the lead being alluded to.

Finally, for each part, the partition/vicinity between the two picture profiles was enrolled, achieving a record of "identity closeness". We considered such a record as insightfully generally the same as the match between the self-thought and to the consonance between the customers's mental self-view and the photo of the appreciated buyer of that thing used free from any other individual congruity speculation.

Michele et al, (2004), is likely going to all things considered, review of composing shows that insightful research related to reusing has set an accentuation on choosing components that can better portray and predict reusing conduct. Positive association among perspectives and lead have been shown so often, while no relationship was found in others. Regardless, there is a comprehension in the written work that specific reusing manners are best pointers over are general proficient biological perspectives.

Triguero et al, (2016), were the foremost researchers to display the works of 'freedom' and 'collaboration' in their examination. Their model relied upon the likelihood that a purchaser is not inclined to get any incite advantage by partaking in reusing conduct. People who put noteworthiness on incite preferences can be considered as being individualistic, while people who consider the impact of their practices on others and on society are known as collectivists. Thusly, the lead, for instance, reusing, which joins a consideration on social points of interest, may be looked as a part of 'group and freedom'.

Past lead is said to affect the way we bear on later on. Regardless, there is no wide synchronization with respect to past direct in the hypothesis of arranged lead. At to begin with, past lead is roundabout tended to by the elements of the theory of built arrange under the conditions that all sections identified with the lead are known and held obvious. In case past lead shows an effect on future direct it is a result of a missing portion in the model and to estimation change Past direct has only a winding effect on point through affectation and subjective standard Or, on the other hand

possibly, they affirm that past lead especially impacts need. Regardless, past direct is not the purpose for future lead, yet to some degree spellbinding in a lead more routinely will enhance the likelihood to play out a close direct later on. As demonstrated by that line of thought, general reusing conduct in the work environment and paper reusing conduct. In their examination people who used to reuse paper at home will evidently reuse paper at the working environment. Notwithstanding, reusing paper at home does not impact the reusing behavior of various materials at the working environment. Thusly, they battle that past direct can basically make predicative claims about future reusing conduct in case it is concerning a close lead and material. In a later report among families in the United Kingdom. "Past reusing foundation" exceptionally impacts reusing conduct and is developing the estimation of the speculation of sorted out lead and should be consolidated into the model when testing reusing conduct. An examination about consumerism in addition found that past lead was uninhibitedly imagining future direct. In addition, they found that the effect of past lead is not related to the estimation technique picked as ensured by (Ramayah et al., 2015). With everything considered, investigate has demonstrated that past lead can energetically affect need and future direct. Concerning reusing, it can be perceived that a man who has a mind blowing bit of the time reused will continue doing everything considered if all conditions have proceeded as some time starting late. Thusly, past direct is joined to test whether past reusing conduct impacts future lead.

Sharifah et al, (2015) proposed that the speculation of designed facilitate surmises that individuals are affected by benchmarks laid upon them by society which is reflected in the make subjective standard. While subjective standard gets the individual's lead because of what particular people think, analysts fight that the theory of created coordinate does not get measures the comprehensive group put upon herself/himself. For example, a couple of individuals won't not welcome a particular direct since they believe it is the best possible thing to do and not in setting of what others think. In this manner, among others, included completions of individual models while looking at understudy's lead as to "shoplifting, lying and getting away assignments". The explanation behind their examination was to research to what degree the speculation of masterminded coordinate measures hones named beguiling. Their examination found saw moral commitment no uncertainty on

the planet contributes toward gauging if an individual would lie, while it smaller impacts "shoplifting and deluding". By the day's end, Sharifah et al, (2015), fight that "undeniable extraordinary commitment seems to add to the difference in needs to perform dumbfounding takes a shot at" paying little respect to the likelihood that the extra ideal position of including PMO is compelled. Sharifah et al, (2015), agree with Beck and Ajzen (1991) that including a measure of individual gauges is fitting when measuring conduct that can be put on an "alright or awesome estimation" Given the argumentation above, reusing can contribute toward lessening waste in landfills, oceans or other negative steady outcomes. Beginning now and into the not so distant, one could battle that to reuse or not can be a moral decision as to reusing conduct, Sharifah et al, (2015), attempted saw moral commitment and found a self-choice effect on behavioral needs. Sharifah et al, (2015), figure in a comparative plan, a man who considers to reuse or not without a doubt joins specific measures in the central movement process. In any case, their examination did not request this supposition. In particular, saw moral commitment couldn't illuminate reusing conduct, by and by it contributes toward the game plan of the intent to reuse.

Tonglet et al. (2004) As showed by the theory of designed facilities, saw behavioral control covers factors, for instance, nonappearance of reusing incline, i.e. data about which waste to free, and having clear access to reusing workplaces, i.e. how relentless is reusing for the individual. In any case, It is argued that evident behavioral control does insufficient address to situational factors. Subsequently, the hypothesis of dealing with lead is extended by the parts data and weight about reusing.

CHAPTER III

METHOD OF THE RESEARCH

Information related to the research models data collection methods, data analysis and application steps of the research are presented in this section.

3.1. Method of the Research

- Tobruk students were picked for a logical examination in light of its huge size and has been seen as one of the genuine universities in Libya.
- The data will be sourced using a study that will be appropriated to 350 university students in Tobruk University as the illustration measure.
- The study will contain questions which will be used to choose respondents perception and care towards environmental issues that could be caused due to solid waste accumulation. The clarification behind picking 350 respondents was an immediate consequence of the need to pick a sporadic and genuinely illustrative case.
- The data obtained through the use of questionnaires will be examined using statistical package for social science (SPSS).

Parts of the objectives of the study are to analyze some of the factors that influence student's intention to recycle their waste with Tobruk University students as case study. As literarily illustrated in the previous chapter, various factors influence student's attitudes towards recycling.

This chapter is categorized into subsections notably the research design, sample selection, collection of data, the research frame work and lastly, the statistical analytical tool adopted for the study

3.2 Sample Selection

The data collection for this study adopted a random sampling technique where 370 questions were distributed randomly to the respondents (Tobruk university students from different faculties and institutions in the university). The study also adopted a face-to- face method of questionnaire distribution so as to clarify any confusion or questions that might be asked by the respondents in the process of attending to the questions in the questionnaire. Out of the 370 distributed

questionnaires, 20 were incorrectly attended to by respondents, hence leading to the adoption of 350 correctly filled questionnaires as the sample size.

3.3 Data Collection Technique

Data were sourced from Tobruk University students in the mid days of 17 – 18 July, 2017. The questionnaire consisted of 4 parts with a total of 35 questions. Part one is composed of questions that will give information about the respondent's demographic profile. Part two will give information about respondent's interest in recycling of waste while the third part will extract information about provision of recycling facilities and how it affects student's behavior towards recycling. The fourth part aims to extract how well respondents are informed on the benefits of recycling waste and the last part of the questionnaire will extract data inconveniences related with waste recycling and how it affects respondent's attitudes towards recycling.

In order to ensure easy response to the questions, the research adopted questions in likert form. The likert scale took a hierarchical other of: strongly agree, moderately agree, slightly agree, neutral, slightly disagree, moderately disagree and strongly disagree.

3.4 Frame work for Data analysis

The frame work of the study stems on the devastating impact of tons of waste in Libya and the world at large. Studies has shown that recycling poses as one of the strategies to curtail the impact of waste generation on the environment. However, recycling practices have witnessed a down fall in recent times majorly due to lack of information on the benefits of recycling, attitude towards waste recycling, lack of interest in recycling of waste and avoidance of inconveniences as a result of recycling waste.

This study analyses this aforementioned variables and how it affects university students with Tobruk University student as a case study.

3.5 Statistical Analysis

In accordance with the intents of the paper, the research hypothesis were tested. The SPSS 19 was adopted for the quantitative data analysis to deduct the correlation, linear and regression values of the variables.

3.6 Variables

The relation between the autonomous (independent) variables and the reliant (dependent) variables will be calculated. The dependent variables are:

- (a) Respondents interest in recycling of waste
- (b) Respondents awareness of the benefits of recycling waste
- (c) Proper information on benefits of recycling waste
- (d) Inconveniences in recycling of waste.

The dependent variable for this study is “Recycling of waste”

3.7 Validity and reliability

Reliability and validity are mostly adopted for quantitative analysis, though it is not applicable for cases where data to be evaluated are directly sourced from humans because opinions and answers from respondents can change at any given time. Validity and reliability are used to express the quality of the data.

Validation of the questionnaires was strengthened through the contribution from the supervisor and also by professionals in environmental education studies.

Internal consistency was carried out to analyze how proper different items measure the same notion in the study. Cronbach's alpha factors was adopted to examine the internal consistency of the data.

Cronbach's alpha is a statistical term that shows the closeness of scale. A reliability coefficient of ≥ 0.07 is generally accepted. The Cronbach's alpha reliability value as shown in table 3.1 is 0.977. Hence we state categorically that the study scale is reliable.

Table 3.1 Reliability Statistics

Cronbach's Alpha	N of Items
.953	35

CHAPTER IV

FINDINGS AND INTERPRETATIONS

This chapter will focus more on analysis of data sourced through questionnaires from Tobruk university students using statistical package for social science (SPSS). This chapter will also involve presenting results and will throw some focus on descriptive statistics for demographic variables, correlation analysis, and regression analysis as tools for testing the expressed hypothesis.

4.1 Demographic Analysis

The analysis of the frequency distribution of the demographic variables was based upon 350 questionnaires retrieved from respondents.

4.1.1 Gender Distribution of Respondents

Table 4.1: Gender Distribution of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	180	51.42	51.42	51.71
	Female	170	48.57	48.57	100
Total		350	100	100	

As represented in Table 4.1: of the respondents, 51.42% were male, while 48.57% were female. This implies that male students of Tobruk University showed more participation in this study than the female counterpart.

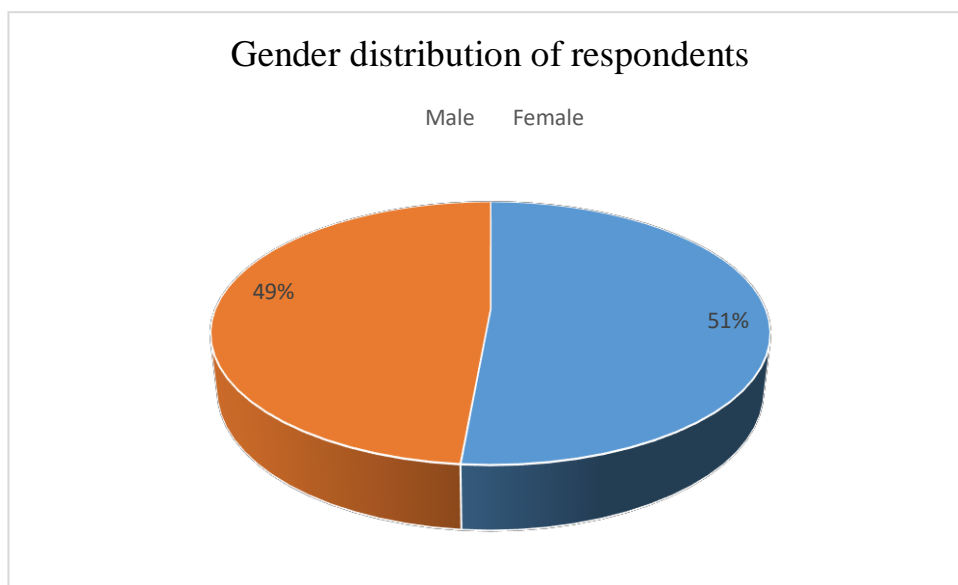


Figure 4.1 Distribution of respondents by gender expressed in percentage.

4.1.2 Age Distribution of Respondents

Table 4.2: Age Distribution of Respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24 years	200	57.14	57.14	57.14
	25-34 years	150	42.86	42.86	100
	Total	350	100	100	

Table 4.2: The distribution of respondents according to age reveals that of the respondents, 42.85% fall in the age bracket of 18-24 years, 34.28% lie within 25-34 years, whereas 22.85% are aged 30 and beyond.

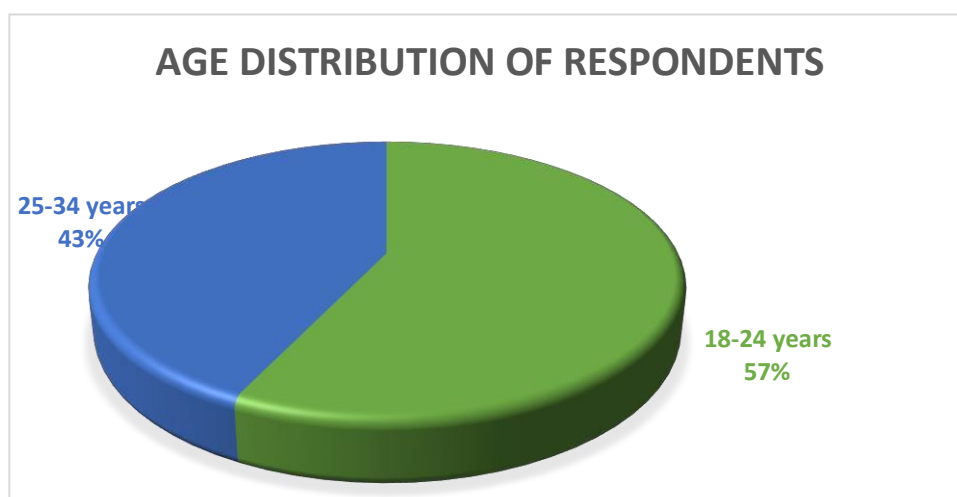


Figure 4.2 Age percentage distribution of respondents

4.1.3 Academic year Status of the respondents

Table 4.3: Academic year Status of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First year	120	34.29	34.29	34.29
	Second year	80	22.86	22.89	57.14
	Third year	70	20	20	77.142
	Forth year	50	14.29	14.29	91.43
	MSc	30	8.57	8.57	100
	Total	350	100	100	

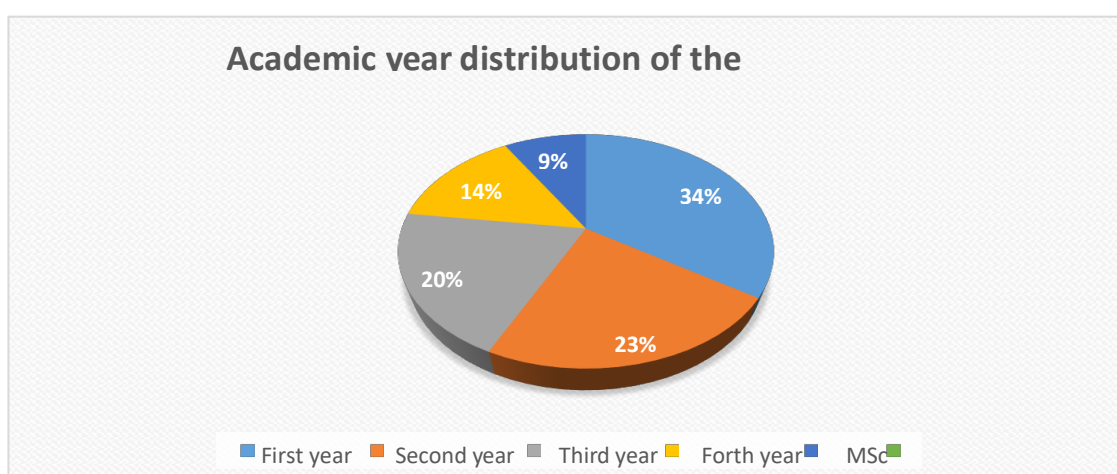


Figure 4.3 Academic year percentage distribution of the respondents

Table 4.3 above shows the academic status distribution of the respondents. From this, it is evident that of the respondents, 22% were freshmen, 20% were second-year enrollees, 20% third-year students, 14.28% are fourth-year students, 14.28% are in their fifth study year, and 10% in sixth study year.

4.1.4 Residential condition of the respondents

Table 4.4: Distribution of respondents' resident status

		Frequency	Percent	Valid Percent	umulative Percent
Valid	Dormitory	132	37.71	37.71	37.71
	Off-campus	218	62.29	62.28	100
Total		350	100	100	

Residential status of the respondents above shows that 37.71% of the respondents are living in the dormitory provided by the university while 62.29% are leaving outside Tobruk university premises

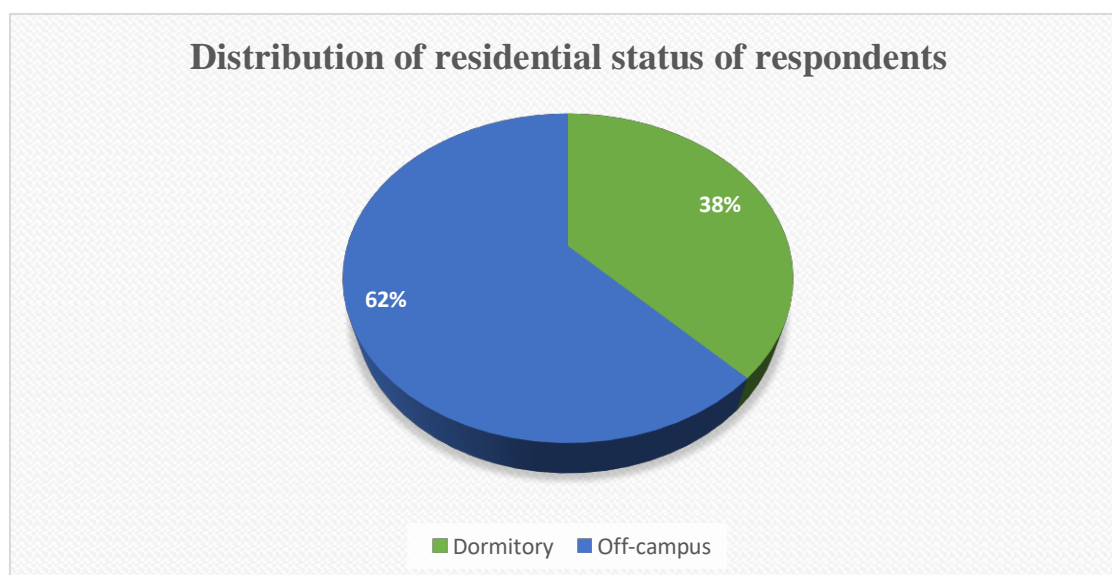


Figure 4.4 Percentage distribution of the respondents' resident status.

4.1.5 Distribution of respondents by educational faculty

Table 4.5 Distribution of the respondents according to educational faculty

	Frequency	Percent	Valid Percent	Cumulative Percent
Natural resources	59	16.86	16.86	16.86
marine resources	75	21.43	21.43	38.29
Valid Environmental science	96	27.43	27.43	65.71
Humanities and Social science	120	34.29	34.29	100
Total	350	100	100	

Table 4.5 above displays the distribution of the respondents by faculty. It can be concluded that 16% of these respondents are from this school of Architecture which is the highest as seen in Table 6 above, followed by 14.85% in environmental studies and 12.57% in educational studies. Students from this school of Graduate Studies, Faculty of Medicine and Health Science and lastly School of Business Studies has a valid percentage of 7.71%, 8.85%, and 10.28% respectively.

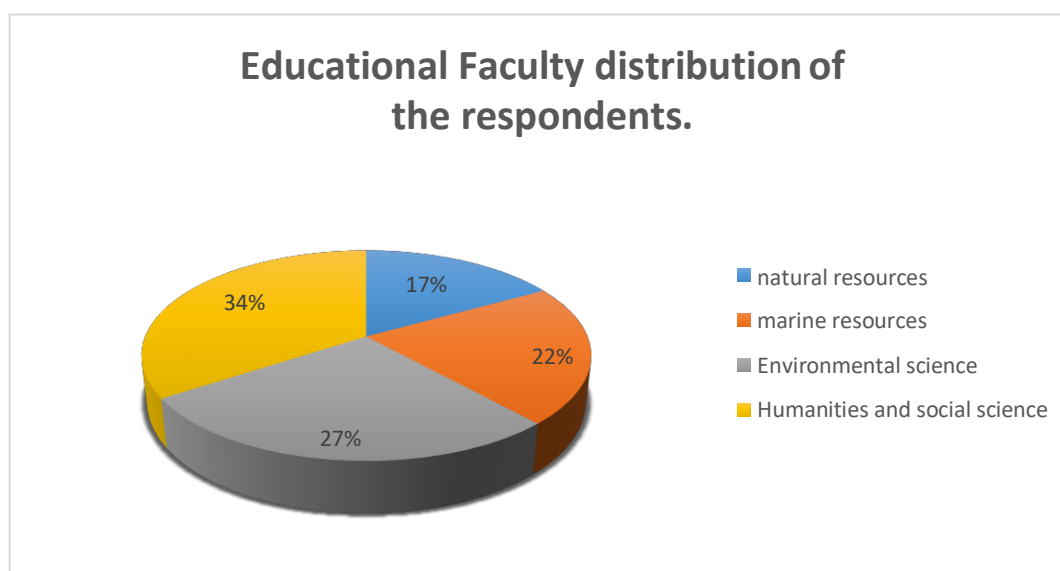


Figure 4.5 Educational faculty percentage distribution of the respondents

Table 4.1.6 percentage response frequency to questions by respondents

Table 4.6 percentage response frequency to questions by respondents

Questions	Response Frequency (%)					Cumulative frequency
	<i>Strongly agree</i>	<i>Slightly Agree</i>	<i>Neutral</i>	<i>Slightly Disagree</i>	<i>Strongly Disagree</i>	(%)
6. Recycling Waste is good	15	17	30	23	15	100
7. Recycling waste is useful	13	19	30	23	15	100
8. Recycling waste is rewarding	14	32	17	24	13	100
9. I am not interested in the idea of recycling waste	28	17	23	16	16	100
10. My feelings towards recycling waste are favorable	29	30	16	16	9	100
11. I don't think recycling waste has many positive effects on the environment	25	26	18	15	16	100
12. I make great personal effort to recycle waste as much as possible	13	19	30	23	15	100
13. It is expect of me to recycle my waste at Tobruk University	14	32	17	24	13	100
14. If more people recycle, i would also recycle more	28	17	23	16	16	100
15. There are plenty of opportunities for me to engage in recycling at the University of Tobruk	29	30	16	16	9	100
16. Recycling is easy	25	26	18	15	16	100
17. The University of Tobruk provides satisfactory resources for recycling	29	15	15	16	25	100

18. I know where to take my waste at the university of Tobruk	15	14	15	26	30	100
19. I feel i should not waste anything if it could be used again	24	22	26	16	12	100
20. It would be wrong of me not to recycle my waste	17	16	29	25	13	100
21. Recycling waste should be an essential part of our way of life	30	19	21	14	16	100
22. I would recycle more waste if i had more information on recycling waste	29	26	23	7	15	100
23. More information about how to recycle waste should be available at the University of Tobruk	36	16	26	10	12	100
24. I know how to recycle my waste	19	17	12	22	30	100
25. If I knew what was happening to the recyclables after i dispose them, I would recycle more often	30	21	15	18	16	100
26. There is little information of recycling at the University of Tobruk	30	23	10	21	16	100
27. I don't have time to recycle	36	25	12	13	14	100
28. Recycling at the university of Tobruk is inconvenient	36	35	8	9	12	100
29. Recycling at the university of Tobruk is too complicated	36	22	15	17	10	100
30. It is convenient for me to recycle at the University of Tobruk	29	26	23	7	15	100

31. Recycling takes up too much space at home	36	16	26	10	12	100
32. How frequently do you recycle your waste at the University of Tobruk	19	17	12	22	30	100
33. How frequently do you recycle your waste at home?	30	21	15	18	16	100
34. In the past three months, how frequently did you recycle your waste at the University of Tobruk	30	23	10	21	16	100
35. In the past three month how frequently did you recycle your waste at home?	19	15	9	25	32	100

The table above gives a clear percentage distribution of the response to questions in the questionnaire by the respondents

4.2 Reliability Analysis

Table 4.7: Reliability Statistics

Cronbach's Alpha	N of Items
.953	35

Table 4.7 above depicts the outcome of the assessment of the response to the questionnaire using Cronbach Alpha. The result demonstrates a reliability score of 0.953 implying that all the thirty five items are reliable and valid to assess the opinion of respondents towards the factors under investigation influencing Tobruk university student's intention to recycle.

4.3 Assessment of correlation

A correlation assessment was carried out to investigate the level of association and dependency between the independent variables (**Lack of awareness, inconvenience in recycling and disinterest in waste recycling**) and the dependent variable (**recycling of waste**). The tabulated distributions below demonstrate the correlation array between the independent variables and the dependent variables as given in this survey.

4.3.1 Correlation between absence of awareness of the benefits of waste recycling and student's intention to recycle waste.

Table 4.8 Correlation between Students awareness and students intention to recycle waste.

		lack of awareness of the benefits of waste recycling	student's intention to recycle waste
lack of awareness of the benefits of waste recycling	Pearson	2	.957**
	Correlation		
	Sig. (2-tailed)		.000
	N	350	350
Student's intention to recycle waste.	Pearson	.957**	2
	Correlation		
	Sig. (2-tailed)	.000	
	N	350	350

****.** Correlation is significant at the 0.01 level (2-tailed).

From the above table, it could be deduced that there is a relationship statistical significance between absence of awareness of the benefits of waste recycling and student's intention to recycle. The coefficient of correlation is 0.957, which is of significance at the 0.01 level. This means that students are unaware of the benefits of recycling waste. Ceren et al., (2017) in their study on "Gender perspective on the factors predicting recycling behavior", also proposed that lack of awareness of the positive impacts of waste recycling is part of the contributing factors why people don't recycle their waste.

4.3.2 Correlation between student's perception of recycling to be inconvenient and student's intention to recycle waste.

Table 4.9 Correlation between student's perception of recycling to be inconvenience and student's intention to recycle waste

		Student's perception of recycling to be inconvenience	Student's intention to recycle waste
student's perception of recycling to be inconvenience	Pearson	2	.786**
	Correlation		
	Sig. (2- tailed)		.000
	N	350	350
Student's intention to recycle waste.	Pearson	.786**	2
	Correlation		
	Sig. (2- tailed)	.000	
	N	350	350
**. Correlation is significant at the 0.01 level (2-tailed).			

The above tabulated data shows that there is a relationship of statistical significance between student's perception of recycling to be inconvenient and student's intention to recycle. The coefficient of correlation is 0.786, and is of significance at the 0.01 level. This evidence further implies that students clearly perceive recycling of waste as stressful and very inconvenient. Study by Calvin et al., (2014), also suggested that inconveniences in recycling waste also contribute to reasons why some opt-out in recycling their waste.

4.3.3 Correlation between student's lack of interest in the idea of recycling waste and motivation to recycle waste.

Table 4.10 Correlation between student's lack of interest in the idea of recycling waste and motivation to recycle waste.

		student's disinterest in the idea of waste recycling	intention to recycle waste
student's lack of interest in the idea of waste recycling	Pearson	2	.825**
	Correlation		
	Sig. (2-tailed)		.000
	N	350	350
intention to recycle waste	Pearson	.825**	2
	Correlation		
	Sig. (2-tailed)	.000	
	N	350	350
**. Correlation is significant at the 0.01 level (2-tailed).			

The above tabulated data shows that a relationship of statistical significance exists between a student's lack of interest in the idea of waste recycling. The coefficient of correlation is 0.825 which is of significance at the 0.01 level. This is evidence that students in general are not interested in the idea of waste recycling.

4.4 REGRESSION ANALYSIS

An analysis of linear regression was done to ascertain the expressed hypothesis so as to decipher the relationship between the independent and the dependent variables.

4.4.1 Hypothesis 1

H1: Absence of awareness of the importance of recycling affects student's intentions to recycle waste.

H0: Absence of awareness of the importance of recycling doesn't affect student's intentions to recycle waste.

4.4.1.1 A Summary Model of Variables

Table 4.11 Model Summary of Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.803 ^a	.654	.652	.5092

a. Predictors: (Constant), Absence of awareness on the importance of recycling

b. Dependent Variable: intentions to recycle waste.

The coefficient of determination for R Square (R^2) is 0.654, which shows the investigative ability of the regression equation. This means that lack of awareness on the benefits of recycling affects student's intentions to recycle waste. Hence this also implies that lack of awareness causes over 67.4% of the reason why Tobruk university students don't recycle their waste.

4.4.1.2 Outcome of regression Analysis (ANOVA)

Table 4.12 Outcome of Regression Analysis (ANOVA)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	124.600	1	126.600	2690.762	.000 ^a
	Residual	9.670	348	.050		
	Total	145.171	350			

a. Predictors: (Constant), absence of awareness of the benefits of recycling

b. Dependent Variable: intentions to recycle waste.

Table 4.12 above-displayed discloses an F-statistic of 2690.762 with a value of significance of 0.000 which suggests that $p < .05$ is of significance at the .05 significant level. Hence, this study declines H_0 and approves H_1 , consenting that an absence of awareness of the benefits of recycling affects student's intentions to recycle waste.

4.4.1.3 Coefficients (Absence of awareness on the importance of recycling and intentions to recycle waste)

Table 4.13 Coefficients (absence of awareness on the importance of recycling and intentions to recycle waste)

Model	Unstandardized	Standardized		t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
1 (Constant)	.173	.050		3.950	.000
Intentions to recycle waste	.985	.019	.976	53.679	.000

a. Absence of awareness on the importance of recycling.

The coefficient tabulated data above shows a Beta value of 0.985 which affirms the beneficial relationship between Lack of awareness on the importance of recycling and intentions to recycle waste as cited previously in the dismissal of the null hypothesis. The T- test numerical value is 53.697 which has a significance of .000 and is less than 0.05. The constant value for the underrated coefficients is .173, whereas student awareness stands at .985, this steady numerical value means that a unit increment in lack of awareness on the benefits of recycling guides to .985 growth on the constant value as portion of elements affecting students intention to recycle waste.

Table 4.15 above-displayed discloses an F-statistic of 289.549 with a value of significance of 0.000 which suggests that $p < .05$ is of significance at the .05 significant level. Hence, this study declines H_0 and approves H_1 , affirming that student's perception to recycling of waste to be inconvenient is statistically significant in the determination of factors that affect student's intention to recycle waste.

4.4.2.3 Coefficients (student's perception of recycling to be inconvenient & intentions to recycle waste)

Table 4.16 Coefficients (student's perception of recycling to be inconvenient & intentions to recycle waste).

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.365	.146		3.689	.010
student's perception of recycling to be inconvenient	.875	.052	.790	16.580	.000

a. Dependent Variable: intentions to recycle waste.

The coefficient tabulated data above shows a Beta value of 0.875 which affirms the beneficial relationship between student's perception of recycling to be inconveniencing as one of the predicting factors for checkmating what affects student's intention to recycle in general as cited previously in the dismissal of the null hypothesis. The T- test numerical value is 16.580 which has a significant numerical value of .000 and is less than 0.05. The constant value for the underrated coefficients is .374, whereas student awareness stands at .895, this steady numerical value means that a unit increment in student's perception leads to .875 growth on the need to educate students that recycling is not all about convenience but also about remediating the environment.

4.4.3 Hypothesis 3

H1: Students are generally disinterested in the idea of recycling waste.

H0: Students are generally interested in the idea of recycling waste.

3.4.3.1 A Summary Model for Variables

Table 4.17 A Summary Model for Variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936a	.900	.789	.39264

a. Predictors: (Constant), interest in the idea of recycling waste.

b. Dependent Variable: Intentions to recycle waste.

Table 4.17 reveals the coefficient of determination for R Square (R²) is 0.900, which shows the investigative ability of the regression equation. This means student's interest in the idea of recycling waste accounts for 90% on factors contributing to student's intention to recycle waste.

4.4.3.2. Results of Regression Analysis (ANOVA)

Table 4.18 Results of Regression Analysis (ANOVA)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.369	2	115.386	800.934	.000 ^a
	Residual	29.819	248	.147		
	Total	145.179	200			

a. Predictors: (Constant), interest in the idea of recycling waste.

b. Dependent Variable: Intentions to recycle waste.

Table 4.18 above-displayed discloses an F-statistic of 800.934 with a value of significance of 0.000 which suggests that $p < .05$ is of significance at the .05 significant level. Hence, this study declines H_0 and approves H_1 , affirming that students are generally not interested in the idea of recycling waste.

4.4.3.3 Coefficients (student's interest in the idea of recycling waste & intentions to recycle waste)

Table 4.19 Coefficients (student's interest in the idea of recycling waste & intentions to recycle waste)

Model		Unstandardized Coefficients		Standardized Coefficients	t	
		B	Std. Error	Beta		
1	(Constant)	-.137	.010		-1.367	.175
	Student's attitude.	1.046	.039	.911	29.160	.000

The coefficient tabulated data above shows a Beta value of 0.911 which affirms the beneficial relationship between student's interest in the idea of recycling waste and the low turnout of waste recycling in Tobruk University. The T- test numerical value is 29.160 which has a significant numerical value of .000 and is less than 0.05. The constant value for the underrated coefficients is -1.36, whereas the absence of training for ameliorating the process is 1.046. This uniform value means a unit growth in non-interest in recycling of waste leads to 1.045 increase in students intention to recycle their waste.

CHAPTER V

RESULTS SUMMARY AND RECOMENDATIONS

5.1 Results Summary of Experimented Hypothesis

Table 5.1 Results Summary of Experimented Hypothesis

S/N	Hypothesis	Results
H1	Lack of awareness of the benefits of recycling affects student's intentions to recycle waste.	Accepted
H0	Lack of awareness of the benefits of recycling doesn't affects student's intentions to recycle waste.	Not Accepted
H2	Student perceive recycling of waste to be inconvenient.	Accepted
H0	Student don't perceive recycling of waste to be inconvenient.	Not Accepted
H3	Students are not generally interested in the idea of recycling waste.	Accepted
H0	Students are generally interested in the idea of recycling waste.	Not Accepted

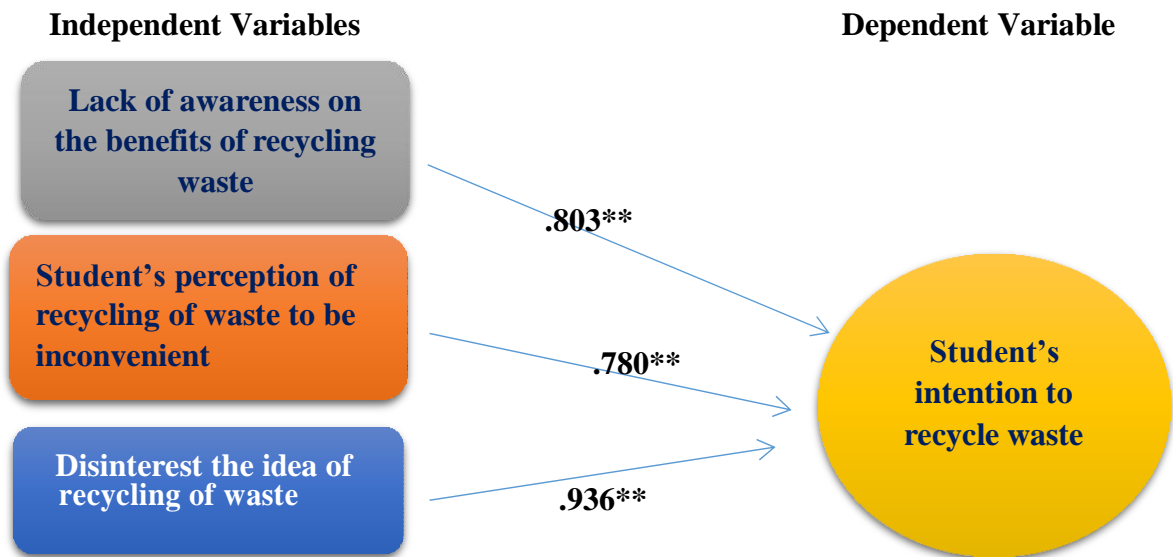


Figure 5.1: A template summary for outcomes

Both table 5.1 and figure 5.1 shown above reveal the replica summary for the outcome of the experimented hypothesis. Depending on the retrogression outcome, all four hypotheses gained approval because the outcomes were of statistical significance. This is an insinuation that the hypothesized elements were major to why there is the need to monitor and control factors affecting student's intention to recycle waste.

The conclusion proceeds by investigating if the methodological approach adopted in responding to the research question is reliable. This section also elaborates more about the methods adopted in assessing the hypothesis driving this research. Part of the research questions that guides the research is *“To what extent is TU student’s behavior to recycle affected by their attitude to recycling of waste”*. Secondly, *“The effect of TU students past behavior, knowledge and inconvenience to attitude towards recycling of waste”*. Correspondingly, four hypothesis were formulated for the study which include:

Hypothesis 1

- HI: Lack of awareness on the benefits of recycling waste affects student’s intention to recycle.
- HO: Lack of awareness on the benefits of recycling waste doesn’t affects students intention to recycle.

Hypothesis 2

- HI: Student’s perception of recycling of waste to be inconvenient.
- HO: Student’s doesn’t perceive recycling of waste to be inconvenient.

Hypothesis 3

- HI: Students are not generally interested in the idea of recycling.
- HO: Students are generally interested in the idea of recycling.

In other to ascertain the above stated hypothesis, a questionnaire was distributed to Tobruk university students and the respondents indicated their agreement to questions on a Likert scale of five different points. The data obtained from these opinion polls were examined with

SPSS, the package for statistical data analysis. At the end of the study, some hypothesis were affirmed to be true, hence they were accepted. Theses hypothesis include:

1. Lack of awareness of the benefits of recycling affects student intention to recycle waste.
2. Students perceive recycling of waste to be inconvenient.
3. Students are not generally disinterested in the idea of recycling waste.

The statistical model summary in-line with the height at which the independent variable affects the dependent variable shows that “General interest in the idea of recycling waste” has the highest impact on “*Student intention to recycle waste* (0.936*)”, followed by “*lack of awareness of the benefits of recycling waste* (0.803*)” and lastly “*Students perception of recycling of waste to be inconvenient* (780**)”.

5.1 Recommendations

As we have observed through numerous events in the time past, attitudes and perceptions of people towards diverse concepts due change. There is a high degree of hope that concerns towards the environment will rise and hence pave an explicit way for recycling of solid waste. A future were monetary attachment and sentiments due not drive people to cater for the environment. But wholly on the indebt willingness to do good to Mother Nature. However, till we get to that point in the future, let it be known that money is one of the factors that drives people to recycle.

Some of the solutions to improve recycling is proper awareness which is tantamount to effective implementation. This goes to say that despite the greatness of the system, people’s motivation or the effective infrastructural structure, if individuals are not aware of the proper way to recycle and its benefits, they will abstain from recycling.

Environmental education program organized by the government would greatly improve students’ knowledge on the benefits of recycling. At homes, attitude and information is learnt from the Guidant or parents. Hence, there is need to educate adults of the benefits of recycling through Newspapers, radio and TV. The media has been proven countlessly to be an effective channel capable of propagating behavioral change.

In other to propose a road map so as to alleviate people’s behavior towards recycling, it is paramount to outline the various factors that’s results to its failure they include:

- Non-available yearly or monthly report on successes achieved in recycling.
- Non-available fulltime employees so as to monitor the recycling activities.
- Non-compliance to stated goals and legislative laws on recycling.
- Non-consistent education campaign within the campus to enlighten the students
- Lack of public relations

- Non-available opportunities for recycling
- Nonexistent synergy between the institution administration, house keeper and custodians.

It is worthy of note that success rate in recycling of waste is dependent on individuals and their quest for a cleaner and sustainable environment

This study is still very much open for further studies for example, future research could center on the contrast between intention of students living within university premises and those living outside university premises to recycling of waste.

Recycling is vital in our society today as waste has a huge detrimental effect on the natural environment. This study has shown the various factors that challenge recycling which ought to be addressed.

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APPENDIX

Appendix: Questionnaire

1. What is your Age?

☐ 18 to 24

☐ 25 to 34

2. What is your Gender?

☐ Female ☐ Male

3. Which Student status applies to you?

☐ Undergraduate student ☐ Graduate student (Master) ☐ Ph.D. student

☐ Other (please specify)

4. Where do you live?

☐ On campus ☐ Off campus

5. What is your department?

☐ Natural resources ☐ Marine resource ☐ Environmental science ☐ Humanities and social sciences

For the purpose of these study please respond with option provided in the check boxes in respect to the question by indication either of the following “**Moderately agreed, slightly Agreed, Neutral, Slightly Disagree Moderately**”

Disagree and strongly disagree”

Question	Strongly Agree	Slightly Agree	Neutral	Slightly Disagree	Strongly Disagree
6. Recycling Waste is good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Recycling waste is useful	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Recycling waste is rewarding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I am not interested in the idea of recycling waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. My feelings towards recycling waste are favorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I dont think recycling waste has many positive effects on the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I make great personal effort to recycle waste as much as possible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. It is expect of me to recycle my waste at Tobruk University	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. If more people recycle, i would also recycle more	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. There are plenty of opportunities for me to engage in recycling at the University of Tobruk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Recycling is easy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. The University of Tobruk provides satisfactory resources for recycling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. I know where to take my waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

at the university of Tobruk					
19. I feel i should not waste anything if it could be used again	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. It would be wrong of me not to recycle my waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. Recycling waste should be an essential part of our way of life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I would recycle more waste if i had more information on recycling waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. More information about how to recycle waste should be available at the University of Tobruk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. I know how to recycle my waste	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. If I knew what was happening to the recyclables after i dispose them, I would recycle more often	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
26. There is little information of recycling at the University of Tobruk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. I don't have time to recycle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. Recycling at the university of Tobruk is inconvenient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. Recycling at the university of Tobruk is too complicated	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. It is convenient for me to recycle at the University of Tobruk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. Recycling takes up too much	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<i>space at home</i>					
32. <i>How frequently do you recycle your waste at the University of Tobruk</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. <i>How frequently do you recycle your waste at home?</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. <i>In the past three months, how frequently did you recycle your waste at the University of Tobruk</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. <i>In the past three month how frequently did you recycle your waste at home?</i>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Curriculum Vitae

My name is Almukhtar Aljatlawe. I was born on 10/07/1987 in the city of Tobruk, Libya. In 2002, I started high school and completed in 2006. In 2009 I received my Diploma in the field of Environment and Water Resources from the Higher Vocational Institute for Comprehensive Trades in the city of Tobruk. I worked as a Teacher assistant in the same institute in the Department of Environment and water Recourses from 2011 to 2014. In year of 2015, I took English Language courses in Atilim University in Ankara, Turkey, then I came to the Turkish Republic of North Cyprus and I joined the Master program in the Department of Environmental Education and Management at the University of the Near East.

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