

**AN INVESTIGATION INTO THE QUALITY OF
INFORMATION OBTAINED FROM MAIL SURVEY USING
PERSONAL CASH REWARDS AND CONTRIBUTIONS TO
CHARITY AS A WAY OF INCREASING MAIL SURVEY
RESPONSE:
THE CASE OF NAIROBI UNIVERSITY STUDENTS. "**

BY

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DECLARATION


ACKNOWLEDGEMENTS

This Thesis is my original work and has not been submitted for a degree in any other University.

Sign  _____ Date 25/10/01
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The ^{Project} Thesis has been submitted with my approval as The University Supervisor.

Sign  _____ Date 1/11/2001
Dr. Raymond Musyoka

ABSTRACT

ACKNOWLEDGEMENTS

Much appreciation and thanks to my Supervisor, Dr. Raymond Musyoka, who guided and advised me throughout the study.

I also wish to extend my sincere gratitude to Mr. Nthege of Lower Kabete Campus, Mr. Mwangi of Chiromo Campus and Mr. Rono of Parklands Campus for their assistance in selecting and locating my sample units.

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Special appreciation is extended to the Directors of Riders (K) Ltd for their financial and moral support during the study.

I also thank my sister Pauline for typing and retyping the many drafts during the study.

Recognition is extended to all my friends and colleagues at work and at the Faculty of Commerce who, in one way or another, contributed to the successful completion of this study.

ABSTRACT

This study was designed to investigate the quality of information obtained from mail survey using personal cash rewards and contribution to charity as a way of increasing mail survey response.

The specific objectives were: 1) To determine if the use of personal cash rewards and contributions to charity incentive to mail survey can significantly increase the rate of mail survey among Nairobi residents. 2) To find out which method is more effective between personal cash reward and charity contributions as an incentive to the Nairobi residents in mail survey response. 3) To compare the quality of answers given between those respondents who are not offered anything and those that are offered charity and cash incentives.

The population was the current undergraduate students of the University of Nairobi. A sample was randomly selected from this population and questionnaires sent to them. The chi square (X^2) test was used as the main tool to analyse the response rate. The quality of the answers was analysed using descriptive statistics.

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Results showed that cash rewards are very effective in increasing the response rate. Contribution to charity did not increase the response rate significantly. The quality of answers was not effected by the incentives offered.

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1.0 Chapter one; Introduction..... III

The study recommends to the researcher using mail survey to use the cash incentive to increase the response rates. However, caution is given that the particular characteristics of the population must be analysed to determine whether to use cash or not. It is also important to carefully determine the amount of cash to offer. In an era of increasing consumer skepticism about research and reluctance to participate in survey research, these methods may prove superior to previously used methods of enhancing consumer response.

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It has been the data collection mode of choice for many who conduct surveys for many reasons. Some of these are:-

- * Collecting data by mail is relatively inexpensive. There is no need to limit the sampling frame by geography because of the expense of reaching respondents in remote or distant areas.
- * Mail surveys are easy to implement.
- * There is no interviewer error since interviewers are not used.
- * Mail questionnaire recipients have time to verify the validity of a survey if they choose to.

1.0 CHAPTER ONE ; INTRODUCTION

1.1 BACKGROUND

Kenya is experiencing a rapid expansion of education especially since the liberalisation of the education system. We now have a quite number of private colleges and universities. Government universities have started parallel degree programmes and quite a number of international universities have started correspondence programmes for Kenyan students to do their studies without having to travel overseas. This therefore means that there is more and more research work being done locally. Mail survey is one of the tools used to collect data in research.

It has been the data collection mode of choice for many who conduct surveys for many reasons. Some of these are:-

- Collecting data by mail is relatively inexpensive. There is no need to limit the sampling frame by geography because of the expense of reaching respondents in remote or distant areas.
- Mail surveys are easy to implement.
- There is no interviewer error since interviewers are not used.
- Mail questionnaire recipients have time to verify the validity of a survey if they choose to.

- Mail respondents have privacy, the flexibility of completing the questionnaire at their leisure, and time to make sure they are providing accurate information (Kanuk & Berenson 1975 and Mangione 1995). The mailed questionnaire survey is best suited (and perhaps the only alternative open to the researcher) when a substantial amount of information is to be obtained through questions, at minimal costs from a sample that is widely dispersed geographically. The major problem of mail is non-response.

Non response is a serious problem because non-respondents may differ considerably from respondents. Studies have shown that the response rate for mail questionnaire is mainly higher for respondents interested in the subject than those who are not (Mutunga E. N. 1993).

Therefore, the bias resulting from non-response may limit the investigator's ability to make generalisation about the entire population. Many researches done in Kenya and particularly in Nairobi show that non-response to mail questionnaires is a major problem.

Ogutu M. (1983) preferred to carry out personal interview with various advertising agency executives in Kenya instead of using mail questionnaires in order to cut down non-response rate. Odhiambo P.J.

(1986) administered the questionnaire personally to advertising agency executives instead of sending mail questionnaires because of the same reason.

Gathuo W.A (1989) used both drop & pick up later and mail questionnaire methods and got a response rate of 88.6% and 43.5% respectively.

Several methods can be used to increase the response rate of mail questionnaires. One method is to offer the respondent a reward, such as a prize or a nominal sum of money. The problem with offering money is that the respondents will be indignant that the researchers consider the respondents time worth so little and thus may not respond at all. However, most often respondents see the reward as a symbolic gesture, and they cooperate because they consider the study worthwhile (Chava F.N. & David

N. 1996)

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Robertson D. H. and Bellenger D. N. (1978) found out that the response rate can be increased significantly when charity incentive is used in mail questionnaires for Denver residents in America.

1.2 STATEMENT OF THE PROBLEM (1978) found out that the response

The major problem of mail surveys is non-response. There are many non-responders, and we usually know nothing about how those who answer might differ from those who do not answer. The most commonly used incentive to increase mail survey response in Kenya is the use of a post-paid self-addressed return envelope. This however, is like a standard rather than incentive because it is unreasonable to expect the respondent not only to fill out the questionnaire but also find an envelope and then go to the post office to have it weighed and stamped. use the response rate

among the students of Nairobi University. It will also try to find out the

Odhiambo P.J. (1986) preferred to use personal interview instead of mail questionnaires to cut down on the response rate. Gathuo W.A. (1989) used both the drop and pick up later and mail questionnaires methods to get information from respondents in Kenya. The response rate for drop and pick up later method was 88.6% while that of mail questionnaires was 43.5%. This indicates that non response to mail questionnaires is still a major problem. The use of cash rewards and contributions to charity as incentives in increasing the response rate is not common among researchers using the residents of Nairobi as their population.

13 Robertson D. H. and Bellenger D. N. (1978) found out that the response rate can be increased significantly when charity incentive is used in mail questionnaires for Denver residents in America.

It is important however, to find the quality of answers given by the respondents especially when they are offered cash rewards. This is because they may only be interested in the money and may thus not answer the questions keenly.

This research therefore will try and find out if the use of cash rewards and charity incentives will significantly increase the response rate among the students of Nairobi University. It will also try to find out the quality of answers given by respondents when they are offered cash and charity incentives.

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1.3 RESEARCH OBJECTIVES

- (i) To determine if the use of personal cash rewards and contributions to charity incentives in mail survey can significantly increase the rate of mail survey response among Nairobi University Students
- (ii) To find out which method is more effective between personal cash reward and charity contributions as an incentive to the Nairobi University Students in mail survey response.
- (iii) To compare the quality of answers given between those respondents who are not offered anything and those that are offered charity and cash incentives.

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Therefore researchers sometimes avoid to use this technique of data collection because of this problem. Oguni M. (1983) used personal interview instead of mail questionnaires to cut down on the possible non-response rate. Others have had to use data collected from a small proportion of the sample to make conclusions about the population. Nzunzi (1990) used data collected from only 26.8% of the sample to make conclusions about a population residing in and around Nairobi.

1.4 IMPORTANCE OF THE STUDY

While the advantages of the mail questionnaire (e.g. low cost, lack of interview bias, ability to reach a widely dispersed sample) make it a very attractive data collection technique in research, the problems of low response rates make it a constant headache for researchers. In most cases non-response leads to bias if the persons who do respond differ substantially from those who do not respond. If this is the case, the results do not directly allow one to say how the entire sample, let alone the population, could have responded. A research done by Mutunga E.N. (1993) on consumer attitudes towards life insurance industry in Kenya had the response rate more dominated by policyholders than non-policyholders.

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Therefore researchers sometimes avoid to use this technique of data collection because of this problem. Ogutu M. (1983) used personal interview instead of mail questionnaires to cut down on the possible non-response rate. Others have had to use data collected from a small proportion of the sample to make conclusions about the population. Nzunzi (1990) used data collected from only 26.8% of the sample to make conclusions about a population residing in and around Nairobi.

2.0 CHAPTER TWO: LITERATURE REVIEW

Therefore every effort must be made to increase the response rate. If cash and contribution to charity incentives can be used to increase the response rate in Nairobi, then researchers should be encouraged to use these incentives as a way of reducing this problem.

(ii) Telephone interview

(iii) Self-administered questionnaires/mail survey

2.1 SELECTING AN OPTIMAL METHOD

The choice of a method is not as complicated as it might first appear. By comparing your research objectives with the strengths and weaknesses of each method, it is possible to choose one that is optimally suited to your needs. When your investigative questions call for information from hard-to-reach or inaccessible respondents, the telephone interview or mail survey should be considered.

2.1 FACTORS AFFECTING THE RESPONSE RATE OF MAIL SURVEYS

According to Chavis F. N. & David N. (1996), the factors affecting the response rate of mail surveys are-

2.0 CHAPTER TWO; LITERATURE REVIEW

Primary data can either be collected by observational or survey methods.

To survey is to question people and record their responses for analysis.

Survey methods can be classified into: -

- (i) Personal interview
- (ii) Telephone interview
- (iii) Self-administered questionnaires/mail survey

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2.1 SELECTING AN OPTIMAL METHOD

The choice of a method is not as complicated as it might first appear. By comparing your research objectives with the strengths and weaknesses of each method, it is possible to choose one that is optionally suited to your needs. When your investigative questions call for information from hard-to-reach or inaccessible respondents, the telephone interview or mail survey should be considered.

2.2 FACTORS AFFECTING THE RESPONSE RATE OF MAIL SURVEYS

According to Chava F. N. & David N. (1996), the factors affecting the response rate of mail surveys are-

(a) Sponsorship

The sponsorship of a questionnaire has a significant effect on respondents, often motivating them to fill it out and return it. Therefore, investigators must include information on sponsorship, usually in the cover letter accompanying the questionnaire.

(b) Inducement to respond

Inducement to respond surveys must appeal to the respondents and persuade them that they should participate by filling out the questionnaires and mailing them back. Several methods can be used, but they vary in their degree of effectiveness.

(c) Questionnaire format and method of mailing

One method is to appeal to the respondents' goodwill, telling them that the researchers need their help. For example, a student conducting a survey for a class project may mention that his/her grade may be affected by the response to the questionnaire.

Another method is to offer the respondent a reward, such as a prize or a nominal sum of money. The problem with offering money is that the respondents will be indignant that the researchers consider the respondents time worth so little and thus may not respond at all. However, most often respondents see the reward as a symbolic gesture, and they co-operate because they consider the study worthwhile. Other inducements to respond include letters of support from professional associations and advertisements of the coming survey in publications of professional associations. But the most effective strategy is to appeal to the respondents' altruistic sentiments and to convince them of the significance of the study.

(c) Questionnaire format and method of mailing

Designing a mail questionnaire involves several considerations: typography, colour and length and type of cover letter. A slightly larger investment on format and typography (e.g. high quality paper and adequate spacing) will pay off in a higher response rate. The use of unusual

colours is not recommended because it may have a negative effect.

(d) Cover letter

Another factor to be considered in designing the questionnaire is the cover letter. The cover letter must succeed in convincing the respondents to fill out the questionnaire and mail it back. It should therefore identify the sponsor of the study explain its purpose, tell the respondents why it is important that they fill out the questionnaire, and assure them that the answers will be held in strict confidence. The investigator must choose between a formal or semi-personal letter. Studies have shown that a semi-personal letter generates a slightly higher response rate than a formal form letter.

(e) Type of mailing

Questionnaires that are not accompanied by a post-paid return envelope obtain few responses. It is unreasonable to expect the respondent not only to fill out the questionnaire but also to

find an envelope and then go to the post office to have it weighed and stamped. Hence it is a common practice to enclose a stamped, self addressed envelope.

(h) Selection of Respondents

(f) Timing of mailing

The timing of mailing has been shown to affect the response rate of mail questionnaires. For example, holidays produce lowest response rate hence it is not advisable to do the mailing during the holidays.

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(g) The Total Design Method (TDM)

In the recent years researchers have improved data collection with TDM, a standardized set of step-by-step procedures that is divided into two parts: questionnaire construction and survey implementation. The principles researchers follow in construction TDM questionnaires include paying particular attention to details such as the outside of the envelope that contains the questionnaire, the front cover of the questionnaire and the order of the questions. Researchers

using TDM try to make sure that the questionnaire will be immediately differentiated from junk mail.

(h) Selection of Respondents

The selection of respondents is largely determined by the nature of the study and the characteristics of the population, there is very little a researcher can do in the selection process to increase the response rate. However, certain characteristics of potential respondents are associated with a high or low response rate. Recognizing this can help a researcher determine if a mail questionnaire should be used to design with or whether to use other strategies to increase the response rate. The most significant dimension a researcher needs to consider in selecting respondents is whether they consist of a heterogeneous or a homogenous group.

The response rate for homogenous groups is usually higher than it is for heterogeneous group.

Homogenous groups are likely to identify with the goals of the study and thus will be more motivated to respond.

Respondents who are more educated are more likely to fill out

and return questionnaires. Interests in or familiarity with the topic under investigation is another important factor in determining the rate of return. Finally, in general professionals tend to have the highest response rate among all occupations. Table 1 ranks the methods used to increase the response rates according to their effectiveness.

TABLE 1

TECHNIQUES FOR INCREASING RESPONSE RATE

Method	Rank	Optimal Conditions
Follow-up	1	More than one follow-up.
Telephone	2	Questionnaires containing a token
Inducement	2	Results than the ones without.
Sponsorship	3	and the type of
Introductory letter	4	Questionnaire has to be considered.
Method of return	-	People the respondent knows.
Cover	-	Produce the best results.
Selection of respondents	-	An altruistic appeal seems to
		Produce the best results.
		A regular stamped envelope
		produces better results than a
		business reply envelope.
		Aesthetically pleasing cover; a title
		that will arouse interests; an
		attractive page format.
		- Non readers and non-writers are
		excluded from participation.
		- Interest in or familiarity with the
		topic under investigation is a
		major factor determining the rate
		of return.
		- The better educated are more
		likely
		to return the questionnaires.
		- Professionals are more likely to
		the questionnaires.

Source: Research Methods in the social sciences.

5th Edition, G.F. Nakhmias & D. Nakhmias 1996

TABLE 1
TECHNIQUES FOR INCREASING RESPONSE RATE

Method	Rank (High to Low)	Optimal Conditions
Follow-up Telephone	1	More than one follow-up. Could be used for follow-up.
Inducement	2	Questionnaires containing a token Monetary reward produces better Results than the ones without. However, The population and the and the type of Questionnaire has to be considered.
Sponsorship	3	People the respondent knows Produce the best results.
Introductory letter	4	An altruistic appeal seems to Produce the best results.
Method of return	-	A regular stamped envelope produces better results than a business reply envelope.
Format	-	Aesthetically pleasing cover; a title that will arouse interests; an attractive page format.
Selection of respondents	-	<ul style="list-style-type: none"> - Non readers and non-writers are excluded from participation. - Interest in or familiarity with the topic under investigation is a major factor determining the rate of return. - The better educated are more likely to return the questionnaires. - Professionals are more likely to the questionnaires.

Source: Research Methods in the social sciences.

5th Edition, C.F. Nachmias & D. Nachmias 1996

Since the responses from a sample survey's questionnaire are used to estimate population parameters, the degree to which sample estimates truly represent population parameters depends upon how similar the survey's respondents and non-respondents are. As the response rate of a survey increases, errors in the estimates due to non-response decrease. The higher the response rates, the more accurate the survey (Kanuk and Berenson, 1975).

To survey is to question people and record their responses for analysis.

This can be done through personal interview, telephone interview or mail survey/questionnaires (Cooper D.R & Emory C.W. 1995).

Mail survey involves sending mail questionnaires by post office to the respondents who fill them and mail them back to the researcher. The mailed questionnaires survey is best suited when a substantial amount of information is to be obtained through structured questions, at minimal costs from a sample that is widely dispersed geographically (Uma S. 1993).

The major weakness of the mail survey is non response (Chava F.N. & David N. 1996). Mail surveys with a return rate of about 30% are often considered satisfactory (Dillman D.A 1972). Hence in most cases of mail

surveys there are many non-respondents and we usually know nothing about how those who answer might differ from those who do not.

Many studies have shown that the better educated and those more interested in the topic answer mail surveys (Chava F. N. & David N.1996). Studies have shown that mail questionnaires addressed to the population are likely to result in an upward bias in education; better educated people tend to respond more quickly to mail questionnaire (Cooper D.R & Emory C.W. 1995).

Mutunga E.N. (1993) did a mail survey on consumer attitudes towards life insurance industry in Kenya. The life insurance policy owners than non policy owners dominated the response rate, while a pretest conducted earlier using the drop and pick up later method suggested that the ratio of non policy holders was much higher. Hence non-policyholders were less involved or less interested in the subject and therefore easily ignored or forgot the questionnaire. Nyagah J.K. (1986) sent questionnaire to 50 financial institutions in Kenya and only 30 replied representing a response rate of 60%. The population was 106 financial institutions. Hence information was obtained from 30 financial institutions to represent the whole of 106 institutions.

Nzunzi (1990) sent out mail questionnaires to 112 respondents in and around Nairobi and only 30 replied representing a response rate of 26.8%. Gathuo W.A. (1989) used both the drop and pick up later and mail questionnaires methods to get information from respondents in Kenya. The response rate for drop and pick up later method was 88.6% while that of mail questionnaires was 43.5%.

Ogut M. (1983) used personal interviews instead of mail questionnaires to cut down on the possible non-response rate. Odhiambo P.J. (1986) also used personal interview instead of mail questionnaires to cut down on the non-response rate.

A considerable amount of research has been directed to methods of increasing the response rate in mail surveys (Kanuk & Berensen, 1975). One method of achieving this objective has been the use of promised rewards or incentives. Two motivational appeals explored in previous research are egotistic and altruistic. Egotistic appeals stress the importance of the individual's response so that his/her opinions will be known,; altruistic appeals emphasise a respondent's opportunity to do something for someone else (Champion D.J. & Alan M.S. 1969).

With the exception of additional follow-ups, the inclusion of monetary incentives with the questionnaires has been shown to be the most successful technique for improving mail survey response rates (Mangiona, 1995).

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The most commonly used methods of increasing mail questionnaires response rate in Kenya is the cover letter and post paid return envelope. The cover letter explains the purpose of the study, the sponsor and tell the respondents why it is important that they fill out the questionnaires. Post paid return envelope is more of a standard requirement in mail questionnaires rather than a motivational factor in increasing response rate. It is unreasonable to expect the respondent not only to fill out the questionnaire but also to find an envelope and then go to the post office to have it weighed and stamped.

Kanuk and Berensen (1975) reviewed empirical studies to increase response rates for mail questionnaire surveys provides a look at the state of mail questionnaire research up to the time. The authors evaluated several techniques, one technique at a time, and made an assessment of the success of the techniques across studies. A summary of what they found is provided below in table 2.

TABLE 2
EFFECTS OF THE TECHNIQUES ON RESPONSE RATES

Technique	Conclusion
Advance Notification*	Effective in creasing the rate of return, but not better than follow-up mailings.
Follow-up Techniques*	Successful across experiments; cash successive contact resulted increased returns; the required cost of the additional follow-up should be weighed against the value of the additional information obtained.
Questionnaire Length	Short questionnaires are not necessarily more likely to result in higher response rates than longer questionnaires.
Survey Sponsorship*	Official or university sponsors have higher returns over commercial sponsors.
Return Envelopes*	Shown to increase return, but only one study was found which tested the technique.
Postage – Outgoing & Return	Inconsistent results
Personalisation	Inconclusive results
Cover Letter	Produced no significant differences in response Rates
Anonymity	Little evidence to support the assumption that promises of anonymity or confidentiality led to improved response rates
Size, Reproduction, and color of Questionnaires	Produced no significant differences in response rates
Premiums and Rewards*	Very effective in increasing response rates. For middle-class respondents, promised rewards produce very little increases in response, whereas immediate rewards are more effective; the opposite is true for poorer respondents

* Led to improved response

Source: Kanuk and Berensen (1975). *Mail surveys and response rates: A literature review.*

2.3 EVALUATING THE RESPONSE RATE Residents of Nairobi on their

What is acceptable response rate for a mail questionnaire? Most is mail investigators attempt to maximize the response rate by using some or all of the strategies just discussed. Yet despite these efforts, many mail surveys achieve a response rate no longer than 50 percent.

Non response is a serious problem because non respondents differ considerably from respondents. Studies have shown that mail questionnaires addressed to the general population are likely to result in an upward bias in education: better-educated people tend to respond more quickly to mail questionnaires. Therefore, the bias resulting from non-response may limit the investigator's ability to make generalization about the entire population (Chava F.N. & David N. 1996).

The question of what constitutes an acceptable response rate cannot be answered easily because scientists do not agree on a standard for a minimum response rate. For example, surveys done under contract to the government are expected to yield a response rate higher than 75 percent. But whereas academic survey organizations are usually able to achieve that level, the response rates for surveys conducted more obscure organizations are considered lower (Chava F. N. and David N. 1996).

However, no research has been done to the residents of Nairobi on their reaction to cash reward incentives and contribution to charity in mail surveys. I have therefore decided to do a research on Nairobi residents to try and find out how they will react to cash reward and contribution to charity incentives in replying to mail surveys.

graduate students in session from Lower Kabete, Parklands and Chirozo Campuses. The students were preferred for this study because the variability among them is fairly low. The sample size was limited mainly by financial constraints. The different campuses formed three different groups (O_1 , E_1 , E_2). This is done purposely to avoid the respondents getting to know the different treatments they were received. Group O_1 was the control, E_1 was experimental group 1 and E_2 was experimental group 2. All the groups had a questionnaire (see appendix 4) posted to them. This questionnaire had a cover letter (see appendix 1) and stamped return envelope.

Group E_1 was promised a Sh. 100/= cash reward for fully completed questionnaire received back (see appendix 2). Group E_2 was promised a Sh. 100/= contribution to Nairobi Hospice for a fully completed questionnaire received back (see appendix 3). Group O_1 was not promised

3.0 CHAPTER THREE; RESEARCH METHODOLOGY

This was an experiment involving three groups of samples, one of them being the control group. The groups were composed of 30 respondents forming a sample of 90 units. This sample was randomly selected from a population comprising all the current undergraduate students in session from Lower Kabete , Parklands and Chiromo Campuses .The students were preferred for this study because the variability among them is fairly low. The sample size was limited mainly by financial constraints. The different campuses formed three different groups (O_1 , E_1 , E_2). This is done purposely to avoid the respondents getting to know the different treatments they were received. Group O_1 was the control, E_1 , was experimental group 1 and E_2 was experimental group 2. All the groups had a questionnaire (see appendix 4) posted to them. This questionnaire had a cover letter (see appendix 1) and stamped return envelope.

Group E_1 was promised a Sh. 100/= cash reward for fully completed questionnaire received back (see appendix 2). Group E_2 was promised a Sh. 100/= contribution to Nairobi Hospice for a fully completed questionnaire received back (see appendix 3). Group O_1 was not promised

anything. The questionnaires for group E₂ were serialised for easy checking with Nairobi Hospice for receipts.

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The respondents were given two weeks to respond from the date of delivery of the questionnaires to their rooms .

The number of questionnaires received back was recorded for the purpose of calculating the response rate. Questionnaires received after the deadline were ignored.

The quality of the answers for each questionnaire was then calculated.

3.1 THE RESPONSE RATE

The chi-square (χ^2) test was the main tool used for analysis of the results. It was chosen because of its usefulness in analysing nominal data with more than one sample. It was used to analyse the response rate.

$$\text{Response rate} = \frac{\text{Fully completed questionnaires received}}{\text{Total questionnaires posted (N)}}$$

Groups	O(control)	E ₁ (cash)	E ₂ (charity)
Response			
N	30	30	30

The Null Hypothesis (H₀)

The monetary incentives and charity contributions do not significantly increase the response rate at 95% confidence level.

$$X^2 = \frac{(O - E)^2}{E}$$

A respondent will earn marks for being consistent as follows:

- Degrees of freedom $V = n - 1$
- Question 3 & question 9 (1mark)

3.2 THE QUALITY OF THE ANSWERS

- Question 8H & question 13 (3marks)

The quality of the answers was analysed using descriptive statistics.

The questionnaire was set in such a manner that it was easy to assess the quality of the answers given. Same questions were asked differently to test the consistency of the answers given.

For example:

- (i) Question 3 and question 9 should have the same answer.
- (ii) It is possible to get the answer to question 11 once the answer to question 1 (year of study) is given.
- (iii) A respondent who says the prices of motor cycles is high (question 8A) should have an idea of costs of motor cycles, hence the answers to question 12 should at least be within 25% over or below the average market costs for the motor cycles illustrated.

A respondent will earn marks for being consistent as follows;

- Question 1 (year of study) & question 11 (1mark)
- Question 3 & question 9 (1mark)
- Question 8A & question 12 (4marks)
- Question 8H & question 13 (3marks)
- Question 8B & question 14 (1mark)

Respondents also got an extra mark for giving out an answer to question 8J that brings out points not measured in question 8A – 8I.

Hence, a respondent can earn up to 11 points for being consistent. Each respondent will earn a mark for answering any closed ended question and 2 marks for answering open ended question, whether the answers are right or wrong. That gives an additional 20 points for closed ended questions and 14 points for open-ended questions.

Therefore the total score for the questionnaire will be;

Consistency	11 points
Answering closed ended questions	20 points
Answering open ended questions	14 points
Total	<u>45 points</u>

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GROUP	NO INCENTIVE	CASH INCENTIVE	CHARITY INCENTIVE
Av. Score out of 45			50.0
% Score			

4.0 CHAPTER FOUR; DATA ANALYSIS AND FINDINGS

4.1 THE RESPONSE RATE

The chi-square (χ^2) test was the main tool used for analysis of the results. It was chosen because of its usefulness in analysing nominal data with more than one sample. It was used to analyse the response rate.

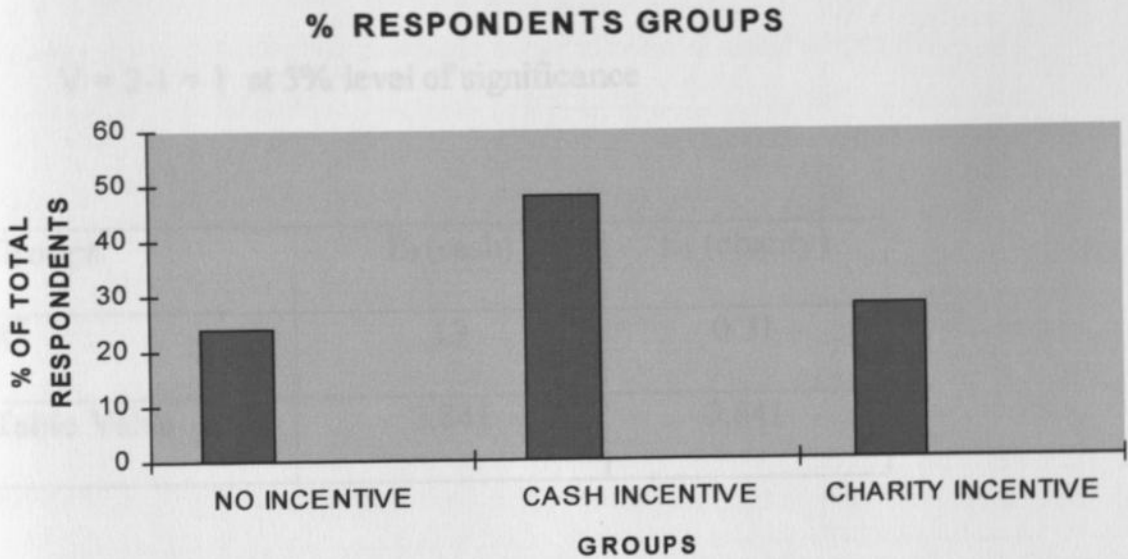
$$\text{Response rate} = \frac{\text{Fully completed questionnaires received}}{\text{Total questionnaires posted (N)}}$$

Groups	O(control)	E ₁ (cash)	E ₂ (charity)
Response	13	26	15
N	30	30	30

Groups	O(control)	E ₁ (cash)	E ₂ (charity)
% Response	43.3	86.7	50.0

The total sample was 90 students out of which 54 completed and mailed back the questionnaires. Out of these 54 students , 13 were from the group that was offered nothing , 26 were from the group that was offered cash

rewards and 15 from the group that was offered charity contribution. The percentage of the different groups of respondents was thus; 24% no incentive, 28% charity incentive and 48% cash incentive as illustrated below.



The Null Hypothesis (HO)

The monetary incentives and charity contributions do not significantly increase the response rate at 95% confidence level.

$$X^2 = \frac{(O - E)^2}{E}$$

Degrees of freedom $V = n-1$

$$E = O(\text{control}) = 13$$

$V = 2-1 = 1$ at 5% level of significance

Groups	E_1 (cash)	E_2 (charity)
X^2	13	0.31
Table Value	3.841	3.841

- a) We reject the null hypothesis for cash incentive and accept the alternate hypothesis i.e. the monetary incentives significantly increase the response rate in mail questionnaire.
- b) We fail to reject the null hypothesis for charity incentives i. e. the charity incentives do not significantly increase the response rate therefore, the use of personal cash rewards in mail survey significantly increases the response rate to the University of Nairobi students. However, the use of contributions to charity in mail survey does not increase the response rate significantly among University of Nairobi students.

Thus, the use of personal cash rewards is more effective than the use of contributions to charity in increasing the response rate in mail survey among the students of Nairobi University.

4.2 THE QUALITY OF THE ANSWERS

The quality of the answers was analysed using descriptive statistics.

The average points for each sample was calculated and compared:

GROUP	NO INCENTIVE	CASH INCENTIVE	CHARITY INCENTIVE
Av. Score out of 45	42	41	40
% Score	93.3	91.1	88.9

There is no significant difference in the quality of the answers given by the different groups of the sample.

Most of the respondents were the male students . This could be explained by the fact that the subject of discussion was motor cycles and naturally

male students were more interested in the subject than female students. Students from Nairobi province seemed to be more practical especially in giving extra suggestions in the open ended questions like question (8j). This may have been due to the fact that they have been practically experiencing transport problems in the city since this is where they stay. Most of the respondents were in the age bracket of 16-25 with a few in 26-35 age bracket. These are young people who are expected to have fresh ideas about problems facing a society and who are more willing to change. This explains why most of the respondents spent quality time in answering the questions and even came up with some new ideas. Most students had a vague idea about the costs of motor cycles, maybe because of their lack of exposure to the commercial world.

5.0 CHAPTER FIVE; SUMMARY AND CONCLUSION the working class

Mail survey is one of the methods used for data collection. The mailed questionnaire survey is best suited (and perhaps the only alternative open to the researcher) when a substantial amount of information is to be obtained through questions, at minimal costs from a sample that is widely dispersed geographically. The major problem of mail questionnaire is non-response. or difference was as a result of other variable and not cash or charity contributors rewards. It is therefore my conclusion that offering

The results of the study indicate that cash rewards can significantly increase the response rate. This is unlike the study carried out by Robertson & Bellenger (1978) which indicated response rate for charity incentive was more than cash reward for Denver residents in America. This may be attributed to the sample difference between the two samples. While the sample of this study was university students, theirs was the general public. This plus the fact that the sample is from a developing country, explain why cash reward was more important to this sample than to theirs. cher considers the sample to be economically well off and the

Although this sample was uniform in terms of its characteristics, it has a major weakness when it comes to generalising the results to the general public. While a cash reward of Ksh.100/= resulted in a high response rate,

it is unlikely this amount will be significant to most of the working class people in Kenya. A large amount should be considered if one has to use the general public. This amount will be dictated by the characteristics of the sample, especially the income levels.

Though cash increase the response rate, it is important to find out the

The quality of the answers given by the three shows no major differences in fact the minor difference was as a result of other variable and not cash or charity contributors rewards. It is therefore my conclusion that offering respondents with cash or contributions to charity rewards does not compromise the quality of answers.

The other important decision a researcher using cash rewards needs to make is whether to administer the questionnaires with the cash token initially or wait until the respondent fills and sends back the questionnaire. In this research cash was only given out for every questionnaire received back fully completed. This is useful when using a population of low income level like students who are eager to get that cash. In cases where the researcher considers the sample to be economically well off and the cash reward is an insignificant amount in their income, it may be wise to administer the questionnaires with the cash initially. This is because the

cash reward should be considered as a positive gesture by the respondents and not anything material in their income.

Changpin, Deen J and Alan M. Sear: Questionnaire Response Rate.

4.4 SUGGESTION FOR FURTHER RESEARCH

Though cash increase the response rate, it is important to find out the savings a researcher gets by using the cash incentive method instead of using other methods that require more cash like drop & pick up rate methods, telephone interviews.

Cooper R. Donald & Emory C. William: Business Research Methods, 5th

It is also important to note that the results for this study are only limited to the population characteristic especially the income level. The same research may produce different results for a different population especially for high-income earners who may not be interested much by cash rewards. Therefore, one needs to study the population carefully.

1988.

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1996.

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THE USE OF MOTOR CYCLES AS THE MAIN MODE OF TRANSPORT

The residents of Nairobi continue to experience lots of problems as they move back and forth in their routine activities like going to work and schools in the mornings and back to their homes in the evenings due to poor means of transport. Public transport, apart from being slow, is very uncomfortable due to the congestion. Private transport is expensive and slow.

Motor cycles offer the advantage of being quick, as they are able to avoid queues and parking problems. They are also relatively cheap when compared to motor vehicles yet, their use in Nairobi is not common. The few found on the roads are for organizations and not for individuals. Very few individuals own motor cycles in Nairobi.

This is a self-sponsored research trying to find out why this is so. Your name and address was randomly picked from the list of all current students in the campus.

Please answer the attached questionnaire as comprehensively as possible and give it to Mr. Rono, the Halls Officer. Your co-operation will help in trying to find the solutions to transport problems in Nairobi.

Yours faithfully,

D. Makenzie

Appendix 1 (Cover letter)

Dear Sir/Madam,

RE: THE USE OF MOTOR CYCLES AS THE MAIN MODE OF TRANSPORT

The residents of Nairobi continue to experience lots of problems as they move back and forth in their routine activities like going to work and schools in the mornings and back to their homes in the evenings due to poor means of transport. Public transport, apart from being slow, is very uncomfortable due to the congestion. Private transport is expensive and slow.

Motor cycles offer the advantage of being quick, as they are able to avoid queues and parking problems. They are also relatively cheap when compared to motor vehicles yet, their use in Nairobi is not common. The few found on the roads are for organizations and not for individuals. Very few individuals own motor cycles in Nairobi.

This is a self-sponsored research trying to find out why this is so. Your name and address was randomly picked from the list of all current students in the campus.

Please answer the attached questionnaire as comprehensively as possible and give it to Mr. Rono, the Halls Officer. Your co-operation will help in trying to find the solutions to transport problems in Nairobi.

Yours faithfully,

D. Makongo.

Appendix 2 (Money Incentive)

Dear Sir/Madam,

RE: THE USE OF MOTOR CYCLES AS THE MAIN MODE OF TRANSPORT

The residents of Nairobi continue to experience lots of problems as they move back and forth in their routine activities like going to work and schools in the mornings and back to their homes in the evenings due to poor means of transport. Public transport, apart from being slow, is very uncomfortable due to the congestion. Private transport is expensive and slow.

Motor cycles offer the advantage of being quick, as they are able to avoid queues and parking problems. They are also relatively cheap when compared to motor vehicles yet, their use in Nairobi is not common. The few found on the roads are for organizations and not for individuals. Very few individuals own motor cycles in Nairobi.

This is a self-sponsored research trying to find out why this is so. Your name and address was randomly picked from the list of all current students in the campus.

For every questionnaire received, a cash reward of Ksh.100 will be offered to the respondent. You will collect your money from Mr. Nthenge in the records office.

Your co-operation will help in trying to find the solutions to transport problems in Nairobi.

Yours faithfully

D. Makongo.

Appendix 3 (Charity Incentive)

Dear Sir/Madam,

RE: THE USE OF MOTOR CYCLES AS THE MAIN MODE OF TRANSPORT

The residents of Nairobi continue to experience lots of problems as they move back and forth in their routine activities like going to work and schools in the mornings and back to their homes in the evenings due to poor means of transport. Public transport, apart from being slow, is very uncomfortable due to the congestion. Private transport is expensive and slow.

Motor cycles offer the advantage of being quick, as they are able to avoid queues and parking problems. They are also relatively cheap when compared to motor vehicles yet, their use in Nairobi is not common. The few found on the roads are for organizations and not for individuals. Very few individuals own motor cycles in Nairobi.

This is a self-sponsored research trying to find out why this is so. Your name and address was randomly picked from the list of all current students in the campus.

Please answer the attached questionnaire as comprehensively as possible and give it to Mr. Kimani, the Assistant Halls officer. Your co-operation will help in trying to find the solutions to transport problems in Nairobi.

For every questionnaire received a cash reward of Ksh. 100/= will be paid to Nairobi Hospice, a charitable organisation caring for patients with terminal illnesses. You can verify this by calling Rehema of Nairobi Hospice on telephone number 712361 who will be able to counter check the payments received. The questionnaires are serialized for this purpose hence you need to give your questionnaire serial number.

Yours faithfully

D. Makongo.

APPENDIX 4 (THE QUESTIONNAIRE)

1. Please tick one of each item:

Sex: Male

Female

Age bracket 1 - 15

16 - 25

26 - 35

36 - 45

over 45

Year of study 1st

2nd

3rd

4th

Other

State _____

2. For how long have you stayed in Nairobi? _____

3. Where have you been brought up?
(State Province) _____

4. Which is your main mode of transport within Nairobi?

Public

Private

Other

State _____

5. Do you own a motorcycle?

Yes

No

6. Do you know how to ride a motor cycle?

Yes

No

7. Have you ever been carried on a motor cycle?

Never

Once

Few times

Many times

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8. What is your opinion regarding the following? Please tick one item.

I think so Maybe Don't know Maybe not Don't think so

A. The price of motor cycle in Nairobi is too high.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. The running costs for motor cycles in Nairobi is too high.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Motor cycles are more prone to accidents than motor vehicles in Nairobi.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Motor cycles are prone to thefts than motor ^{vehicles} cycles in Nairobi.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Motor cycles are not common in Nairobi because of the unfavourable weather conditions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Motor cycles are not common in Nairobi because of the road conditions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Motor cycles are not common in Nairobi because of the bad habits of motor vehicle drivers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Motor cycles are not common in Nairobi because we do not have enough dealers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Motor cycles are not common in Nairobi because of the prohibitive legislation in terms of taxes and duties and traffic laws.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

J. Please state briefly any other reason why you think motor cycles are not common in Nairobi.

9. Where did you attend your primary school?

(State Province) _____

10. Where did you attend your secondary school?

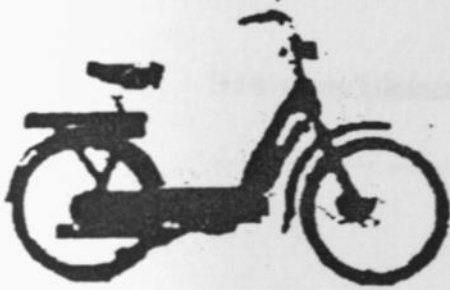
(State Province) _____

11. When did you join the university? _____

12. Approximately how much do you think the following motor cycles will cost?



Kshs. _____



Kshs. _____



Kshs. _____



Kshs. _____

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13. How many brands of motor cycles do you know? _____

Please list them: _____

14. How many kilometers do you think one (1) litre of petrol will take a motor cycle?

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