# THE IMPACTS OF IMAGE MANIPULATION ON CREDIBILITY OF FACEBOOK MESSAGES

 $\mathbf{BY}$ 

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A RESEARCH PROJECT SUBMITTED TO SCHOOL OF ARTS & SOCIAL SCIENCES IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR DEGREE IN COMMUNICATION AND JOURNALISM

# DECLARATION

I hereby declare this is my original work and has not been presented in any form for awarding
of degree in this University or any other institution of higher education.
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Signature
Date

# **DEDICATION**

I wish to dedicate this research project to my fiancé Reginah Ndirangu who helped me a lot in the process of writing this project. I would also like to dedicate to my younger brother Stanley Gitahi who kept me along as I did this project.

# **ACKNOWLEDGEMENT**

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#### **ABSTRACT**

This study intended to investigate the impact of photo manipulation which have become popular among young people on credibility of Facebook messages. We had identified the gap in the previous studies which had focused much on the credibility of texts rather than images on the Facebook site. After thorough literature review we identified that there were no previous research done connecting photo manipulation and credibility of those messages when they are uploaded on Facebook in the process of communication.

We therefore indulged in this study to establish the impacts of image manipulation on credibility of Facebook messages. In the study, we used 4th year journalism class students as our respondents in Maasai Mara University Main Campus. We had chosen these students to be our respondents since we assumed that they were much aware of image editing and much common Facebook messages consumers and also disseminators.

This study used survey as research method and used questionnaires as data collection instruments. The respondents were targeted to answer few questions regarding how they perceived Facebook messages, how often they used Facebook per week, whether they ever did photo manipulation before posting on Facebook and to which common tools they used to do photo manipulation.

In this study we assumed all our respondents gave honest information as the study had required. We also assumed our respondents were aware of Facebook communication and about image manipulation.

# Table of Contents

DECLARATIONi	i
DEDICATIONii	i
ACKNOWLEDGEMENT	,
ABSTRACTv	i
CHAPTER ONE	1
INTRODUCTION	L
1.1 BACKGROUND OF THE STUDY	L
1.2 STATEMENT OF THE PROBLEM	5
1.3 RESEARCH OBJECTIVES	5
1.4 MAIN OBJECTIVE	5
1.4.1 SPECIFIC OBJECTIVES	5
1.5 RESEARCH QUESTIONS	õ
1.6 ASSUMPTION OF STUDY	õ
1.7 JUSTIFICATION OF THE STUDY	õ
1.8 SCOPE OF THE STUDY	õ
CHAPTER TWO	7
LITERATURE REVIEW	7
2.1 MEDIA CREDIBILITY	7
2.2 FACEBOOK USERS ATTITUDE AND BEHAVIOUR	3
2.3 THEORETICAL FRAMEWORK	)
THE ELABORATION LIKELIHOOD MODEL	)
CHAPTER THREE	2
METHODOLOCV 11	

3.1 RESEARCH DESIGN	12
3.2 TARGET POPULATION	12
3.3 SAMPLING AND SAMPLING PROCEDURES	12
3.4 DESCRIPTION OF RESEARCH INSTRUMENTS	12
3.5 DATA COLLECTION PROCEDURE	12
3.6 DATA ANALYSIS PROCEDURE	13
CHAPTER FOUR	
DATA PRESENTATION, ANALYSIS AND DISCUSSION	14
4.1 PRESENTATION OF FINDINGS	14
4.2 DISCUSSION	21
CHAPTER FIVE	22
SUMMARY, CONCLUSION AND RECOMMENDATIONS	22
5.1 SUMMARY	22
5.2 CONCLUSION	23
5.3 RECOMMENDATIONS	23
5.4 FURTHER RESEARCH	24
DEFEDENCES	26

# CHAPTER ONE INTRODUCTION

#### 1.1 BACKGROUND OF THE STUDY

Social media is user generated content. Users can share messages, images, videos, or link of websites (K. R. Saikaew 2015). This content will be news, events, or some opinion. Social media has many types such as Facebook, Twitter, LinkedIn, Pinterest, Google+, and Instagram. Facebook is the most popular social networking site in the world (Brett A. Stoll 2015). Facebook users can update status that can be a personal message or webpage link. Users can modify the description of the link before posting. Moreover, users can upload photos or videos (K. R. Saikaew 2015). To be a friend of a Facebook user, one needs to request that user first, and he/she will be a friend if that user accepts that request. By default, friends can see posts of one another if there is no customized privacy setting (Adam, 2008).

In every publication there are most likely photos accompanying articles, advertisements, or exist as an article by themselves. Pictures help support an article, promote a product, tell a story, and bring the viewer in (Stephanie Coffaney 2011). Nowadays there are an abundance of software programs that help edit photos. These programs are also continuously improving, making editing much easier. Artists and photographers enjoy using this software because of all the opportunities they have to make their pictures even better (C. Noyunsan 2015). However, when it comes to publishing a photo in a magazine, newspaper, or advertisement there should be a limit to how much they edit. As a piece of artwork, editing a photo can have no limits, but when editing a photo that will be published, like one that will accompany a news article, editing should be subtle so the picture does not completely change (K. R. Saikaew 2015). Society turns to the news and media to gain information and photos should not provide them with false information.

This research will bring awareness to the amount of editing that is done in the media and what is an acceptable limit. There have been some reactions in the media about editing going too far. Most of society knows that photos in magazines have likely been retouched, but the public is not aware about the extent of editing that is done. Currently there are no laws regarding what an editor can publish when it comes to edited photography (Hofer, M., & Swan, K. O. (2005). It is up to the editor's discretion whether or not to add a tagline

informing the viewer that the photo has been tampered with. Almost all photos are published with a certain amount of editing.

The purpose of editing a photo is usually to create a better-looking picture. For example, the sky in a picture may look dull so an editor makes it bluer. Or there is trash in the background of a photo so the editor removes it. In other cases, such as a fashion magazine, the editor may want a model's figure to be thinner or their nose to be smaller, so they edit that as well (Stephanie Coffaney 2011). The tools make these edits extremely easy. If an edit is easy to make and does not take a lot of time to do then it is considered not as big of a change. The editor may not realize how much they are changing the photo when the tools make it so easy to edit.

Even though the media is publishing these photos, they may not understand the public's reactions to certain levels of photo editing. Some may think applying changes to a photo make the photo more appealing and do not consider that some may prefer an unedited photo. There are different levels of alteration, which an editor can use to edit a photo. Certain levels may be more acceptable to the public when published, whereas other levels may not. Society may believe editing a part of a photo, such as the color, may not matter but changing the person's figure or rearranging the photo entirely is most likely not tolerable in the public's eye without some kind of caption or note informing the viewer that the picture has been altered (Stephanie Coffaney 2011). Even in the case where a note is provided, photos that have been edited drastically should not be published because it is providing a false sense of reality to the viewers. Therefore a limit should be implemented so as to keep published photos realistic as well as a regulation requiring a footnote or tagline of some kind to be added when a photo has been edited past the acceptable limit.

Facebook has attracted considerable attention among researchers. As a social networking site, it offers an online platform on which users create profiles, generate and share contents and information, and interact with other known and unknown contacts (Boyd and Ellison, 2007). Social networking sites (SNS) continue to rise in popularity, solidifying their ongoing presence and influence for the foreseeable future. Sites such as Twitter, YouTube, and Facebook provide outlets for user-created content with global connection and implications.

Facebook is currently the number one ranked SNS in terms of active monthly users (Smith, 2013). According to Smith (2013), Facebook has over 1.15 billion active monthly users, who access the site at least once a month to manage personal profile content or view the profiles

of others. Studies have shown that the primary motivations for using Facebook, as reported by its users, were for social surveillance and investigation, perpetual contact with others, and creating shared content (Joinson, 2008).

As a primary motivation for use, reported social surveillance demonstrates user awareness of Facebook's pivotal role in establishing and maintaining individual and group impressions. Users understand that they are creating shared content, and just as they use Facebook to monitor friends, so too do they realize their friends are using Facebook to monitor them.

Impressions can be managed a number of ways through Facebook, including photo sharing, writing public wall posts, or merely by assigning "likes" to certain artifacts. Facebook walls are the public message boards that each user has within his/her profile where the user and his/her friends may freely post messages for all those connected to the network to see. Facebook is not the only site to allow such online public sharing, and as a result of these abundant platforms, it is becoming increasingly difficult for individuals to strategically manage impressions online (Rui & Stefanone, 2013).

Social media depend on mobile and web-based technologies to create highly interactive platforms through which individuals and communities share, co-create, discuss, and modify user-generated content. They introduce substantial and pervasive changes to communication between businesses, organizations, communities, and individuals. The difference between social media platforms and traditional media channels is that users of social media platforms become content creators, not just content reviewers. We encounter a great deal of information in our daily life, and one of the criteria we use to filter information is its credibility, or believability. Information credibility is defined as the extent to which one perceives information to be believable, and is a strong predictor of an information consumer's further action. Because large-scale collaborative creation is one of the main ways of forming information in the social network, the user-generated content is sometimes viewed with skepticism; readers do not consider it as a reliable source of information. Previous research has reported how to judge the information credibility on traditional media or websites. However, information on social media platforms suffers from a lack of professional gatekeepers to monitor content. It is not unusual to find that unverified or falsified information continues to flood on social media. In this situation, information consumers are forced to look for new ways to evaluate the credible information.

In the new advancement in photo editing software both in smartphone and laptops or computer have given the users a chance of editing images after capturing them before posting them on Facebook or other social media. Photo editing has been there to help any people in improving the quality of an image so that to give the intended message clearer rather than to lie or give exaggerated information (Stephanie Coffaney 2011).

Some people have been prosecuted in court of law for spreading rumors in social media through images with an intention of defaming others. In 2013, Nairobi senator Mike Sonko together with Nairobi Women Representative Rachel Chebesh their image were circulating on social media having intimate relationship only people to discover later that these images were manipulated by some people through photo editing software who wanted to tarnish their political career. This incidence was clear indication of what do happen in social media images before they are posted. It is therefore likely that every image in social media is distorted from the reality.

This project therefore strived to establish whether the awareness of photo editing of images had affected the credibility of image on Facebook as one of the popular site. Since some incidences have been there where people claim that some images were posted on social media about them were not the actual truth and they were cooked by someone. Furthermore, the previous researches focused on measuring credibility of social media messages on twitter and Facebook, there existed a gap in the social media researches as there were no researcher who had investigated how image manipulation software have affected the credibility of Facebook messages. Therefore we decided to conduct this research to fill this gap.

After thorough literature review we also identified that the method used by other researchers to measure the credibility of Facebook were not convincing in modern world. We observed that the past researches dwelt on likes and comments of any post on respondents Facebook wall which we felt that sometime like and comment may not actually reflect person believed that post. There are some other factors that may have influenced people like or comment other than believing the message. People may like a post because they want to please the account user. They may also do this because of their relationship or they have same thing in common, sometime other like do results by liking by mistaking of where the user did not intend to like the post. After considering these problems, we felt that facing the respondents face to face with questionnaire were of great help to avoid these bias in this study as the respondents were to tell whether they believe the message or not.

# 1.2 STATEMENT OF THE PROBLEM

Photo editing has brought new trend in Facebook messages. People today do not post original images on the Facebook before editing. They first look at it, identify where to improve, decide where to crop, and decide what to change. All these actions shows that the reality in form of image is distorted and questionable.

Therefore, this study intended to establish how had image manipulation activities had affected how people perceive Facebook messages. We wanted to establish whether there were changes of credibility of Facebook messages in the mind of the audience and message consumers as result of awareness of image editing.

# 1.3 RESEARCH OBJECTIVES

With the influx of technology, the new generation began focusing on what is seen digitally to retrieve news or interact with one another on Facebook. With the existence of photo editing software people are tempted to add or remove some aspect of the image in order to convey some kind of message of which they intend to tell the other whether true or bad. It is not unusual to hear that some images that had spread through Facebook was just a mere rumor that was edited by some individuals .Due to this habit on some Facebook users we conducted this research with main objective:

# 1.4 MAIN OBJECTIVE

• To establish whether image manipulation affected credibility of Facebook messages.

Our main objective also enabled us to fulfill other specific objectives which guided us all through the research process in achieving accurate and reliable conclusion. The following were our specific objectives:

#### 1.4.1 SPECIFIC OBJECTIVES

- i) To inquire how often do people consume Facebook messages
- ii) To investigate the rate of image manipulation on Facebook messages
- iii) To inquire how people perceived images on Facebook messages
- iv) To investigate most common image manipulation devices
- v) To investigate the cause of action the users do to take as result of seeing edited images

# 1.5 RESEARCH QUESTIONS

The main question that drove this study was to establish whether image manipulation affected credibility of Facebook messages? In the same time we intended to find the answer of other questions which were as follow:

- How often do people consume Facebook messages?
- How often do people manipulate images before posting on Facebook messenger?
- How do people perceive images on Facebook messages?
- What are common image manipulating devices?

#### 1.6 ASSUMPTION OF STUDY

In this study we worked with several assumptions throughout the research. We assumed all our respondents gave us honest feedback to our questionnaire. We also assumed all our respondents had a Facebook account and were frequents users and consumers of Facebook images. We also assumed they were all familiar with image manipulation either by smartphone, laptops or computer.

# 1.7 JUSTIFICATION OF THE STUDY

The outcome of this research helped the researchers to draw accurate conclusion on how photo manipulation has affected Facebook message credibility and enabled them to deduce the right recommendations to the media fraternity and to amateurs.

The finding of this research would help the society to be acquainted with the effects of photo manipulation, therefore, enabling them to take time in making inferences on what they see on a picture so that not to stick on old phrase of visual media that 'seeing is believing'.

Since the previous studies had limited research on this topic we believe it is helpful to other researchers who would like to embark in the similar study and therefore give them a platform of comparison and giving them sense of direction.

# 1.8 SCOPE OF THE STUDY

This study used 4<sup>th</sup> year's students in Journalism Class within the Maasai Mara University main campus as its respondents. Our study was confined only on Facebook pages and image manipulation. Elaboration likelihood model was used as theoretical framework.

# CHAPTER TWO LITERATURE REVIEW

# 2.1 MEDIA CREDIBILITY

In process of finding the previous researches done on this topic we found that few researchers had carried out related research. The assessment of credibility in the online environment is often much more complex than in previous media contexts due to "the multiplicity of sources embedded in the numerous layers of online dissemination of content" (Sundar, 2008). Credibility has been discussed in the three perspectives of communication: medium credibility, message/content credibility, and source credibility (Metzger et al., 2003). *Medium* credibility is the perceived level of credibility that individual users have of a specific medium, such as newspapers, television, the Internet, or blogs (Newhagen & Nass, 1989; Sundar & Nass, 2001). *Message* credibility is the perceived credibility of the communicated message itself, such as informational quality, accuracy, or currency (Metzger et al., 2003).

The issue of image manipulation is an emerging trend in world of photography and communication. The future of image credibility depend on our today behavior. Will increase of image editing lead to people lose credibility of pictures on Facebook? It is unfortunate that photo manipulation does not concern many people. However, as result of the overuse of these techniques overtime the audiences are going to increasingly discounts pictures... once the audience believes that the pictures are doctored beyond reality, some of that magic is lost (YouAreaBeingManipulated). Photoshopped photos is misrepresent of reality while claiming to be straight footage (Newbold 2011).

According to Ruoham Li and Ayoung Suh 2015, the difference between social media platforms and traditional media channels is that users of social media platforms become content creators and not just reviewers. This shows dynamism in area of message dissemination in the current generation of which any one with internet connection have ability to distribute any information they feel to share with others with no limitations. Traditional media like radio, television, magazines and newspapers believes in sifting the information that goes to the audiences whether it is images or texts. Those organizations that invest in the traditional media who have presence online also extend gatekeeping tendency to the online audiences of which is done by their reporters or editors.

Ruoham Li and Ayoung Suh defines information credibility as the extent to which one perceive information to be believable and is a strong predictor of an information consumer's

action. According to them the first action when one is confronted with any message whether it is text or image is gauging credibility. After this act they decide whether to believe the message or not .This study we accept the Li and Suh study but we feel the method used to collect data was not satisfactory to reach to these finding. They relied on measuring number of likes and comments on Facebook posts made by their respondents to reach to their conclusion. As researcher in this field we feel their method was not appropriate since there are some factors that may influenced people to like and comment in favor of respondent post.

#### 2.2 FACEBOOK USERS ATTITUDE AND BEHAVIOUR

People may like or comment on a post because they know you or you are related but not that they believed your message is true. Secondly, people may like or comment on post because the writer is well known and is a celebrity and therefore they want to be associated with them rather than credibility of the content. Finally, people may respond favorably to a content due to other factors of self-interest rather than in the contents.

We therefore think this research would have worked well if the researcher would have used questionnaires so that to get the actual response from the respondents who would tell what results their like or comment on a post. This would help to get the number of respondents who like or comment as result of conviction of the trueness of the information. This therefore become as one of the gap we identified in the past researches.

Image manipulated messages on the media has also been a concern to many researchers. Stephanie Coffaney 2011 discovered that 97.84% of people are aware of photoshopped images in all type of media. This shows that there can be great problem to any media, individual or journalists when the audience can identify their images as manipulated in terms of credibility. 69.78% of people surveyed by Coffaney said that they would be more suspectful that photo has been manipulated if they were found online.

One thing that a researcher of this study would ask is 'to what extend should a photo be edited before dissemination? This is difficult question to answer because it will be determined by motive of the editor or distributor of that image. In his research Coffaney discovered that 85.61% of his respondents considering acceptable if blemishes, dust and clutter were removed from a photo while 92.81% believed there should be disclaimer saying it was photoshopped in any part of an article.

Coffaney discoveries are great and appreciable. In his research we found that there existed some gap that needed to be filled. One, Coffaney focused a lot on traditional media that is magazines, newspapers and advertisements. This shows that he did not focused attention of awareness of image manipulation specifically on Facebook of which we are interested in this research. Secondly, we also feel that the method he used to collect data was not satisfactory. This is because he used survey method through emails, Facebook and twitter of where he sent the questionnaires.

We feel that by using Facebook, email and twitter one is prone to bias from the respondents. This is because these respondents would have answered the questions in hurry because they do pay for internet browsing and therefore not spend a lot of time understanding and responding to the questions. Secondly, many people on internet do not commit their time on something they did not intend to do prior to browsing. Therefore this research intended to fill these gaps with better method. Nevertheless ,as Coffaney justified his research by using graphic communication students in his research due to their knowledge of photo editing, we decided also to constrain our research on Journalism students as they are quiet aware of image editing and they are frequent Facebook users.

The subject of photoshopping and publishing images are subject to each viewer opinion(Coffaney 2011). His study brought some light to what a small set of people is acceptable to this subject, change in contrast and removal of blemishes, dust and clutter are considered acceptable level of changes of published photo.

# 2.3 THEORETICAL FRAMEWORK

# THE ELABORATION LIKELIHOOD MODEL

The Elaboration Likelihood Model was propounded by Richard Petty and John Caccioppo. It attempts to explain how attitudes are shaped, formed, and reinforced by persuasive arguments. The basic idea is that when someone is presented with information, some level of "elaboration" occurs. Elaboration, in this context, means the effort someone makes to evaluate, remember, and accept (or reject) a message.

	Central route processing	Peripheral route processing
Elaboration	High	Low
Information processing	Contents of message are closely examined by the receiver	Receiver is influenced by factors other than the contents of the message
Attitude		Might change or be reinforced based on the effectiveness of factors other than the message
Strength of attitude formed/reinforced	More enduring and less subject to counterarguments	Less enduring and subject to change through future persuasive messages

Table 1: Comparison of central route processing and peripheral route processing.

The model suggests that people express either high or low elaboration (that is, their level of effort) when they encounter a persuasive message. The level of elaboration then determines which processing route the message takes: central or peripheral.

The table above clearly defines and show how messages are processed differently in the two routes in areas of elaboration, information processing, attitude and strength of attitude formed regarding the content of the message brought forward. In this study we believe that Facebook messages are not consumed differently with other media and therefore it follows the aforementioned routes differently and result to variance of attitude in the Facebook users.

Central route processing (as shown in the table above) means your audience cares more about the message. They'll pay more attention and scrutinize the quality and strength of the argument. Any attitudes formed or reinforced this way are thought to be more enduring and resistant to counter-arguments.

Peripheral route processing (as shown in the table above) happens on a more superficial level. Your audience will pay less attention to the message itself while being influenced by secondary factors, such as source credibility, visual appeal, presentation, and enticements like food, sex, and humor. Attitudes formed or reinforced this way are thought to be less

enduring, subject to change through counter-arguments, and in need of continual reinforcement.

The behavior of the Facebook messages users when confronted with images that have been manipulated may likely to be caused by elaboration likelihood of the users toward the content. Those users who are so concern with anything on Facebook posts will process the content through central route, paying more attention on the content, evaluating its connection with the reality and determining the intention of the author before making any action whether to believe the message or not.

This means after taking a lot of time in message elaboration with greater amount of thought argument generated by the individual receiving the message the resulting attitude change will relatively be durable, resistance and predicting of behavior.

When the receivers discovers that the content has been manipulated and distorted, they may opt not to believe that source of information any more in the future no matter the content is true or not. This resulting change will cause the receiver to be ignoring to read of even to pay attention to the sources which they earlier discovered they had manipulated some images to distort the reality. When they discovers that the image source did not or do not have tendency of image manipulation, the receivers in the future will believe their content no matter what it is because they had developed positive attitude toward them and all this depend on strength of attitude as shown in the table above.

Since we said earlier that people may not like or comment positively to a Facebook content in regard to credibility, other factors may influence people to believe the content. Those people who may believe this type of content are those who process this information through peripheral route as shown in the table above. When an individual process information through this route they don't pay attention to what content is but who is saying it, attractiveness of the source message or production quality of the message.

This theory therefore was of great help in this study as it helped us to establish the impacts of image manipulation on the credibility of Facebook message. We believed there was interconnection between likelihood elaboration and credibility depending on which route an individual process the image information they encounter on Facebook. This enabled us to establish how the users perceived the images on Facebook posts. Whether they developed resistance attitude to Facebook messages or do they believe everything.

# CHAPTER THREE METHODOLOGY

#### 3.1 RESEARCH DESIGN

In order to carry out this study, we opted to use survey method. We carried our own surveys to collect data from our respondents. This is because this study was not carried out by other previous researchers and therefore we collected our own data as other information from other related studies was not satisfactory in addressing this problem. Survey research was the best in the study as it enabled us to obtain information from group of people with respect to the objectives and purpose of this study.

# 3.2 TARGET POPULATION

The target population of this study was all media students taking communication and journalism courses in Kenyan universities. We opt to use this population as we were sure that this group was well conversant with imaging editing and frequent users of social media.

# 3.3 SAMPLING AND SAMPLING PROCEDURES

Due to time limit and directions from school of arts and social sciences, we confined our study within Maasai Mara University. This therefore led us to use purposive sampling method where we decided to use 21 students in 4<sup>th</sup> year journalism class who we thought were familiar with imaging editing and frequent Facebook users than any other class in the university. We therefore used purposive sampling since we had prior knowledge that this sample possess the information that we required as we had interacted with them since first year.

# 3.4 DESCRIPTION OF RESEARCH INSTRUMENTS

This research depended on primary data which was obtained through questionnaires. We believed that questionnaires were best method to acquire enough information that we needed in making conclusion and generalization of our study. In those questionnaires we used much of closed ended questions and some few open ended questions that assisted us in address our objectives in satisfactory manner.

# 3.5 DATA COLLECTION PROCEDURE

Every respondent was issued with a single questionnaire and filled all the spaces required to be filled. Since our respondents were residing in different parts inside and outside the university at time of study, we decided to issues these questionnaires before and after class sessions as most of them were only accessible during a class session. Since we knew our respondents by names, we ensured all answered our questionnaires by allocating a period of one week as some students were absent in some classes during our research week.

# 3.6 DATA ANALYSIS PROCEDURE

After obtaining the data from our respondents, we tabulated data on every question in a table stating the question, frequency of responses and converting them to percentages. All responses from a single question were analyzed and tabulated differently.

In analyzing the data after the survey period, results was separated into categories based on a Likert scale. Increments on the scale ranged from strongly agree "slightly disagree" "slightly disagree" to "strongly disagree" based on attitudes mentioned in the survey. Depending on the results, the category on the scale with the highest number of survey takers that matched a response was considered the general opinion of the population surveyed in regards to the legitimacy of imaging manipulation and Facebook messages.

The data collected from our survey research was analyzed through use of relative frequency table. We categorized our data by calculating the total number of responses and then divide the number in each category by total.

# CHAPTER FOUR DATA PRESENTATION, ANALYSIS AND DISCUSSION

# 4.1 PRESENTATION OF FINDINGS

The purpose of this study was to investigate the impacts of image manipulation on credibility of Facebook messages. In order to achieve our purpose we used questionnaires to collect data from 21 students in 4<sup>th</sup> year journalism class (2012 group) in Maasai Mara University who we sampled through purposive sampling in a period of one week

By the end of our data collection, all questions that were deduced from these objectives were all answered by our respondents and therefore helped us to analyze those responses as follows.

In the first question where the respondents were asked to tell whether they believe image manipulation has affected credibility of Facebook messages 42.86% of 21 said they strongly agree,28.57% slightly disagree,4.76% strongly disagree, 14.29% slightly disagree and 9.52% said they don't know whether it has affected.

Q1. Image manipulation affect credibility of Facebook messages		
answer	responses	share
Strongly agree	9	9/21 (42.86%)
Slightly agree	6	6/21 (28.57%)
Strongly disagree	1	1/21 (4.76%)
Slightly disagree	3	3/21 (14.29%)
I don't know	2	2/21 (9.52%)
total	21	21/21 (100%)

Table 2: responses on whether respondents believed image editing affect credibility of Facebook messages

When the respondents were asked how often they use Facebook messages, most people said they use everyday 66.67%, those who use once per week, twice per week and more thrice per week were 9.52% respectively while 4.76% said they don't know how often they use Facebook.

Q2. How often do you use Facebook messages		
answer	responses	share
everyday	14	14/21 (66.67%)
Once per week	2	2/21 (9.52%)
Twice per week	2	2/21 (9.52%)
More than thrice per week	2	2/21 (9.52%)
I don't know	1	1/21 (4.76%)
total	21	21/21 (100%)

Table 3: responses on how often respondents uses Facebook messages

In the question addressing how often do people edit images before posting on Facebook 38.1% said once per week, 19.05% said every day, 4.76% said more than thrice per week while 38.1% said they don't edit before posting on Facebook.

Q3. How often do you edit images before posting on Facebook		
answers	responses	share
everyday	4	4/21 (19.05%)
Once per week	8	8/21 (38.1%)
More than thrice per week	1	1/21 (4.76%)
none	8	8/21 (38.1%)
total	21	21/21 (100%)

Table 4: responses on how frequent respondents edit images before posting on Facebook

When those who edit images before posting on Facebook were asked to state which software they use in editing, 42.86% stated photo grid which is mobile phone application, 9.52% stated Photoshop which is laptop software, and 4.76% said they use photo editor for both laptop and mobile phone software while those who neither use software or application in editing were 42.86%.

Q4. Which software/application do you use to execute activity in q3		
Answer (respondent	responses	share
generated)		
Photo grid (phone)	9	9/21 (42.86%)
Photoshop(laptop)	2	2/21 (9.52%)
Photo editor (phone laptop)	1	1/21 (4.76%)
none	9	9/21 (42.86%)
total	21	21/21 (100%)

Table 5: responses on software and applications that respondents uses to edit images

When the respondents were asked to state the device they use to edit image with in respect to Q4, most people said they use mobile phone 57.14%, while 19.05% said laptop, while those who neither use laptop, phone or computer were 23.81%.

Q5. Which device do you use to edit images		
answer	response	share
computer	0	0/21 (00%)
laptop	4	4/21 (19.05%)
phone	12	12/21 (57.14%)
none	5	5/21 (23.81%)
total	21	21/21 (100%)

Table 6: Reponses on the devices that respondents uses to edit images

In the question asking whether the respondents believed images that appears on Facebook messages 85.71% stated slightly yes,4.76% said absolutely yes while 9.52% said absolutely no.

Q6. Do you believe imag	es on Facebook messages	
answer	response	share
Absolutely yes	1	1/21 (4.76%)
Slightly yes	18	18/21 (85.71%)
Absolutely no	2	2/21 (9.52%)
Slightly no	0	0/21 (00.00%)
I don't know	0	0/21 (00.00%)
total	21	21/21 (100%)

Table 7: responses on whether respondents do believe images on Facebook messages

When the respondents were asked whether they have ever identified edited images on Facebook messages 85.71% said yes, 9.52 % said no while 4.76 % said they cannot tell.

Q7. Have you ever identified an edited image on Facebook messages		
answer	response	share
yes	18	18/21 (85.71%)
no	2	2/21 (9.52%)
I don't know	1	1/21 (4.76%)
total	21	21/21 (100%)

Table 8: responses on whether respondents have ever identified edited image on Facebook

When those respondents who have ever identified edited images on Facebook were ask to state if their identification had influenced them in believing those sources in future 23.81% absolutely yes, 23.81% said slightly yes, 28.57% said absolutely no while 9.52% said they don't know.

Q8. Did identifying edited image influenced you in believing the source in future		
answer	responses	share
Absolutely yes	5	5/21 (23.81%)
Slightly yes	5	5/21 (23.81%)
Absolutely no	6	6/21 (28.57%)
Slightly no	3	3/21 (14.29%)
I don't know	2	2/21 (9.52%)
total	21	21/21 (100%)

Table 9: responses on whether respondents were influenced in believing a source they ever got edited image

In the question asking whether the respondents think that images should be edited before posting on Facebook 42.86% said yes, 52.38% said no while 4.76% said they don't know.

Q9. Do you think image should be edited before posting on Facebook		
answer	responses	Share
Yes	9	9/21 (42.86%)
No	11	11/21 (52.38%)
I don't know	1	1/21 (4.76%)
total	21	21/21 (100%)

Table 10: response on whether images to be edited before posting on Facebook

In the question asking the respondents whether they have sources they believe always on their content on Facebook 47.62% said yes, 42.86% said no while 9.52% said they don't know

Q10. Do you have sources that you do believe always on their content on Facebook		
answer	response	share
Yes	10	10/21 (47.62%)
No	9	9/21 (42.86%)
I don't know	2	2/21 (9.52%)
total	21	21/21 (100%)

Table 11: responses on whether the respondents have sources they believe on their content on Facebook

When the respondents were asked to name the sources that they always believe on their content on Facebook 42.86% stated media stations online pages, 4.76% stated politician pages, 4.76 stated their friends while those who don't believe always were 47.62%.

Q11. Which sources do you believe always (q10) on their content on Facebook?		
Answer(respondent generated)	response	share
Media stations online pages	9	9/21 (42.86%)
Politicians pages	1	1/21 (4.76%)
Friends accounts	1	1/21 (4.76%)
none	10	10/21 (47.62%)
total	21	21/21 (100%)

Table 12: responses on which sources respondents believe their content always on Facebook

When we asked the respondents whether they would wish to be a law of regulating image manipulation meant for public 76.19% stated yes, while 23.81% said no.

Q12. Would you like there to be law of regulating images manipulation meant for public		
answer	responses	share
Yes	16	16/21 (76.19%)
No	5	5/21 (23.81%)
I don't know	0	0/21 (00.00%)
total	21	21/21 (100%)

Table 13: responses on whether to enact law to regulate image manipulation

In the last question where respondents were asked to name the sort of images they think should be edited 14.29% said political images,28.57% said entertainment,33.33% stated fun,14.29% said education while 9.52% said none of images should be edited.

Q13. Which images do you think should be edited before posting on Facebook		
answer	responses	share
Political	3	3/21 (14.29%)
Entertainment	6	6/21 (28.57%)
fun	7	7/21 (33.33%)
educational	3	3/21 (14.29%)
none	2	2/21 (9.52%)
total	21	21/21 (100%)

Table 14: responses on how people think images should be edited before posting on Facebook

# 4.2 DISCUSSION

After conducting this research we have found that image manipulation has affected credibility of Facebook message. This is clearly shown by a great number of population who believes that image editing has affected how people believes any image that is found on Facebook site. This is clearly depicted by great number of the respondents absolutely agreed to this statement 42.86% and other 28.57% slightly agreed which amounted to 71.41% for the total population who believe this statement.

Most people who uses Facebook are not passive consumers. They analyses the image content and most of them have been able to identify edited ages images in the past .it is this identification that has influenced some of them not to believe some sources of which they had discovered editing images in the past distorting the truth. This makes it evident that some sources of information in Facebook has lost credibility as result of manipulating images that the users had identified before.

However, despite some sources losing credibility as result of image manipulation, most people still believes on most of images they access on Facebook as truthful particularly from media stations pages. They still believe on media telling the truth through images they post on their pages alongside the texts. This believe is subject to past interaction between the source and the user. This means that those sources that the users have not discovered distorting the truth through image editing their credibility have not been affected so much compared to others who fall victims in this practice.

Most people uses Facebook on daily basis using their mobile phone of which they use to edit images before posting on their accounts for others to read and see through photo grid application which provide them with an opportunity to edit these images.

Editing images that are meant for public consumption is a practice that still confront resentments from a number of people. To control this habit there should enactment of law to regulate amount of editing images that target public domain. As we have seen in this study a greater number of population would like policy makers to come with law which would limit whoever would like to apply this technique.

# CHAPTER FIVE SUMMARY, CONCLUSION AND RECOMMENDATIONS

# 5.1 SUMMARY

The purpose of this study was to investigate the impacts of image manipulation on credibility of Facebook messages. Alongside our main objective we also investigated some other related specific objectives which were as follow;

- To inquire how often do people consume Facebook messages
- To investigate the rate of image manipulation on Facebook messages
- To inquire how people perceived images on Facebook messages
- To investigate most common image manipulation devices
- To investigate the cause of action the users do to take as result of seeing edited images

This study intended to establish how had image manipulation activities had affected how people perceive Facebook messages. We wanted to establish whether there were changes of credibility of Facebook messages in the mind of the audience and message consumers as result of awareness of image editing.

This research used undergraduate students in 4<sup>th</sup> year journalism class in Maasai Mara University as respondents who were selected through purposive sampling method as we were aware they were most conversant with image editing and also frequent Facebook users.

Our research was based on quantitative survey research method where we used questionnaires to collect our data from the 21 respondents between 24 March and 1<sup>st</sup> April 2016. All the respondents were accessible at this time and they answered the questions without difficulties.

This study has established that image manipulation has affected credibility of Facebook message. If the users identify that a source has distorted the image it is more likely they will not believe image content of that source in future. We have also established that most people uses Facebook daily and most of them edit images on frequent basis.

We have also discovered that a great number of people do still believe on some images content on Facebook site particularly content on most media station pages. This means that Facebook has not lost all credibility as result of image manipulation. Lastly, this study has

identified that mobile phone is the most common device that is used to access Facebook account and also editing of images through an application known as photo grid.

#### 5.2 CONCLUSION

Image manipulation affect the credibility of Facebook messages. Whenever the users identify that a source has manipulated images before, they will develop negative attitude toward that source in the future and it is more likely they will never believe image content of that source again in future.

It is evident that most of Facebook users are not passive consumers. This means that they don't consume everything on Facebook without second thought, they process this content through central route as stated in Elaboration likelihood model, analyze, generate self-argument concerning the content and finally decide either to believe the content or not through developing resistance attitude which may be positive or negative toward the image source.

We can therefore conclude that credibility of Facebook messages that comprises of images depend the route of which the users uses to process the content with. When they consume through peripheral route then no much attention is given to the content credibility leading those not to recognize editing and therefore no influence will be notice. On other hand central route is key to the influence on credibility. When the users use central route to process an image content and result to positive attitude toward image content the source retain credibility but when it result to negative attitude then the source lose credibility now and in future.

# **5.3 RECOMMENDATIONS**

Facebook is one of the popular social media site that most of people are using in their daily live either to interact with others or access information about daily happening in the society. With this in mind, this study is of much help to all Facebook users and media houses who disseminate information through Facebook in understanding how has credibility of Facebook messages has been affected by image manipulation by some other users. We therefore pose the following recommendations to all users of Facebook site particularly those who uses for information dissemination.

#### Recommendation 1

This study has discovered that whenever other users identify that any source have edited an image with an intention to distort reality it more likely to lose credibility from those users.

We there recommend to all people who are frequent distributors of image content on Facebook to be keen when editing images. They should refrain and adopt technique of making sure they don't tamper with the truth represented by images themselves. You should edit images to make sure you rely your information more vividly rather than diverting the truth.

# Recommendation 2

We recommend to policy makers to enact policies of which will help to regulate image manipulation. This is because image editing has become a habit to many people who sometime distort the truth by combining some different images into one with the aim of spreading propaganda.

# Recommendation 3

We also recommend that media houses embrace the spirit of truthfulness always as most of people depend on their content to know the reality or events happening around them. Therefore let media stations that have Facebook pages use them well by ensuring all the content including images are true, objective and free from bias because audience are not passive and if they discover you have distorted the truth you will suffer from credibility issues.

#### Recommendation 4

We would like to recommend to general public who uses Facebook to be aware of image manipulation and therefore they should be alert to scrutinize everything they see on Facebook as most people are editing images before posting them. Public should be aware that not everything that appear on Facebook is reflection of reality or true happening in the society. Therefore check again and have second thought on what you consume on Facebook not to hear the next day that whatever was circulating last night on Facebook was just a mere propaganda.

# 5.4 FURTHER RESEARCH

This research focused on one group which was journalism class as respondents who we thought were well familiar with image editing and Facebook site. Therefore a future researcher who would like to engage in them same research may use other classes of respondents to get their responses through another sampling method rather than purposive sampling of which we used.

Future researchers on the same topic may also use another method of data collection rather questionnaires or use combination of questionnaires with others method of data collection method either in the same university or another university or different target population.

Lastly, future researchers also may explore in the same study by extending the number of respondents rather than number we used in obtaining our data from the field. The research may opt to use either lower or greater number than we used in this study.

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