

## BEHAVIOURAL RESPONSES AND PROCLIVITY OF FACEBOOK USERS TOWARDS FLAMING

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### ABSTRACT

*The use of computer-mediated communication has increased the hostile expressions of emotion, termed flaming. Flaming is primarily social-context dependent. Often relatively anonymous and socially detached, electronic communication allows people to write things online that they would seldom consider saying face-to-face, generating flames. This study takes a closer look at the social context in which flaming occurs, which need not necessarily be developed online but, as well, can be the social, religious, and political background and affiliations of the participants. This paper includes a survey majorly conducted in a confined environment on 104 subjects and the result is analyzed based upon the feedback of the people. The research focuses on flaming tendencies, especially when incendiary messages or posts by Non-met friends on their friend list. The research adopted the method of random group of social networking sites users and studied the response patterns when faced with certain sensitive topics or comments. The research uses a Probit Model, which also validates the inclination towards flaming for the subjects, having more number of Non-met friends, were found to be more prone towards flaming, and males tended to participate more in the activity than did females.*

**Keywords:** *Flaming, Social Networking Sites, Non-Met friends, Facebook friends (FBD), Social media, Computer mediated Communication (CMC), Probit Model.*

### INTRODUCTION

Flaming is any hostile and insulting interaction between Internet users. Flaming usually occurs in the social context of an Internet forum and other social networking sites. Computer-mediated communication (CMC) is defined as any communicative transaction that occurs with two or more networked computers. It is the process by which people create, exchange, and perceive information using communication systems that includes encoding, transmitting, and decoding messages.

#### Importance of CMC

Computer-mediated communication (CMC) is now-a-days viewed as one of the most important platform for social interaction, thereby removing the physical interaction constraints [10]. On one hand there are credits attributed to CMC, while on the other there is also another side in new mediated communication such as electronic mail, online chat and messages in the form of hostile and aggressive communicative behavior, termed as “flaming”. The use of CMC in the organizations has raised serious doubts that whether it is beneficial or harmful for the organizations due to flaming, which has become prominent part of the social interaction. It is a general belief that flaming consists of hostile and aggressive behavior shown through CMC. However, Lea et al. [21, 22] defies this belief. Nevertheless, scholars have collectively pushed forward to try to quantify levels of flaming as well as to provide explanations and possible remedies. The lack of a clear and consistent conceptual and operational definition of the concept, however, leaves a notable void in this body of work. Consequently, there is a greater need for defining flaming with more precision and understanding the behavioral tendencies of the users towards flaming. Misunderstandings regarding communication behavior can result in personnel discord, split team efforts, and legal liability, all of which are clearly detrimental to organizations' ongoing success. Several scholars have argued that there are specific features of computer-mediated channels that might contribute to the incidence of flaming and other problematic online interactions [19, 38]. Although others have questioned the prevalence of flaming [21] and technologically deterministic explanations for it [42,43], the emphasis has remained on flaming behavior as a uniquely computer-

mediated phenomenon. However, the flaming occurring in CMC is independent of the other forms of social interactions.

## Concept of Flaming

Flaming is defined as verbal attacks intended to offend either persons or organizations [34]. The notion of it is emotional, outrageous, outside the boundaries of polite conversation and is seriously destructive [24]. It is always characterized by profanity, obscenity, and insults. For [1], the occurrence of flaming is affected by gender, level of maturity, hostility, while for [34], flaming is caused by hostility and moderated by personal values and the risk of reprisal. Whatever the definition, most commentators agree that flaming is an intentional act that occurs via computer-mediated channels. For example, [37] Seabrook described flaming behaviour as “premeditated insults” and [40] Tamosaitis (1991) viewed flaming as being done “purposively” and describes a sender as “someone who delights in inciting trouble”. Furthermore, [37] Seabrook stated that flaming is “a form of speech unique to online communication”, although [39] Stewart was more general, limiting his conception of flaming to “rapid, abusive, or otherwise over exuberant outbursts sent via computer”.

**The question is what is the type of behavior that can create such a hostile situation in an online communication that the participants tend to communicate with people with almost complete lack of civility?**

Flaming is hostile and insulting interaction between users on the internet or any social networking website who may share some common interest. Messages, which contain some conflicting or hostile information, are referred to as “flames”. “Flames” can be hostile, intimidating, aggressive, offensive, sarcastic, unfriendly and insulting. A text written in a large, bold font can be termed as aggressive. Red colored font signifies swearing. Use of emoticons (smiley faces :), sad faces :(, or other symbols), which are meant to mimic emotional or facial cues not present in text-only communication is also a type of flaming. Acronyms such as LOL! (Laughing out loud), ROFL! (Rolling on the floor laughing) and J/K (just kidding) could also have an effect on how receivers perceive a message [41].

## CLASSIFICATION OF FLAMING

The research saw a need to classify flames on social networking sites as it revealed some patterns of replies based on the type of flame posted by users. All statuses given to the survey subjects can be classified broadly into one of these categories. Some examples are taken from the survey.

### Direct and Intentional Flaming

Flaming tendencies are noted to be highest when users intentionally use abusive, incendiary and hostile message against another user or users. This is major on different forms of computer-mediated communication but is less seen on social networking sites. Users prefer to keep their confrontations private and not publicize them to all their friends on their list to unnecessarily. Users are more conscious of their actions on social networking sites. Yet, there are small groups who take such steps and use venues like status messages, comments, etc for flaming. Such flaming patterns are quite seen on status messages but are more predominant on discussions on groups or community venues. Other users with direct flames reciprocate such flames [28].

*Example: “Hello, stupid! If you were not such an idiot, you would understand why you are wrong about everything. However, apparently you are so retarded that you cannot even spell right” [52].*

### Indirect Flaming

Indirect flaming is generally opted for to show disagreement and hostility but posted in a language, which can only be understood by the participants involved. Friends of the user who read such messages would realize that there is some disagreement, but hardly would be able to track exact references or the users towards whom the flame is intended. Such flaming patterns can be seen on status messages that are made public to all friends. Such messages are posted to show disagreement [28].

*Example: “Actor X tweeted “My movie earned 100cr in a week”. Actor Y tweeted “and still your movie was not worth watching”.*

## **Straight Flames**

When the references to people, places or situations are clearly stated in any message posted by the user, it can be termed as Straight flames. This style of flaming is used along with direct or indirect flaming. Since straight flames are clearer, they have higher chances of drawing counter flames by users, which then increases the intensity of the following flames by the users [28].

## **Satirical Flames**

When a user uses statements that can have alternate derivations aimed towards a specific person, place or situation, it can be termed as Satirical Flames. Satirical flames are more complicated as the references made in these flames are vague. Thus, responses to such flames are normally enquiring of the details [28].

## **Hot Flames**

Hot flames are characterized as “incendiary messages” and “inflammatory remarks”. Typical descriptions represent hot flaming as “rude or insulting” messages, “vicious attacks”, “and nasty and often profane diatribe”, “derisive commentary”. In other words, hot flames can be described as messages, which constitute attacks such as name calling, swearing, insulting on other communicating party/parties. It is also characterized by the use of rude behaviour (may be sexually oriented), offensive, aggressive and an angry tone [28].

*Example: “The sequel of 1994’s hit comedy movie received mixed reviews from film critics and became the subject of a wonderful flame war on the Rotten Tomatoes forum. Two days after movie hit theaters; a user called Anonymous I planted a thread entitled “Movie flops! It is official! 9 million OPENING weekend”. When the user Anonymous II challenged the claim that the film had flopped, Anonymous I came back and called him a “total gullible idiot” and a “liar,” and answered other users by simply re-posting his initial commentary. Director of the movie stepped in with an even-handed explanation of the movie’s mediocre reception and profit potential. The insolent Anonymous III addressed the director with terms like “pathetic loser” and “slandorous jerk” [52].*

## **Cold Flames**

Use of literature that cannot be categorized as abusive or hostile but when we consider the context in which it is said, it means completely different and user receiving it feels insulted and humiliated [28].

*Example: “On April 7, 2006, one of the famous blogger made a one-word entry to his blog. The post was simple; all it said was “Blog”. What followed was a torrent of comments satirizing flammers and trolls in general. It sums up the way people act and react in comment threads all over the Internet. One comment says disagreement based on unstated difference in paradigms. Another comment came in with Nazi analogy. One of the comments is flaming other commenter for spelling error, which flame contains the requisite spelling error of its own. It kept going like that for over 1,000 comments!” [52].*

## **Context of flaming**

The term “flaming” is mainly used in electronic contexts and rarely in non-electronic ones [28]. Flaming has different implication in different scenarios as it has been seen that sometimes the user who resorts to flaming has some advantages whereas in many other case studies the user being flamed has the distinct advantage [28]. Many a times it has been observed that, a user for redirecting the argument or for forcing one’s opinion uses the flaming intentionally. Flaming is used deliberately by the flame sender as a means of diverting the other factions from the original discussion, by sending flames so that they can use it for their own benefit in an attempt to agitate and make the other factions change from present topic of discussion or to remain on a certain topic or point which is preferred by the flame sender. The essence of this topic is that flaming is a very real phenomenon and to some people, it is even an actual problem [28]. There are reported cases where several distinguished individuals have terminated or abandoned maintaining their weblogs (Online diaries that is open for net users to read and comment on) due to excessive negative or hateful feedback, they received on their weblogs. Some research suggests the law to provide for the protection of net users against flaming and other misuses of the internet [28].

The most common area where flaming takes place is online discussion forums, which are also called bulletin boards. Flaming often leads to the trading of insults between members within a certain forum. This is actually quite bad as flaming often throws the discussion of a legitimate topic well off track. For example, the topic of a discussion

forum may be “Choosing a windows or a linux for a laptop”. Some windows user may post a message gloating about the benefits of windows, which in turn prompts a response from a linux user explaining why linux is a better operating system than windows. The windows user may refute by saying that windows users are, in fact, a more intelligent species who are not as naive as linux users. This kindles a more personal attack from the linux user, which incites an all out flame war [53,54,57].

## Subjects

Sample of study consists of 104 subjects with different cultural and social backgrounds who are members of facebook.

## RESEARCH METHODOLOGY AND RESULTS

### Survey-Section 1

Our research centered upon the following research questions:

1. Does social media users’ having more number of Non-met friends tend to be more inclined towards flaming?
2. Do male users tend to have more number of non-met friends than female users?

A survey was prepared and conducted on the controversial “*News of the World Phone Hacking Scandal*”.

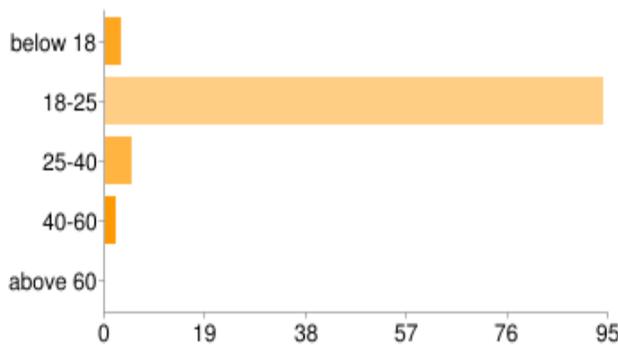
### The Scandal

*“The News International phone-hacking scandal is an ongoing controversy involving the News of the World and also some other British tabloid newspapers published by News International, a subsidiary of News Corporation. Employees of the newspaper were accused of engaging in phone hacking, police bribery, and exercising improper influence in the pursuit of publishing stories. Investigations conducted from 2005-2007 concluded that the paper's phone hacking activities were limited to celebrities, politicians and members of the British Royal Family. However, in July 2011, it was revealed that the phones of murdered school girl Milly Dowler, relatives of deceased British soldiers, and victims of the 7/7 London bombings were also accessed, resulting in a public outcry against News Corporation and owner Rupert Murdoch. Advertiser boycotts contributed to the closure of the News of the World on 10 July, ending 168 years of publication. British Prime Minister David Cameron announced on 6 July that a public inquiry would look into the affair after police investigations had ended. On 13 July, Cameron named Lord Justice Leveson as chairman of the inquiry, with a remit to look into phone hacking and police bribery by the News of the World, while a separate inquiry would consider the culture and ethics of the wider British media. The inquiries led to several high-profile resignations, including Dow Jones chief executive Les Hinton; News International legal manager Tom Crone; and chief executive Rebekah Brooks. The commissioner of London's Metropolitan Police Service, Sir Paul Stephenson, also resigned his post. Former News of the World managing editor Andy Coulson, former executive editor Neil Wallis, and Brooks were all arrested. Murdoch and his son, James, was summoned to give evidence before a parliamentary media committee”* [5,26,32,35,45,46,48,49,50,51,56].

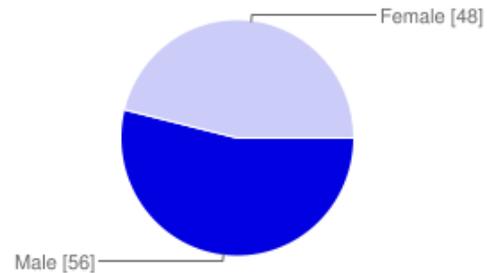
In the survey, firstly, the basic details of the participant i.e. name, gender & age were recorded. Then the participants were asked the number of friends they have on facebook. In addition, the number of Non-Met friends in their friend lists was asked. The research used a method of survey using the “Status hostility Scale” [41] (Turnage 2007) which is a scale measuring responses on three situations, referring to the main controversy, which consisted seven status messages each. The participants were asked to choose one of the status messages as their response.

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**Figure 1.** Number of Subjects ( that are Categorized according to their age) has Participated in the Survey



**Figure 2.** Percentage of Subjects Choosing a Status (Survey-Section2 Situation 1)

**Table 1.** Demographic details of the subjects

Age Group(in yrs)	Male	Female	Number of Subjects	Percentage (%)
Below 18	2	1	3	2.884
18 to 25	48	46	94	90.384
25 to 40	5	0	5	4.807
40 to 60	1	1	2	1.923
Above 60	0	0	0	0
			TOTAL=104	TOTAL=100

The sample consists of 54 % males (number = 56) and 46% females (Number = 48) which are from the different age groups and their percentages are defined in the table given above. All the 104 people are users of social networking sites and have mean of 282.53 friends in their respective friend list. All subjects were asked to give the number of 'Non-met' friends in their friend list. The mean Non-met friends were 24.54 whom the subjects had accepted as friends but never met in person. The research also found that the number of Non-Met friends on female friend lists were less than of the male subjects in the survey.

**Figure 3.** Screenshot 1 of Survey Section 1

**Figure 4.** Screenshot 2 of Survey Section 1

## Procedure

The subjects were asked to complete the survey subject matter, which consisted of three sections. The first being general personal details, such as nickname, age, gender, number of facebook friends, Number of 'Non-Met' friends. The second section presented the subjects with the survey story. The subject was asked to read the survey story to get an abstract knowledge of the survey. The third section presented subjects with three scenarios. Each of the scenarios put forward eight different status messages with varying level of hostility and aggressiveness, where '1' represented 'not hostile' and '8' represented 'very hostile'. The subject was asked to choose one of status messages, which they would be willing to put up as their own status message. The idea behind this was to know the pattern of the subject with respect to all other subjects; on what level of hostility would they choose in their own status messages.

## Survey-Section 2

These were the three situations presented before the subjects:

**Situation 1:** For the past 4 years, the Scotland Yard had all the information regarding all sorts of illegal activities regarding the phone hacking of politicians and celebrities done by News of the World. But, no action was taken against them.

**Status 1:** What else can be expected of the POLICE!! They all are the same.

**Result:** This message had rating of 2. Only 11(=10.57%) of the subjects selected this message.

**Status 2:** These bloody f\*\*kers pledge to serve their country and now they are the ones involved in the scandals!!!

**Result:** This message had rating of 7. Only 16(=15.3%) of the subjects selected this message.

**Status3:** You cannot just blame the Scotland Yard. The whole system was involved!

**Result:** This message had rating of 3. Majority of subjects chose this as their status message. Around 49(=47.11%) of the subjects selected this message.

**Status 4:** It is because of these @\$\$/-%L3\$, that a country has to carry the stains of disgrace.

**Result:** This message had rating of 6. About 3(=2.88%) of the subjects selected this message.

**Status 5:** What the f\*\*k! I don't give a damn about it!!!

**Result:** This message had rating of 5. Only 1(=0.9%) subject selected this message.

**Status 6:** They are nothing but a bunch of greedy dogs...SHAMELESS CREATURES!!!!

**Result:** This message had rating of 4. Around 15(=14.42%) of the subjects selected this message.

**Status 7:** The Scotland Yard has lost the feeling of patriotism.

**Result:** This message had rating of 1. Around 9(=8.65%) of the subjects selected this message.

**Status 8:** M\*\*\*er f\*\*kers...They are incorrigible!!!

**Result:** This message had rating of 8. Only 0(=0%) subject selected this message.



Figure 5. Screenshot for Survey Section 2 (Situation 1)

Table 2. Standard Deviation and Mean Flaming Rating of Status Messages for Situation 1

STATUS	RATING	NO. OF RESPONSES	MEAN	STANDARD DEVIATION
Status 1	2	12	24	27.98
Status 2	7	16	112	192.98
Status 3	3	49	147	13.6
Status 4	6	3	18	18.34
Status 5	5	1	5	2.16
Status 6	4	14	56	3.13
Status 7	1	11	11	70.24
Status 8	8	1	8	20

The following chart summarizes the choices of the subjects:

**Situation 2:** News of the World has been in the news for all wrong reasons. Their practice of intercepting voice mails and use of hidden cameras to find breaking news has sent out a wave of doubt and distrust throughout the world.

**Status 1:** What the f\*\*k!!! Where the hell is my personal space??

**Result:** This message had rating of 7. Around 5(=4.8%) of the subjects selected this message.

**Status 2:** Media is full of MORONS! They will do just ANYTHING to get stories

**Result:** This message had rating of 6. Majority of subjects chose this as their status message. Around 36(=34.6%) of subjects selected this message.

**Status 3:** Phone tapping is a crime and all the culprits should be put behind bars

**Result:** This message had rating of 3. Around 17(=16.3%)of the subjects selected this message.

**Status 4:** Best selling newspaper! Bull\*\*\*t!!!! This is what they do :@

**Result:** This message had rating of 5. Around 9(=8.65%) of the subjects selected this message.

**Status 5:** Their job was to provide breaking news. And that's EXACTLY what they did.

**Result:** This message had rating of 2. Around 10(=9.6%) of the subjects selected this message.

**Status 6:** We deserve to know what is happening around us, they did a commendable job by providing us with all the news.

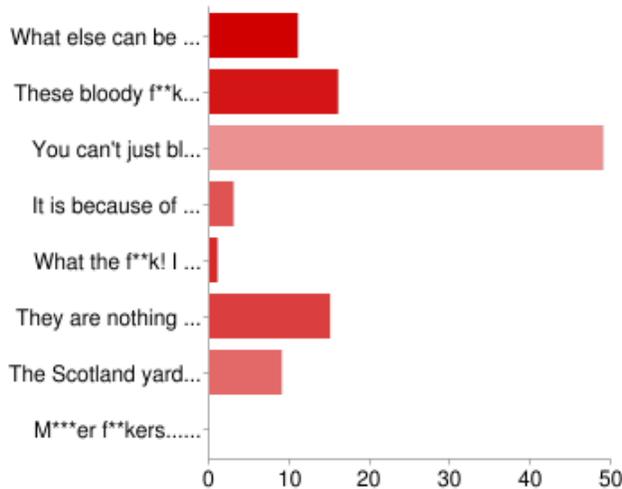
**Result:** This message had rating of 1. Around 12(=11.5%) of the subjects selected this message.

**Status 7:** What are the celebrities so afraid of, if they have not done anything wrong? Moreover, they should just let the damn media publish stories. After all, it will increase their own popularity!

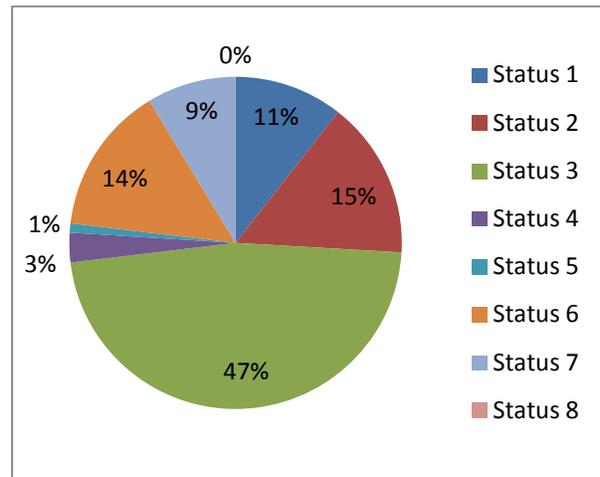
**Result:** This message had rating of 4. Around 13(=12.5%) of the subjects selected this message.

**Status 8:** Huh!!! These celebrities are fu\*\*ing UNBELIEVABLE!!!! If their dignity and personal space is so important to them, why do they end up making the headlines for all wrong reasons????

**Result:** This message had rating of 8. Around 2 (=1.92%) of the subjects selected this message.



**Figure 6.** Number of Subjects Choosing a Status (Survey-Section 2 Situation 1)



**Figure 7.** Percentage of Subjects Choosing a Status (Survey-Section2 Situation 1)

**News Of The World- Phone Hacking Scandal**

\* Required

News Of The World has been in the news for all wrong reasons. Their practice of intercepting voice mails and use of hidden cameras to find breaking news has sent out a wave of doubt and distrust throughout the world. \*

Which of the following will you choose as your status message?

- What the f\*\*k!! Where the hell is my personal space??
- Media is full of MORONS! They'll do just ANYTHING to get stories.
- Phone tapping is a crime and all the culprits should be put behind bars.
- Best selling newspaper! Bull\*\*\*\*!!!! This is what they do :@
- Their job was to provide breaking news. And thats EXACTLY what they did!
- We deserve to know what is happening around us,they did a commendable job by providing us with all the news.
- What are the celebrities so afraid of, if they haven't done anything wrong?Moreover,they should just let the damn media publish stories. After all, it will increase their own popularity!!
- Huh!!! These celebrities are fu\*\*ing UNBELIEVABLE!!!! If their dignity and personal space is so important to them, why do they end up making the headlines for all wrong reasons????

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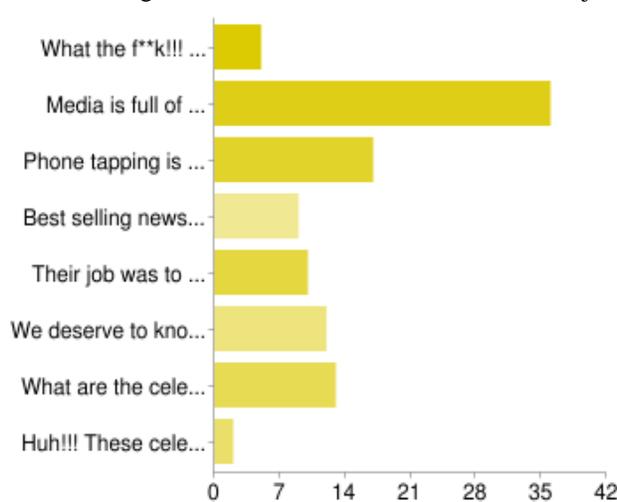
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**Figure 8.** Screenshot for Section 2 (Situation 2)

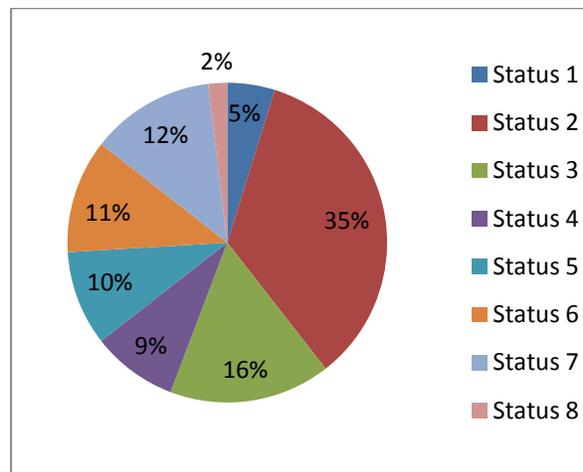
**Table 3.** Standard Deviation and Mean Flaming Rating of Status Messages for Situation 2

STATUS	RATING	NO. OF RESPONSES	MEAN	STANDARD DEVIATION
Status 1	7	5	35	37.81
Status 2	6	37	222	113.3
Status 3	3	16	48	25
Status 4	5	10	50	5.62
Status 5	2	13	26	65.81
Status 6	1	11	11	116.18
Status 7	4	13	52	0.812
Status 8	8	2	16	28.12

The following chart summarizes the choices of the subjects



**Figure 9.** Number of Subjects Choosing a Status (Survey-Section 2 Situation 2)



**Figure 10.** Percentage of Subjects Choosing a Status (Survey-Section2 Situation 2)

**Situation 3:** News of the world, apologized in the national newspaper, admitting the deliberate hacking into the voice mails of politicians and celebrities.

**Status 1:** F\*\*K OFF!!!! We DONT want your f\*\*king apology!!!!

**Result:** This message had rating of 8. Around 7(=6.73%) of the subjects selected this message.

**Status 2:** Shutting down your 168 years old newspaper will not bring back the lost self-esteem.

**Result:** This message had rating of 5. Around 11(10.5%) of the subjects selected this message.

**Status 3:** The only way to expose the corrupt people was through this method. Well done indeed

**Result:** This message had rating of 2. Around 20(=19.23%) of the subjects selected this message.

**Status 4:** Your method was wrong but to admit your mistake was a courageous thing!!!

**Result:** This message had rating of 3. Majority of subjects chose this as their status message. Around 25(=24.03%) of subjects selected this message.

**Status 5:** They should all be punished severely. APOLOGY NOT ACCEPTED!

**Result:** This message had rating of 6. Around 18(=17.32%) of the subjects selected this message.

**Status 6:** It's more of a publicity stunt rather than an apology

**Result:** This message had rating of 4. Around 15(=14.42%) of the subjects selected this message.

**Status 7:** As far as it does not concern me, I do not give a damn

**Result:** This message had rating of 1. Around only 3(=2%) of the subjects selected this message.

**Status 8:** YEAH!!!!Do something wrong and then f\*\*king APOLOGIZE !!!!! As this is gonna make everything right!!

**Result:** This message had rating of 7. Around 5(=4%) subjects selected this message.

**News Of The World- Phone Hacking Scandal**

\* Required

**News of the world , apologized in the national newspaper , admitting the deliberate hacking into the voice mails of politicians and celebrities. \***

Which of the following will you choose as your status message?

- F\*\*K OFF!!!! We DONT want your f\*\*king apology!!!!
- Shutting down your 168 years old newspaper won't bring back the lost self-esteem.
- The only way to expose the corrupt people was through this method.Well done indeed!!
- Your method was wrong but to admit your mistake was a courageous thing!!!
- They should all be punished severely.APOLOGY NOT ACCEPTED!
- Its more of a publicity stunt rather than an apology.
- As far as it does'nt concern me ,I don't give a damn.
- YEAH!!!!Do something wrong and then f\*\*king APOLOGIZE !!!!! As this is gonna make everything right!!

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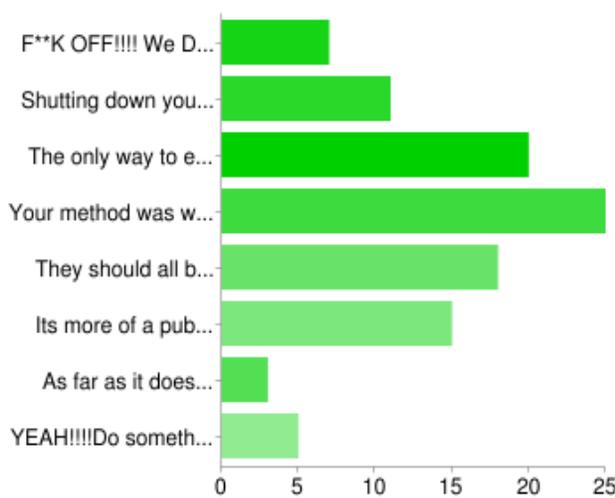
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**Figure 11.** Screenshot for Section 2 (Situation 3)

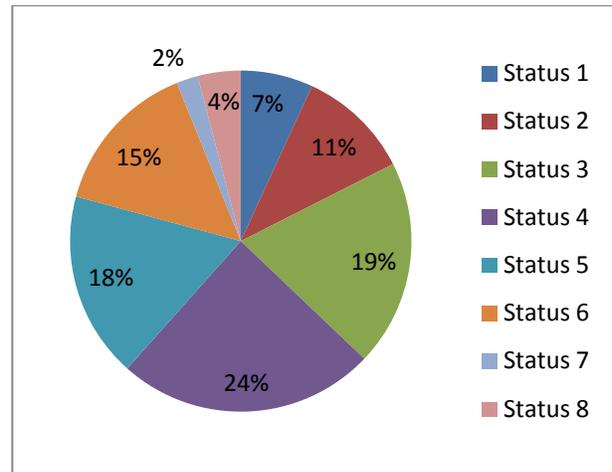
**Table 4.** Standard Deviation and Mean Flaming Rating of Status Messages for Situation 3

STATUS	RATING	NO. OF RESPONSES	MEAN	STANDARD DEVIATION
Status 1	8	7	56	100.54
Status 2	5	12	60	7.48
Status 3	2	19	38	92.79
Status 4	3	24	72	35.13
Status 5	6	20	120	64.08
Status 6	4	16	64	0.7
Status 7	1	3	3	30.91
Status 8	7	6	42	46.7

The following chart summarizes the choices of the subjects:



**Figure 12.** Number of Subjects Choosing a Status (Survey-Section 2 Situation 3)



**Figure 13.** Percentage of Subjects Choosing a Status (Survey-Section2 Situation 3)

## THE MODEL USED

For analyzing our survey, we used a specific form of regression model named Probit Model. The model is used in the analysis of qualitative data where response variable (or dependent variable) is dichotomous in nature, taking 0 or 1, where “0” represents nothing happens while “1” represents happening of something. This concept can also be understood with the help of a suitable example, given below:

*Example: Consider US presidential elections; assume that there are two political parties, democratic and republican. The dependent variable here is vote choice between the two political parties. We let  $Y=1$ , if this vote is for democratic and  $Y=0$ , if vote is for republican. Some of the variables that can be used in the vote choice are growth rate of GDP, unemployment, inflation rate and whether the candidate is running for re-election etc. One other instance can be, in a Cricket tournament, a team may win or lose. We can take  $Y=1$ , if team wins and  $Y=0$ , if team loses [16].*

The equation used for our Probit Model is given below:

$$\text{FBD} = \text{Const} + \beta_1 \text{AGE} + \beta_2 \text{GEN} + \beta_3 \text{R1} + \beta_4 \text{SQR1} + \beta_5 \text{R2} + \beta_6 \text{SQR2} + \beta_7 \text{R3} + \beta_8 \text{SQR3} + \epsilon$$

where

FBD is facebook users having non-met friends more than 10% of their facebook friends.

The variable AGE and GEN represents Age and Gender of the respondents.

R1 is the rating of status messages pertaining to Situation 1.

R2 is the rating of status messages pertaining to Situation 2.

R3 is the rating of status messages pertaining to Situation 3.

Rating of the status messages ranges from (1 to 8).

$\beta_1$  to  $\beta_8$  are coefficients of the regression equation, where  $\beta_1$  is the coefficient of variable age,  $\beta_2$  is of gender,  $\beta_3$  is of R1,  $\beta_4$  is of square of R1,  $\beta_5$  is of R2,  $\beta_6$  is of square of R2,  $\beta_7$  is of R3 and  $\beta_8$  is the coefficient of square of R3.

$\epsilon$  represents the error term

The response variable or regressand can take only two values, in other words the regressand is a binary or dichotomous, variable. Therefore in case where subject having Non-met friends less than 10% of their facebook friends, the value of FBD was assigned as “0” and subject if having Non-met friends more than 10% of their facebook friends, the value of FBD was assigned as “1”.

The dependent variables were converted accordingly in form of 0 and 1. For dependent variable gender, Male was assigned 0 and female was assigned 1. For dependent variable age-group, 18-25 years was assigned 0 and all others were assigned 1.

Variables SQR1, SQR2 and SQR3 represent the square of ratings of situation 1, 2 and 3 respectively. Squaring of ratings and taking them as an independent variable is done deliberately because by squaring we can assign different weights to different ratings, higher ratings will get higher weight while lower rating will get lower rate. Therefore, the impact of ratings on the dependent variable can be assessed with more accuracy.

## NULL HYPOTHESIS

*“The null hypothesis typically corresponds to a general or default position. For example, the null hypothesis might be that there is no relationship between two measured phenomena or that a potential treatment has no effect. It is important to understand that the null hypothesis can never be proven. A set of data can only **reject** a null hypothesis or **fail to reject it**. For example, if comparison of two groups (e.g.: treatment, no treatment) reveals no statistically significant difference between the two, it does not mean that there is no difference in reality. It only means that there is not enough evidence to reject the null hypothesis (in other words, one fails to reject the null hypothesis)” [47].*

Therefore, the null and alternate hypothesis in our case would be:

H<sub>0</sub>:  $\beta_1=0, \beta_2=0, \beta_3=0, \beta_4=0, \beta_5=0, \beta_6=0, \beta_7=0$  and  $\beta_8=0$ ; means individually an independent variable do not have any effect on the dependent variable.

H<sub>1</sub>:  $\beta_1\neq 0, \beta_2\neq 0, \beta_3\neq 0, \beta_4\neq 0, \beta_5\neq 0, \beta_6\neq 0, \beta_7\neq 0$  and  $\beta_8\neq 0$ ; means individually an independent variable has its effect on the dependent variable.

The significance level is taken as 10% because the average of Non-met friends is 10% of the average of facebook friends.

**Table 5.** The result of regression

VARIABLE	COEFFICIENT	STANDARD ERROR	Z-STATISTIC	PROBABILITY
C	0.0921	1.1553	0.0797	0.9365
AGE	0.6523	0.4358	1.4967	0.1345
GEN	-0.5730**	0.2838	-2.0192	0.0435
R1	-0.5754	0.3574	-1.6103	0.1073
SQR1	0.0692*	0.0407	1.7010	0.0889
R2	-0.2967	0.3380	-0.8778	0.3800
SQR2	0.0414	0.0406	1.0197	0.3078
R3	0.4859	0.3800	1.2785	0.2011

(\* = significant at 10%)

## Explanation

Table 5 reveals that the coefficient of only two variables are found to be significant at 10% significance level, they are Gender and square value of the rating of situation 1. The Coefficient of first significant dependent variable gender is -0.572988 which depicts that if a person is having more number of Non-met friends, the person is more likely to be a male than a female because when gender is 1 i.e. female, since in our assumptions we have taken male to be 0 and female to be 1, then as per the regression equation, FBD (facebook users having non-met friends more than 10% of their facebook friends) has an inverse relationship with gender, thus showing that females tend to have less number of Non-met friends in comparison to males.

The coefficient of second significant dependent variable Rating 1 depicts subject's tendency towards behaviour of Police is 0.069214 and probability is 0.08, thus null hypothesis gets rejected, hence showing that a person having more number of non-met friends is more prone towards hostility and is more likely to abuse the police. However, in case of Rating 2 (response towards practice of intercepting voice mails and use of hidden cameras to find breaking news by NEWS OF THE WORLD) and Rating 3 (response towards apology made by the NEWS OF THE WORLD), the result is found to be insignificant as probability is 0.3078 and 0.2219 which shows that in our case (i.e., the sample taken) Rating 2 and 3 does not have any significant impact on the dependent variable FBD.

## ANALYSIS OF RESULTS AND DISCUSSIONS

The survey results that we got from Eviews using the Probit model reveal that, the person having more number of Non-met friends is more hostile towards the three situations and has more probability of being a male rather than a female, which was as per our expectation. In situation 1, the case of police where the information was kept by them and not used against the corrupt practices of news agency. The participants chose the status, which had low hostility rating. It can be noted that only a small number of participants opted for moderately flamed status messages. Also only one participant voted for the most hostile message. The result after squaring the data was that the person having more number of non-met friends is more hostile and abusive towards this act on the part of police. This result is in accordance with our assumption that people, which are more interactive and friendly on social networking sites, i.e. having large number of friends as well as non-met friends tend to be more hostile towards the environment. In situation 2, the malicious practice of the news agency of intercepting the voice-mails and tapping of the telephones produced chaos all over and sent a wave of distrust throughout the country. The participants chose the status that had somewhat more than average hostility rating. In this case, only two of the participants voted for the most intimidating status message. The result in case of situation 2 did not meet our expectations as assumed but it has to be noted that in the regression analysis the coefficient of the variable is found to be insignificant, therefore, it is difficult to make any comment on the nature of the variable in the given case. In situation 3, the apology made by the news agency on their part of tapping the phone calls and deliberately hacking into the lives of the people was a remarkable effort made by them in order to undo what they have done but according to responses recorded by the participants it seemed futile and ineffective. While majority of the participants chose the status, which had less than average hostility rating, a greater part also choose the status message, which had remarkably high hostility rating. However, in case of situation 3 as well the result were again found to be insignificant. This result could be owed to the fact that our study confined within boundaries. The number of participants was 104 which when compared to the number of active users of facebook (845 million) is a very meagre number. In addition, the data was highly skewed as the survey was conducted mostly in parts of Asia and Mid-West USA and the majority of respondents were concentrated between 18-25 years who may respond differently than older respondents. The overall mentality depicted by subjects was almost same.

## CONCLUSION

This research concludes that generally social networking sites users tend to restrain themselves from responding to the highly flamed messages. The above analysis conducted draws the conclusion that female users have lesser number of 'Not-Met' friends on their friend lists than male users. Thus, females are less likely to make hostile and incendiary remarks during any computer mediated communication than their male counterparts. Secondly, people having more number of facebook friends majorly including Non-met friends are more intimidating on social networking sites during computer-mediated communication as well as through their reactions and responses towards different situations. The research also revealed that people preferred flamed statuses for their own status but only up to a certain level of flaming. This indicates that users are aware about their social reputation and even though they might want to flame but they prefer to avoid or use a moderately flamed message.

These results will help researchers understand that even though computer mediated communication have more chances of flaming as compared to face-to-face communication, more use of social media will lessen the chances of flaming and will provide a better environment for users from different socio-cultural backgrounds.

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