

# RELATIONSHIP OF SELECTED CYBERBULLYING BEHAVIORS AMONG GUJARAT UNIVERSITY STUDENTS

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## Abstract

*It is most important to indicate the cyber harmful behavior which can lead to poor academic achievement. Furthermore, it is significantly important to diagnose these problems and this would pave the way for effective and efficient prevention. Therefore, the selected items of cyberbullying behavior had massive importance for the University stakeholders and better achievement of academic performance and harmony. Gujarat University students voluntary (N=292) participated in the study which consisted of both gender males and females (139,153) respectively. A random sampling design was used for collecting data and its reliability was checked for cyberbullying and cyber victim items were (.794 and .834) respectively.*

*The Pearson Product-Moment Correlation and paired Samples t-test methods were used for analyzing the data through SPSS version 24. The results showed that all items with their reaction have significantly correlated with one another on 0.01 level. Moreover, overall cyberbullying and victim items had a significant relationship with one another ( $p < .01$ ,  $p < .01$ ) respectively. Similarly, cyberbullying items were significantly different from cyber victim behavior ( $p < .000$ ) and cyberbullying items were less taken place compare to cyber victim behavior.*

**Keywords:** Cyberbully, cyber victim, bystander, internet surfing

## INTRODUCTION

Cyberbullying behavior is the digital behavior that could psychologically harm his peer (Khawrin, 2021). Moreover, taking advantage and hurting the cyber-prey person is called a cyber-victim. It is very important to study cyber activities at Gujarat University because there is very little research for showing the relationship between cyber activities. Furthermore, these activities have many psychological side effects. For example, Cyber Bullying behavior has many effects on victims' emotions and mental health. Some of these side effects are digital threatened, low self-esteem, migraine attacks, anxiety, loneliness, depression, suicidal thought, humiliation, unsecured, sad, rejection, insulted, hurt, helplessness, procrastination, friendship difficulties, hostile behavior, schizophrenia, academic self-concepts, low levels of academic achievement, and online harassment (Cuffy, 2015). Furthermore, It is proven that cyberbullying behavior has a side effect on cyberbully and bystanders such as anxiety, guilt, fear of safety, lack of support, uncontrolled situation (Cuffy, 2015).

Coloroso (as cited in Duman & Bridge, 2020) said that cyberbullying has four elements. Such as, "power inequality, desire to hurt, a threat for further aggression, and bullying in a systematic violence with dominance". Furthermore, types of cyberbullying were mentioned as "flaming, harassment, cyber-stalking, denigration, impersonation, outing, and exclusion" (Duman & Bridge, 2020). Erdur-Baker and Kavşut (as cited in Duman & Bridge, 2020) the study proved that some students of 14 to 19 years of age were kicked out from common groups because they misused the password, read other messages, and revealed that male students became more victims of these actions. İçelloğlu & Özden (2014) argued the cyberbullying types which are declared as follows. Sharing photos or video, sex messages, hacking profiles, threatening messages, and sending spam messages. However, some of the prominent cyber activities which happen daily are discussed here.

## PASSWORDS MISUSING

Password is the unique identity through which a digital technology recognizes the owner. Kassabri, Gadalla, and Daciuk (as cited in Black, 2014) in the study some students told that they have given a password to peer and friends, and almost 24% of them became cyber victimized, 8% reported cyberbullied, and 25.7% reported both cyberbullied and cyber victimized. Digital space has many flows such as misusing password, sharing personal

secret information, speaking with unknown people through this person become a cyber victim (Álvarez-García et al., 2015). Some partners shared passwords which create psychological problem among them (Cuffy, 2015).

### **THREATENING**

One of the dark sides of digital space is threatening. It is the status of a legal person put in danger that is called threatening. Nishina and Juvonen (2005) reported in their study that 45% of the middle school pupils were threatened (Black, 2014). A study revealed that threatening has minor victim effects in cyberbullying behavior (Katzner et al., 2009).

### **INSULTING**

Telling through verbal or nonverbal meaning and hurtful words are called insulting. Nishina and Juvonen (as cited in Black, 2014) they revealed that 45% of the middle school pupils were insulted by the peers. Moreover, the social media users such as Facebook were insulted, threatened, and taken pics of them. Moreover, Katzner et al. (2009) discovered that participants were insulted. Some study proved that cyber pranks make person insult on a low level (Menesini et al., 2011).

### **EMBARRASSING TEXTING**

Embarrassing is a culturally related issue through which a person hides some information or that culturalistic values on which people make fun of it is called embarrassing. Furthermore, these kinds of embarrassing things come in text form is called embarrassing texting. Cuffy (2015) found in the study that people became embarrassed in digital space.

### **INAPPROPRIATE PHOTO**

İçellioglu & Özden (2014) also, recognize the posting and sharing photos and videos without consent among peers is called cyberbullying. Besides that crating fake profiles, and threatening messages is also called cyberbullying behavior. Black (2014) discovered that misusing passwords, accepting unknown friend requests, and more precisely sharing and posting unsuitable pics and videos make a person victimized, become bullied, and be the bystander of these actions. Moreover, research proved that misusing photo and video in digital media has a severe significant reaction (Menesini et al., 2011).

### **SHARED SECRETS**

The secret is the identity and personality information of a person whom he/she does not want to reveal to others. Álvarez-García et al. (2015) discovered that sharing secret information of a person may be prone to cyberbullies.

### **SPREAD RUMORS**

Publicized wrong information about someone is called rumors. Most of the time it has been seen that females spread rumors more than males (Black, 2014). İçellioglu & Özden (2014) also recognize that females spread rumors more than males. Moreover, some studies proved that peer and perimeter spread rumors about them in the cyberspace (Cuffy, 2015).

### **CREATE ACCOUNT ON OTHER BEHALF**

Some peers make an account on behalf of his/her friend to tease and take advantage of him/her everything that person do not aware of it. Palladino et al. (2017) discovered the “impersonation” actions in which a person use others’ identity for damaging or taking benefit of it.

### **OBJECTIVES**

- To understand the relationship between cyberbullying and victim items.
- To point out the association between general cyberbullying and general cyber victim behavior.
- To clarify the overall sum of cyberbullying behavior with the overall sum of the cyber victim behavior.

### **HYPOTHESES**

H1: Every cyberbullying item would be positively correlated with its reactive cyber victim behavior.  
H2: Over all cyberbullying behavior would be related to overall cyber victim behavior and cyberbullying behavior would be taken place less than cyber victim behavior.

### **METHODOLOGY**

#### **DESIGN OF THE STUDY**

It was a quantitative research design with self-reported predefined eight statements. The sample was selected as a random sample design used for conducting the data.

#### **PARTICIPANTS AND PROCEDURE**

Students of Gujarat University, Ahmedabad Gujarat, participated voluntarily from November 2019 to February 2020. After signing the consent form each of the participants had 20 minutes to answer the questions and every participant was told that they could leave at any time without any excuse. There were 292 participants from both gender (male=139, Female=153).

### MATERIALS

Revised Cyberbullying Inventory-II which has been invented by Topcu & Erdur-Bakerb (2018) was remodified to understand the direct relationship among the selected cyberbullying behavior for further explanation. There were eight items for cyberbullying behavior and eight for cyber victim behavior which is mention in the appendices (C, D) respectively for recognizing the cyber behavior and its frequencies of each item which can indicate cyber harmful behavior. Each item had the Likert Scale Frequencies which start from "Never=0, one time=1, two times=2, and more than three times=3". It showed that if the subject score "Zero" it showed that in this case, cyber behavior has not happened yet. Moreover, 24 showed that items from last month the participant had cyber activities high level. Besides the questionnaire reliability was also checked. The Cronbach alpha was also tested. It was (.794) for cyberbullying perpetrators, and (.834) was for cyber victim behavior. Furthermore, for analysis, the SPSS version 24 was used.

### VARIABLES

There were different variables such as Gender, Age, Internet surfing (hours/day), a perpetrator of cyberbullying, a victim of cyberbullying, and Bystander of cyberbullying behavior. Moreover, eight items for cyberbullying perpetrator behavior such as, I misused someone account's password, I threaten someone, I insulted someone, I sent embarrassing messages, I shared an inappropriate photo of someone, I shared a secret with others, I spread rumors, and I created an account on behalf of someone. On another side it also had cyber victim behavior such as, someone misused my account's password, someone threatens me, someone insulted me, someone sent me embarrassing messages, someone shared an inappropriate photo of me, someone shared my secret with others, someone spread rumors against me, and someone created an account on behalf of me.

### RESULTS

The results of this study as below.

**Table 1**

| Numerators of age and Internet usage of the participants |     |         |         |      |      |                |
|--|-----|---------|---------|------|------|----------------|
|  | N   | Minimum | Maximum | Mean | Mode | Std. Deviation |
| Age  | 292 | 17      | 30      | 21   | 21   | 2.19           |
| Internet surfing (hours/day)                             | 281 | 0.5     | 24      | 4.34 | 3    | 3.25           |

Table 1 showed that there are 292 valid cases of participants. Whose age ranged from 17 to 30 years and mean age is 21 years. Moreover, the repetitive subjects or mode age of the participants are 21 and its standard deviation is 2.19 year among the participants. Similarly, since last month internet surfing out of 292 valid cases are 281 participants. The minimum time consumed per day is a half hour and the maximum time is 24 hours/day. Besides on these participants use the internet on average is 4.34 hours/day, mode of hours is 3 and the standard deviation is 3.25 hours among participants.

**Table 2**

| Numerators of Gender of the participants |      |        |       |
|--|------|--------|-------|
|  | Male | Female | Total |
| Frequency                                | 139  | 153    | 292   |
| Percentile                               | 47.6 | 52.4   | 100   |

Table 2 depicted the overall gender (N=292) who participated in the study. It consists of 139 males and 153 females in other words 47.6% males and 52.4% females.

**Table 3**

| Numerators of Cyberbullying behavior last month with its Gender distinguish |       |        |        |        |       |                     |
|---|-------|--------|--------|--------|-------|---------------------|
| Status of participants  | Male  |        | Female |        | Sum   |                     |
|   | Count | N %    | Count  | N %    | Count | Male and female N % |
| Became Victim of cyberbullying  | 15    | 12.4%  | 21     | 17.4%  | 36    | 29.80%              |
| Became Perpetrator of cyberbullying   | 16    | 13.2%  | 8      | 6.6%   | 24    | 19.80%              |
| Became Bystander of cyberbullying   | 53    | 43.8%  | 55     | 45.5%  | 108   | 89.30%              |
| Total engaged participants of cyberbullying behaviors                       | 84    | 69.40% | 84     | 69.50% | 168   | 138.90%             |

Table 3 depicted the valid participants who have at least one status of cyberbully, victim, or bystander. Overall out of 292 participants just 36 directly specified that they were victimized in the last month. Which consist of

12.4% males and 17.4% females. Furthermore, 24 participants specified that they were cyberbullying perpetrators last month which consist of 13.2% of males and 6.6% of females. Moreover, 108 participants distinguished that they were bystanders of cyberbullying behavior science the last month. It consists of 43.8% males and 45.5% females. Lastly, the total engaged participants showed that 84 males were engaged as a different status such as perpetrator, victim, and bystander of the cyberbullying behavior and 84 females were also engaged.

Table 4

| Descriptive statistic of cyberbully behavior as perpetrator |  |     |       |         |         |     |      |                |          |
|---|--|-----|-------|---------|---------|-----|------|----------------|----------|
| No.   | Items                                      | N   | Range | Minimum | Maximum | Sum | Mean | Std. Deviation | Variance |
| 1   | I misused someone account's password       | 287 | 3     | 0       | 3       | 56  | 0.20 | 0.545          | 0.297    |
| 2   | I threaten someone                         | 284 | 3     | 0       | 3       | 129 | 0.45 | 0.866          | 0.751    |
| 3   | I insulted someone                         | 276 | 3     | 0       | 3       | 170 | 0.62 | 1.064          | 1.132    |
| 4   | I sent embarrassing messages               | 282 | 3     | 0       | 3       | 126 | 0.45 | 0.884          | 0.782    |
| 5   | I shared an inappropriate photo of someone | 285 | 3     | 0       | 3       | 69  | 0.24 | 0.618          | 0.381    |
| 6   | I shared a secret with others              | 284 | 3     | 0       | 3       | 126 | 0.44 | 0.858          | 0.735    |
| 7   | I spread rumors                            | 283 | 3     | 0       | 3       | 122 | 0.43 | 0.870          | 0.757    |
| 8   | I created an account on behalf of someone  | 284 | 3     | 0       | 3       | 66  | 0.23 | 0.608          | 0.370    |
| Valid N (listwise)  |  | 269 |       |         |         |     |      |                |          |

Table 4 depicted that eight forms of cyberbullying behavior as a perpetrator happened. Generally, there were (N=292) cases each participant self-reported that they have engaged in cyberbullying since last month. The mean average of each item was more than Zero. It means, "0=Never" and more than Zero means that behavior exists with each of the participants during the last month. Statement 1 showed that out of (N=292) participants there are 287 valid cases. Its mean average was 0.20. It means on average 0.20 level every participant had engaged in the misusing of a password of someone. Statement 2 depicted that out of (N=292) participants 284 cases were valid and its mean average was 0.45. It showed that on average 0.45 level every participant threatens someone. Statement 3 depicted that out of (N=292) participants 276 cases were valid and its mean average was 0.62. It showed that on average 0.62 level every participant insulted someone. Statement 4 depicted that out of (N=292) participants 282 cases were valid and its mean average was 0.45. It showed that on average 0.45 level every participant sent embarrassing messages to someone. Statement 5 depicted that out of (N=292) participants 285 cases were valid and its mean average was 0.24. It showed that on average 0.24 level every participant shared an inappropriate photo of someone. Statement 6 depicted that out of (N=292) participants 284 cases were valid and its mean average was 0.44. It showed that on average 0.44 level every participant shared a secret with someone. Statement 7 depicted that out of (N=292) participants 283 cases were valid and its mean average was 0.43. It showed that on average 0.43 level every participant spread rumors against someone. Statement 8 depicted that out of (N=292) participants 284 cases were valid and its mean average was 0.23. It showed that on average 0.23 level every participant created an account on behalf of someone. Furthermore, item 3 happened more than any other item. And item 1 took place the least among the other items.

Table 5

| Descriptive statistic of cyber victim behavior of the participants |                                       |     |       |         |         |     |      |                |          |
|--|---------------------------------------|-----|-------|---------|---------|-----|------|----------------|----------|
| No.  | Items                                 | N   | Range | Minimum | Maximum | Sum | Mean | Std. Deviation | Variance |
| 1  | someone misused my account's password | 285 | 3     | 0       | 3       | 88  | 0.31 | 0.663          | 0.440    |
| 2  | someone threaten me                   | 284 | 3     | 0       | 3       | 153 | 0.54 | 0.907          | 0.822    |
| 3  | someone insulted me                   | 274 | 3     | 0       | 3       | 179 | 0.65 | 1.024          | 1.048    |

|                    |   |     |   |   |   |     |      |       |       |
|--------------------|---|-----|---|---|---|-----|------|-------|-------|
| 4                  | someone sent me embarrassing messages       | 283 | 3 | 0 | 3 | 184 | 0.65 | 0.965 | 0.930 |
| 5                  | someone shared an inappropriate photo of me | 287 | 3 | 0 | 3 | 105 | 0.37 | 0.721 | 0.520 |
| 6                  | someone shared my secret with others        | 286 | 3 | 0 | 3 | 174 | 0.61 | 0.970 | 0.941 |
| 7                  | someone spread rumors against me            | 286 | 3 | 0 | 3 | 232 | 0.81 | 1.139 | 1.298 |
| 8                  | someone crated an account on behalf of me   | 288 | 3 | 0 | 3 | 75  | 0.26 | 0.571 | 0.326 |
| Valid N (listwise) |   | 264 |   |   |   |     |      |       |       |

Table 5 depicted that eight forms of cyber victim behavior happened. Generally, there were (N=292) cases each participant self-reported that they have engaged in the cyber victim since last month. The mean average of each item was more than Zero. It means, "0=Never" and more than Zero means that behavior exists with each of the participants during the last month. Statement 1 showed that out of (N=292) participants there were 285 valid cases. Its mean average was 0.31. It means on average 0.31 level someone had engaged in the misusing of the password of every participant. Statement 2 depicted that out of (N=292) participants 284 cases were valid and its mean average was 0.54. It showed that on average 0.54 level someone threatens every participant. Statement 3 depicted that out of (N=292) participants 274 cases were valid and its mean average was 0.65. It showed that on average 0.65 level someone insulted every participant. Statement 4 depicted that out of (N=292) participants 283 cases were valid and its mean average is 0.65. It showed that on average 0.65 level someone sent embarrassing messages to every participant. Statement 5 depicted that out of (N=292) participants 287 cases are valid and its mean average was 0.37. It showed that on average 0.37 level someone shared inappropriate photos with every participant. Statement 6 depicted that out of (N=292) participants 286 cases were valid and its mean average was 0.61. It showed that on average 0.61 level someone shared the secret of every participant. Statement 7 depicted that out of (N=292) participants 286 cases were valid and its mean average was 0.81. It showed that on average 0.81 level someone spread rumors against every participant. Statement 8 depicted that out of (N=292) participants 288 cases were valid and its mean average was 0.26. It showed that on average 0.26 level someone created an account on behalf of every participant. Furthermore, item 7 happened more than any other item. And item 8 took place the least among the other items.

Table 6

| Descriptive Statistics of Cyberbullying and cyber victim Items |   |      |       |     |
|--|---|------|-------|-----|
| No   | Items                                       | Mean | S.D   | N   |
| 1  | I misused someone account's password        | 0.20 | 0.545 | 287 |
| 2  | someone misused my account's password       | 0.31 | 0.663 | 285 |
| 3  | I threaten someone                          | 0.45 | 0.866 | 284 |
| 4  | someone threaten me                         | 0.54 | 0.907 | 284 |
| 5  | I insulted someone                          | 0.62 | 1.064 | 276 |
| 6  | someone insulted me                         | 0.65 | 1.024 | 274 |
| 7  | I sent embarrassing messages                | 0.45 | 0.884 | 282 |
| 8  | someone sent me embarrassing messages       | 0.65 | 0.965 | 283 |
| 9  | I shared an inappropriate photo of someone  | 0.24 | 0.618 | 285 |
| 10   | someone shared an inappropriate photo of me | 0.37 | 0.721 | 287 |
| 11   | I shared a secret with others               | 0.44 | 0.858 | 284 |
| 12   | someone shared my secret with others        | 0.61 | 0.970 | 286 |
| 13   | I spread rumors                             | 0.43 | 0.870 | 283 |
| 14   | someone spread rumors against me            | 0.81 | 1.139 | 286 |
| 15   | I created an account on behalf of someone   | 0.23 | 0.608 | 284 |
| 16   | someone crated an account on behalf of me   | 0.26 | 0.571 | 288 |

Table 6 depicted the Descriptive Statistics of Cyberbullying and cyber victim Items. Every item's mean score, stander deviation, and valid sample size are visualized. Item 1 up to 8 are cyberbullying items and from 9 up to 16 are cyber victim items.

Table 7

|   |
|---|
| Pearson product-moment correlation coefficient of different items |
|---|

| Items No | 1          | 2          | 3          | 4          | 5          | 6          | 7          | 8          | 9          | 10         | 11         | 12         | 13         | 14         | 15         | 16 |
|----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|----|
| 1        | -          |            |            |            |            |            |            |            |            |            |            |            |            |            |            |    |
| 2        | .50<br>3** | -          |            |            |            |            |            |            |            |            |            |            |            |            |            |    |
| 3        | .25<br>4** | .20<br>6** | -          |            |            |            |            |            |            |            |            |            |            |            |            |    |
| 4        | .15<br>7** | .25<br>4** | .49<br>8** | -          |            |            |            |            |            |            |            |            |            |            |            |    |
| 5        | .33<br>4** | .24<br>9** | .37<br>0** | .28<br>5** | -          |            |            |            |            |            |            |            |            |            |            |    |
| 6        | .20<br>9** | .34<br>2** | .22<br>2** | .49<br>1** | .50<br>8** | -          |            |            |            |            |            |            |            |            |            |    |
| 7        | .16<br>8** | .21<br>6** | .38<br>4** | .27<br>4** | .33<br>8** | .27<br>8** | -          |            |            |            |            |            |            |            |            |    |
| 8        | .14<br>5*  | .36<br>5** | .21<br>0** | .48<br>1** | .26<br>9** | .53<br>4** | .50<br>0** | -          |            |            |            |            |            |            |            |    |
| 9        | .33<br>1** | .33<br>2** | .32<br>9** | .16<br>6** | .38<br>2** | .26<br>1** | .32<br>2** | .23<br>8** | -          |            |            |            |            |            |            |    |
| 10       | .17<br>5** | .32<br>3** | .24<br>8** | .39<br>0** | .20<br>2** | .37<br>5** | .26<br>5** | .39<br>5** | .44<br>7** | -          |            |            |            |            |            |    |
| 11       | .21<br>9** | .26<br>2** | .33<br>3** | .28<br>8** | .33<br>1** | .29<br>7** | .33<br>3** | .34<br>9** | .36<br>2** | .31<br>8** | -          |            |            |            |            |    |
| 12       | .12<br>6*  | .27<br>9** | .32<br>7** | .46<br>0** | .21<br>1** | .36<br>4** | .34<br>9** | .44<br>9** | .24<br>5** | .49<br>1** | .57<br>7** | -          |            |            |            |    |
| 13       | .22<br>2** | .24<br>0** | .33<br>2** | .33<br>4** | .20<br>7** | .30<br>5** | .31<br>9** | .31<br>6** | .38<br>7** | .31<br>0** | .47<br>6** | .37<br>1** | -          |            |            |    |
| 14       | 0.1<br>12  | .18<br>6** | .21<br>6** | .49<br>1** | .19<br>4** | .49<br>1** | .34<br>6** | .52<br>2** | .21<br>6** | .37<br>8** | .35<br>4** | .54<br>4** | .38<br>6** | -          |            |    |
| 15       | .27<br>9** | .24<br>8** | .31<br>6** | .31<br>5** | .38<br>9** | .33<br>0** | .46<br>1** | .31<br>9** | .41<br>4** | .29<br>8** | .37<br>0** | .31<br>3** | .36<br>6** | .30<br>0** | -          |    |
| 16       | .18<br>5** | .40<br>1** | .25<br>5** | .36<br>1** | .24<br>0** | .25<br>6** | .17<br>4** | .32<br>0** | .26<br>9** | .27<br>1** | .34<br>5** | .29<br>0** | .37<br>8** | .20<br>1** | .37<br>6** | -  |

\*\*p<.01. Correlation is significant at the 0.01 level (2-tailed). \* p<.05. Correlation is significant at the 0.05 level (2-tailed).

First, table 7 depicted Descriptive statistics and Pearson product-moment correlation coefficient is computed to assess the relationship between cyberbullying selected items. A scatterplot summarizes the results (Figure 1). There was a very strong positive correlation between item 1 (I misused someone's account's password) and item 2 (someone misused my account's password),  $r=0.503$ ,  $n=280$ , moreover, the relationship was significant ( $p<.000$ ). Overall, the participants' misusing passwords appear to be associated with one another.

Second, table 7 depicted Descriptive statistics and Pearson product-moment correlation coefficient was computed to assess the relationship between cyberbullying selected items. A scatterplot summarizes the results (Figure 2). There was a very strong positive correlation between item 3 (I threaten someone) and item 4 (someone threatens me),  $r=0.498$ ,  $n=284$ , moreover, the relationship was significant ( $p<.000$ ). Overall, the participants threatening someone appears to be associated with one another.

Third, table 7 depicted Descriptive statistics and Pearson product-moment correlation coefficient was computed to assess the relationship between cyberbullying selected items. A scatterplot summarizes the results (Figure 3). There was a very strong positive correlation between item 5 (I insulted someone) and item 6 (someone insulted me),  $r=0.508$ ,  $n=264$ , moreover, the relationship was significant ( $p<.000$ ). Overall, the participants' insulting someone to be associated with one another variable.

Fourth, Table 7 depicted Descriptive statistics and Pearson product-moment correlation coefficient was computed to assess the relationship between cyberbullying selected items. A scatterplot summarizes the results (Figure 4). There was a very strong positive correlation between item 7 (I sent embarrassing messages) and item 8 (someone sent me embarrassing messages),  $r=0.500$ ,  $n=274$ , moreover, the relationship was significant

( $p < .000$ ). Overall, the participants' sending embarrassing messages appear to be associated with one another variable.

Fifth, table 7 depicted Descriptive statistics and Pearson product-moment correlation coefficient was computed to assess the relationship between cyberbullying selected items. A scatterplot summarizes the results (Figure 5). There was a very strong positive correlation between item 9 (I shared an inappropriate photo of someone) and item 10 (someone shared an inappropriate photo of me),  $r = 0.447$ ,  $n = 280$ , moreover, the relationship was significant ( $p < .000$ ). Overall, the participants' sharing inappropriate photo appear to be associated with one another variable.

Sixth, table 7 depicted Descriptive statistics and Pearson product-moment correlation coefficient was computed to assess the relationship between cyberbullying selected items. A scatterplot summarizes the results (Figure 6). There was a very strong positive correlation between item 11 (I shared a secret with others) and item 12 (someone shared my secret with others),  $r = 0.577$ ,  $n = 279$ , moreover, the relationship was significant ( $p < .000$ ). Overall, the participants' sharing secrets with others appear to be associated with one another item.

Seventh, table 7 depicted Descriptive statistics and Pearson product-moment correlation coefficient was computed to assess the relationship between cyberbullying selected items. A scatterplot summarizes the results (Figure 7). There was a very strong positive correlation between item 13 (I spread rumors) and item 14 (someone spread rumors against me),  $r = 0.386$ ,  $n = 279$ , moreover, the relationship was significant ( $p < .000$ ). Overall, the participants' spreading rumors appear to be associated with one another item.

Eighth, table 7 depicted Descriptive statistics and Pearson product-moment correlation coefficient was computed to assess the relationship between cyberbullying selected items. A scatterplot summarizes the results (Figure 8). There was a very strong positive correlation between item 15 (I created an account on behalf of someone) and item 16 (someone created an account on behalf of me),  $r = 0.376$ ,  $n = 280$ , moreover, the relationship was significant ( $p < .000$ ). Overall, the participants' creating account on behalf of someone appears to be associated with item 16.

H1: Every cyberbullying item would be positively correlated with its reactive cyber victim behavior.

The above alternative hypothesis was accepted in all cases. It means that every item had a positive association with its reaction behaviors. In other words, increasing of every cyberbullying action increased the cyber victim action and vice versa.

Table 8

| Descriptive statistics and Pearson product-moment correlation coefficient and paired sample t-test |      |      |     |       |     |                 |                      |    |                     |
|--|------|------|-----|-------|-----|-----------------|----------------------|----|---------------------|
|  | M    | S.D  | N   | t     | df  | Sig. (2-tailed) | Sum of Cyberbullying | of | Sum of cyber victim |
| Sum of Cyberbullying   | 2.94 | 4.06 | 254 | -4.86 | 253 | 0.000           | —                    |    |                     |
| Sum of cyber victim  | 3.98 | 4.72 | 254 |       |     |                 | .675**               |    | —                   |

\*\* $p < .01$ . Correlation is significant at the 0.01 level (2-tailed).

A Pearson product-moment correlation coefficient was computed to assess the relationship between the sums Cyberbullying behavior with cyber victim behavior. There was a positive correlation between the two variables,  $r = 0.675$ ,  $n = 254$ ,  $p < 0.01$ . A scatterplot summarizes the results (Figure 9, 10, 11) in which X axis was total sum of cyber victim behavior and Y axis was total sum of cyberbullying behavior. Overall, there was a strong, positive correlation between the sums of Cyberbullying behavior with cyber victim behavior. Increases in Cyberbullying behavior were correlated with increases in cyber victim behavior. Furthermore, there was a significant difference in the mean score for cyberbullying ( $M = 2.94$ ,  $SD = 4.06$ ) and cyber victim ( $M = 3.98$ ,  $SD = 7.72$ ) conditions;  $t(253) = -4.86$ ,  $p < .000$ , at the 0.01 level on two-tailed test. These results suggested that cyberbullying does have difference with cyber victim behavior. Specifically, our results suggested that cyberbullies were less than cyber victim behavior. However, the scatterplot 11 also showed that cyber victim behavior happened more than cyber bullying. The cell I, II, III, and IV tell that cyber victim value are more than other variable.

H2: Over all cyberbullying behavior would be related to overall cyber victim behavior and cyberbullying behavior would be taken place less than cyber victim behavior.

The above second alternative hypotheses also accepted. It means that increasing of cyberbullying behavior was going to increase cyber victim behavior. Moreover, the scatterplot 9, 10, and 11 showed and paired sample test clarified that the cyber victim behavior took place more, especially the scatterplot 11 by adding reference lines to Y axis and X axis it clarified that cyber victim behavior took place more than cyberbullying behavior.

## DISCUSSION

The relationship among all cyberbullying items with all cyber victim items proved strong positive correlations in other word all items with its reflection proved positive association. All items were significant on  $p < .01$  on 0.01 level. It means that increasing of any item of cyberbullying is going to increase the cyber victim reaction. Furthermore, decreasing the cyberbullying any item with its related reflective item is going to decrease its

frequency. Moreover, the Black (2014) also cited the significant difference on peer victimization, threatening, misusing of password, accepting unknown friend request, and more precisely sharing and posting unsuitable pics and videos make a person victimized, become bullied, and be the bystander of these actions. Some cited insulting (Menesini et al., 2011) and Cuffy (2015) found that participants embarrassment in digital space. And Álvarez-García et al. (2015) discovered the sharing secret information in digital space. Moreover, İçellioglu & Özden (2014) spreading of rumors and Palladino et al. (2017) discovered the “impersonation” activities significantly.

A Pearson product-moment correlation coefficient was computed to assess the relationship between the sums of Cyberbullying behavior with cyber victim behavior. There was a positive correlation between the two variables. In other words, increasing the cyberbullying behavior directly increases the cyber victim behavior, and decreasing any variable directly decreases another variable. Moreover, paired sample t-test was also significant which conveyed to us that the total sum of cyberbullying behavior took place less than the total sum of cyber victim behavior.

## SUGGESTION

The ICT of the Gujarat University must take precaution measurements and must give the general information to the students because cyberbullying behavior has a direct relationship with cyber victim behavior. So it is suitable not to engage directly and not to respond to any cyber activity by the cyber victim. Furthermore, the University must take legal action against these activities to show a normal and positive academic environment to the university stakeholders which will provide a more comfortable zone for the academia.

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