# Factors Influencing the Intention of Cyberbullying Among College Students: A Study Based on the Theory of Planned Behavior

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**Abstract:**

A large number of studies show that with the popularization of the Internet, the participation rate of the network has not declined, but the number of cyberbullying victims has grown significantly, and cyberbullying has become increasingly serious. Based on the Theory of Planned Behavior, this paper collects information on behavioral attitudes, subjective norms, and perceived behavioral control of domestic college students regarding their intention of cyberbullying through questionnaires and studies their correlation to find out the factors influencing the intention of cyberbullying. Through correlation analysis, it is found that the behavioral attitudes, subjective norms, and perceived behavioral control of college students are moderately and above positively correlated with the intention of cyberbullying. This finding can provide theoretical support for the practical application of adolescent motivational psychology to help adolescents use social media correctly, as well as for each social media platform to level the playing field and improve the commenting mechanism.

**Keywords:** Cyberbullying; College Students; Theory of Planned Behavior.

## 1. Introduction

### 1.1 Research Background and Question

It is frequently observed that individuals hold divergent perspectives on the same topic of discussion, leading to mutual accusations and abusive exchanges in the comment sections on the Internet. This paper aims to explore the causes of individual cyberbullying behavior from the perspectives of intention and volition. Providing insights into these areas, this paper will be useful for the practical application of adolescent motivational psychology. It will help guide the correct use of social media among adolescents and enhance the mechanism of individual social media engagement, thereby improving the quality of comments based on theoretical support.

### 1.2 Literature Review

Foreign research on the individual domain of cyberbullying has a certain psychological foundation and a wide range of research perspectives, but most of the summarized, expository, research theory lacks structure [1]. Ho et al. adopted the Theory of Planned Behavior to explore cyberbullying but did not conduct a more in-depth study at the level of perceptual-behavioral control, focusing instead on the subjective normative level [2]. In terms of research subjects, most foreign studies do not fully subdivide the research subjects and categorize them according to age. Researchers also use gender, sexual orientation and gender identity as research variables [3]. The focus tends to be on children and adolescents, meaning that the research subjects do not have the clear characteristics of socially structured groups.

Media research in China started late, trailing behind by many years later. It was not until 2007 that the focus of research in China shifted to the issue of online media. Prior to this, there was a lack of theoretical basis for the study of individual motivation on cyberbullying, and the research on cyberbullying in domestic academia is still very preliminary, fragmented, unsystematic, and not profound [4]. Scholar Gao explains the group phenomenon of cyberbullying among a group of college students in China by applying the theory of the "spiral of silence" [5]. Nie examined the factors of cyberbullying generation through the social psychology theories of "network de-inhibition" and "group polarization" [6]. It can be seen that even theoretically grounded articles are relatively scarce on the individual motivation of cyberbullying but focus more on the governance of cyberbullying and the causes behind the phenomenon of grouping.

## 2. Research Methods

### 2.1 Theoretical Framework

This research utilizes the Theory of Planned Behavior (TPB) as its theoretical framework. The TPB was first put forward by the American psychologist Ajzen [7]. The premise of its assumptions is that people's behavior is rational. Before various behaviors occur, information processing and rational thinking take place, forming a series of reasons that determine the motivation to implement the behavior, which in turn forms the behavioral intention. Behavioral intention is a direct determinant of whether the behavior is implemented.

The TPB is based on the Theory of Reasoned Action (TRA). The core idea of the TPB is that behavior is determined by behavioral intention, which is, in turn, determined by behavioral attitudes, subjective norms, and perceived behavioral control, while perceived behavioral control can also be directly applied to behavior. This research will exactly investigate these factors. Behavioral attitudes refer to an individual's assessment of how much he or she likes or dislikes performing a particular behavior. Subjective norms refer to the social pressure that individuals perceive when deciding whether to perform a particular behavior, which reflects the influence of significant others or groups on individuals' behavioral decisions. Perceived behavioral control refers to the degree to which an individual perceives that it is easy or difficult to perform a particular behavior, and it reflects an individual's beliefs about what promotes or hinders behavior indirectly influencing behavioral attitudes, subjective norms, and perceived behavioral control.

### 2.2 Questionnaire

The questionnaire includes personal information, like gender, grade, school, and self-designed behavioral intention influencing factors (behavioral attitudes, subjective norms, and perceived behavioral control). The items adopt the Likert scale of 5 levels for scoring. "Strongly agree", "Relatively agree", "Neutral", "Relatively disagree", and "Strongly disagree" are scored as 1 to 5 points in sequence. The higher the score, the weaker the psychological field of the behavioral intention of cyber violence. The stratified sampling method was used to share the ques-tionnaire online to the respondents through WeChat and QQ with the help of the Questionnaire Star platform, and the respondents were invited to promote the questionnaire to the surrounding qualified people. Equal proportions of male and female college students were randomly selected from universities of all levels across the country, and a total of 201 questionnaires were collected.

### 2.3 Hypotheses

Individual college students' behavioral attitudes, subjective norms, and perceived behavioral control towards cyberbullying are positively correlated with their cyberbullying intention to varying degrees. From the strong positive correlation between college students' behavioral attitudes and cyberbullying intention, college students' individual subjective views and acceptance of cyberbullying play a decisive role in their behavioral intention. The more individuals believe that controlled cyberbullying can be beneficial or bring value to the social group, the stronger their cyberbullying intention is. The correlation between subjective norms and behavioral intentions is weaker than that between behavioral attitudes, i.e., college students' perception of significant others' behaviors and social expectations are positively correlated with their cyberbullying intentions to a certain extent, but the internal consistency shaped by their personal values influences their intentions of cyberbullying more than anything else.

## 3. Results

### 3.1 Reliability and Consistency of the Scale

The Clone Alpha (Cronbach's Alpha) value is .947. This value is very close to 1, indicating that the internal consistency of the scale is very good. Generally, a clone Alpha value above .7 is considered acceptable, while a value above .8 indicates that the scale has good internal consistency, while a value above .9 indicates very good internal consistency. Taken together, a Clone Alpha value of .947 and an item count of 18 represent the following meanings: The 18 items of the questionnaire are highly statistically consistent, i.e., the items are consistent in measuring the same concept or trait. The questionnaire is reliable in assessing or predicting the concept or trait.

### 3.2 Attitudes towards Cyberbullying

**Table 1. Correlation of Intentions of Cyberbullying and Attitudes towards the Behavior**

| | Pearson Correlation | Sig. (two-tailed) | Numbers of Cases |
|---|---|---|---|
| Intentions of Cyberbullying | 1 | | 201 |
| Attitudes toward the Behavior | 805** | 000 | 201 |

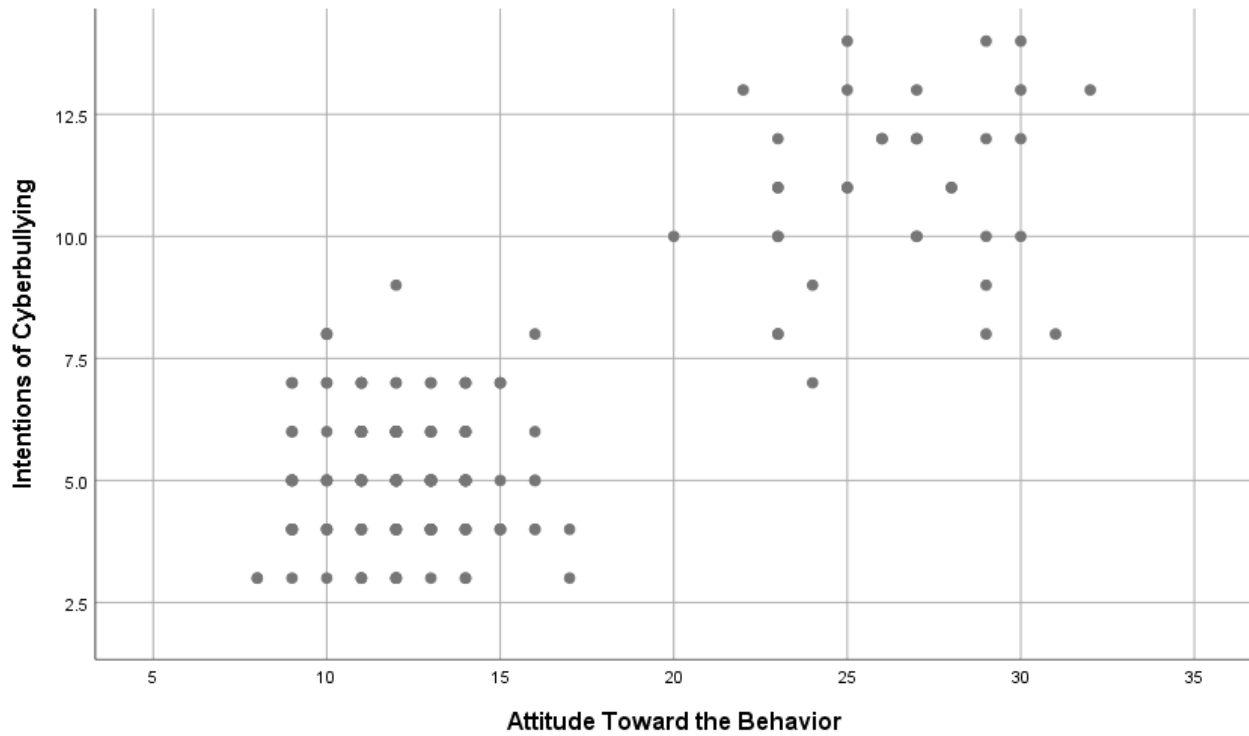**: The correlation is significant at the 0.01 level (two-tailed).



**Fig. 1 Scatter Diagram of Intentions of Cyberbullying and Attitudes toward the Behavior**

As Table 1 shows, the Pearson correlation between cyberbullying intention and behavioral attitudes is .805. This indicates a strong positive correlation between cyberbullying intention and behavioral attitudes. The significance (two-tailed) is .000, indicating that the p-value of the correlation is very low, well below commonly used thresholds for significance levels (e.g., .05 or .01). Since the p-value is less than .05, it can be assumed that the correlation between the intentions of cyberbullying and behavioral attitudes is statistically significant, i.e., it is un-likely that this relationship is due to random factors.

Figure 1 suggests that the more positive an individual's attitudes towards cyberbullying (i.e., the more they perceive it to be acceptable or beneficial), the stronger their intention to engage in it. This relationship can help us understand how attitudes influence behavioral intentions and may provide a basis for interventions to modify the occurrence of coming online.

### 3.3 Subjective Norms

**Table 2. Correlation of Intentions of Cyberbullying and Subjective Norm**

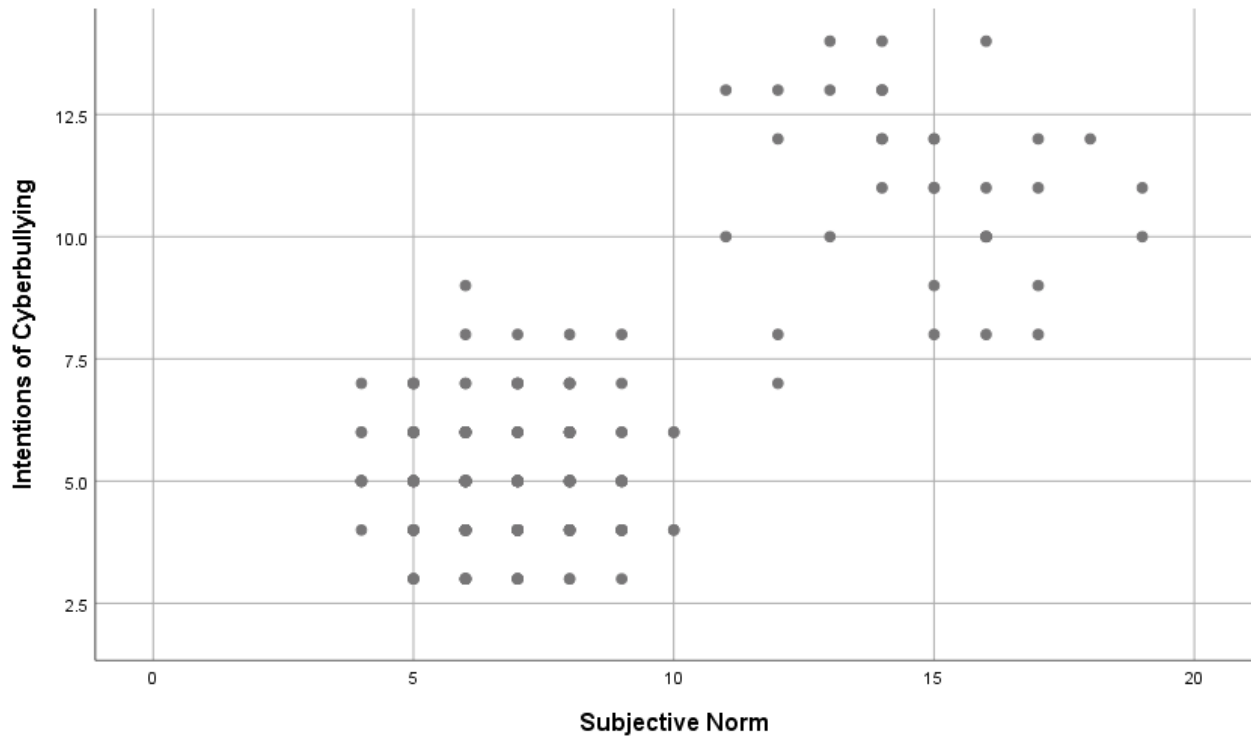|  | Pearson Correlation | Sig. (two-tailed) | Numbers of Cases |
|---|---|---|---|
| Intentions of Cyberbullying | 1 |  | 201 |
| Subjective Norms | 742** | 000 | 201 |

**Fig 2. Scatter Diagram of Intentions of Cyberbullying and Subjective Norm**

As Table 2 shows, the Pearson's correlation between cyberbullying intentions and subjective norms is .742. This indicates a moderate positive correlation between cyberbullying intentions and subjective norms. The Sig. (two-tailed) is .000. This indicates that the p-value of the correlation is very low, well below the commonly used thresholds for significance levels (e.g., 0.05 or 0.01It can be assumed that the correlation between cyberbullying intentions and subjective norms is statistically significant, i.e., it is unlikely that this relationship is due to random factors.

Figure 2 suggests that there is a significant positive correlation between subjective norms (i.e., the degree to which individuals perceive social pressure or are expected to perform a certain behavior) and cyberbullying. This could mean that those who feel more social pressure or perceive cyberbullying to be socially acceptable may have a greater intention to engage in cyberbullying.

**3.4 Perceived Behavioral Control**

**Table 3. Correlation of Intentions of Cyberbullying and Perceived Behavioral Control**

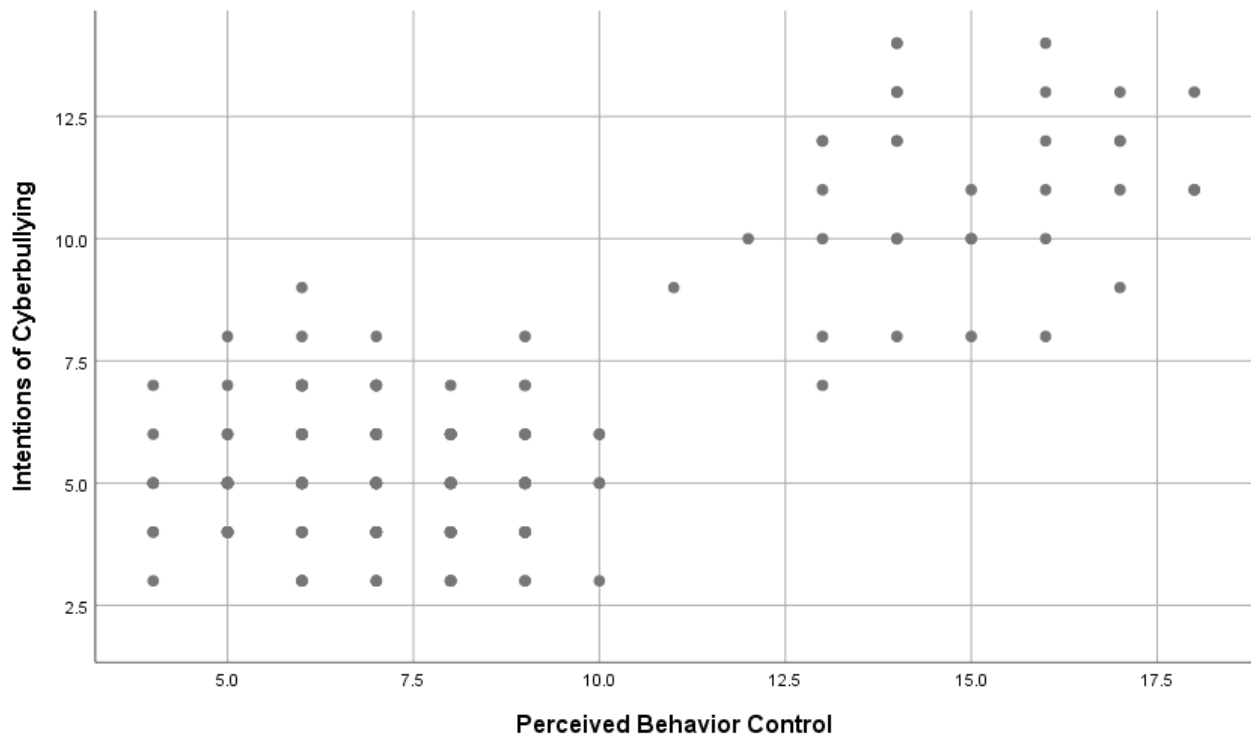|  | Pearson Correlation | Sig. (two-tailed) | Numbers of Cases |
|---|---|---|---|
| Intentions of Cyberbullying | 1 |  | 201 |
| Perceived Behavioral Control | 766** | 000 | 201 |

**Fig. 3 Scatter Diagram of Intentions of Cyberbullying and Perceived Behavior Control**

As Table 3 shows, the Pearson's correlation between cyberbullying intention and perceived behavioral control is .766: this indicates a moderate to strong positive correlation between cyberbullying intention and perceived behavioral control. The significance is (two-tailed).000. This indicates that the significance level (p-value) of the correlation is very low, well below commonly used significance level thresholds (e.g., 0.05 or 0.01). It can be assumed that the correlation between cyberbullying intentions and perceptual behavioral control is statistically significant, i.e., it is unlikely that this relationship is due to random factors.

Figure 3 suggests that there is a significant positive correlation between perceived behavioral control and cyberbullying intentions. In other words, the stronger the sense of perceptual behavioral control, the stronger the intention to engage in cyberbullying. This relationship may be helpful in understanding why individuals engage in cyberbullying and how to intervene with perceptual behavioral control to cyberbullying.

## 4. Discussion

Using the TPB model, this paper explores the intensity of Chinese local college students' cyberbullying intention from three dimensions: attitudes, subjective norms, and perceived behavior control. The subjective norms and perceived behavior control of college students are positively correlated with cyberbullying intention, and

the correlation between subjective behavior attitudes and cyberbullying intention of college students is medium or above. There is a strong positive correlation between college students' behavior attitudes and cyberbullying intention, which shows that college students' subjective views and acceptance of cyberbullying play a decisive role in their behavior intention. Those who think that the more controllable cyberbullying can bring certain benefits or social group value, the stronger cyberbullying intention of individuals. The correlation between subjective norms and behavioral intentions is weaker than behavioral attitudes, that is, college students' perceptions of important others' behaviors and social expectations are positively correlated with their cyberbullying intentions to a certain extent, but the internal consistency shaped by their personal values can affect their cyberbullying intentions more.

The definition of the word "cyberbullying" is vague in the modern social context, which leads to college students' understanding of cyberbullying behavior more from their own subjective cognition and judgment. Under the condition of social expectation, college students are more likely to rely on their subjective attitudes because of their younger age and immature ideas. Therefore, the focus of the causes of cyberbullying intention lies in the internal attitudes of individuals towards "cyberbullying".

Most Chinese college students live on campus without family control and have more free time, which also directly leads to the pressure brought by family and lack of

self-control [8,9]. The degree of perception of important others' behavioral norms can no longer represent the degree of perception of important others' behavioral norms during college, so the correlation between college students' subjective norms and cyberbullying intentions is not as high as the other two.

At the same time, college students have the characteristics of a higher education level, higher cultural accomplishment, stronger self-expression ability and more familiarity with the use of the Internet [10]. College students' perceived difficulty in executing cyberbullying will be lower, so there is a strong positive correlation between college students' perceived behavior control and cyberbullying intention.

There are also studies that show that the more individuals have been exposed to the Internet, the higher their attack degree, which indirectly shows that the degree of different individuals' past experience of the Internet is positively correlated with their cyberbullying behavior intention. This may be because the remarkable feature of Internet users is the lack of emotional empathy, and individuals who change from Internet victims to Internet users show less empathy and higher moral disconnection than non-Internet users [8]. Furthermore, the high popularity of the Internet makes almost everyone a network user, and the surge in the number of network users also leads to more and more common behaviors such as malicious attacks, abuse and invasion of privacy. Therefore, society defines "cyberbullying" more broadly and vaguely, and the acceptance of cyberbullying without consequences or serious consequences becomes higher. Interactive platforms such as comment areas become more difficult to control. Therefore, the design of an interactive platform is particularly important. Each platform can give a more accurate and detailed definition of the term "cyberbullying", correct the public's cognition and attitudes towards the network from the behavior and attitude level, and create a friendly network interactive atmosphere.

## 5. Conclusion

Based on the TPB theory, this study proves that college students' behavioral attitudes, subjective norms, and perceived behavioral control towards cyberbullying are positively correlated with their cyberbullying intentions, but this study does not examine the influence of behavioral intentions on real behavior, and there are mediating variables between behavioral intentions and real behavior.

Moreover, considering that college students will fill in the questionnaire data under the influence of external expectation pressure and self-cognition, the data collected in this questionnaire will not completely and accurately reflect college students' perception of subjective norms of their own behavior attitudes and perceived behavior control due to the influence of some external factors. Moreover, although the definition of "cyberbullying" is indicated before answering the questionnaire when collecting the questionnaire, considering that each college student has a different understanding of the vague word "cyberbullying", different psychological basis when filling out the questionnaire will cause the internal consistency of the questionnaire to be slightly insufficient.

Future scholars can explore the influence of cyberbullying intentions on real behavior on the basis of the research. They can also substitute the macro perspective, combining the social community perspective with the micro theory of rational behavior to predict the future trend of cyberbullying.

## References

[1] Doane, A.N., Pearson, M.R., & Kelley, M.L. Predictors of cyberbullying perpetration among college students: An application of the theory of reasoned action. Computers in Human Behavior, 2014, 36: 154-162.

[2] Ho, S.S., Chen, L., Ng, A. P.Y. Comparing cyberbullying perpetration on social media between primary and secondary school students. Computers & Education, 2017, 109: 74-84.

[3] DeSmet, A., Rodelli, M., Walrave, M., Portzky, G., Dumon, E., & Soenens, B. The moderating role of parenting dimensions in the association between traditional or cyberbullying victimization and mental health among adolescents of different sexual orientation. International Journal of Environmental Research and Public Health, 2021, 18(6), 2867.

[4] Chen, D.B. A review of research on cyberbullying in China in recent years. 2021, (2): 63-66.

[5] Gao, W.L. A study on the status quo of college students' understanding and use of cyberbullying language. Journal of News Research, 2016, 7(4): 39.

[6] Nie, H.S. The psychological causes and countermeasures behind cyberbullying. Frontiers of Social Sciences, 2023, 12(12): 7525-7529.

[7] Ajzen, I. The theory of planned behavior, Organizational Behavior and Human Decision Processes, 1991, 50(2): 179-211.

[8] Guo, Y., Cai, S., & Liang, F. The prevalence of cyberbullying and the association between cyberbullying emotional exhaustion and perception of collective efficacy among Chinese college students. Journal of Affective Disorders, 2024: 145–151.

[9] You, S.K., Lim, S.A. Longitudinal predictors of cyberbullying perpetration: Evidence from Korean middle school students. Personality and Individual Differences, 2016, 89: 172-176.

[10] Zhan, J., Yang, Y., & Lian, R. The relationship between cyberbullying victimization and cyberbullying perpetration: The role of social responsibility. Frontiers in Psychiatry, 2022, 13: 995937.