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# What motivates people to post comments online?

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## ABSTRACT

Cyberbullying, i.e., posting malicious comments online, has been identified as a critical social issue in the online and social media context. As a way to prevent cyberbullying, it is important to promote online prosocial behavior. This study examines what motivates people to post benevolent comments as online prosocial behavior in the online context. For this purpose, we first adopt an exploratory study to identify decision factors in terms of social exchange decision making. We then undertake a main study by developing a theoretical research model based on the identified decision factors. The testing results explain what and how those explored factors affect the posting of benevolent comments online in the social media context. The study has its theoretical contribution in demonstrating the decision factors leading to the posting of benevolent comments by extending the social exchange theory. It also has its practical implications by providing guidance for promoting online prosocial behavior.

## Keywords

Online comments, Cyberbullying, Benevolent comments, Online prosocial behavior, Social exchange theory, Mixed methods

## INTRODUCTION

Cyberbullying or electronic harassment by posting malicious comments used to target only teenagers but now it targets all ages. A survey with more than 3,500 Internet users by Korea Internet and Security Agency (KISA) indicated that users across all ages experienced posting abusive comments online (48.0% of the 10s, 29.0% of the 20s, 17.4% of the 30s, 14.8% of the 40s, 11.7% of the 50s) and experienced being bullied online (64.8% of the 10s, 57.9% of the 20s, 52.1% of the 30s, 49.7% of the 40s, and 47.2% of the 50s).<sup>1</sup> Cyberbullying has thus become a serious concern for all ages.<sup>2</sup>

As cyberbullying has been identified as a critical social issue in the online and social media context, attentions have

been paid to handle and prevent cyberbullying. For example, there is a campaign named 'Help stop the stomping' in the Facebook to stop the cyberbullying.<sup>3</sup> There is another Internet campaign called as 'Sunfull,' i.e., a campaign to promote peace on the Internet (i.e., posting benevolent comments online) and counter bullying and the hateful comments that are posted online.<sup>4</sup> Despite the growing phenomenon of cyberbullying, however, there is a lack of understanding how to prevent cyberbullying and electronic harassment in the online and social media context.

Prior research on prevention of cyberbullying has merely discussed the strategies and guidance for school counselors and parents for the prevention (Beale et al. 2007; Bhat 2008; Diamanduros et al. 2008) and the creation of respect culture in a cyber world (Keith et al. 2005). Missing in the previous research is a theory-based empirical explanation of what factors lead to the prevention of cyberbullying.

As a way to prevent cyberbullying, it is essential to promote prosocial behavior in the online and social media context. This study thus aims to examine what motivates people to post benevolent comments in the social media context. Posting benevolent comments online can be viewed as social exchange behavior where individuals offer things to one another without negotiating terms and knowing whether or when the recipient will reciprocate (Molm et al. 2000). Hence, this study adopts social exchange theory to examine the posting of benevolent comments online.

This research uses a mixed methods approach of an exploratory qualitative study followed by a confirmatory quantitative study. In this way, this study is expected to advance the theoretical understanding of the posting of benevolent comments and its drivers in the online context. It also contributes to research by extending the application of social exchange theory, while adding to the literature on cyberbullying. Moreover, the study can inform SNS providers on how to prevent cyberbullying and promote prosocial behavior and the relevant culture in the online context.

<sup>1</sup> <http://www.kisa.or.kr/eng/main.jsp>

<sup>2</sup> <http://www.news.com.au/technology/cyber-bullying-against-adults-a-victim8217s-story/story-e6frfro0-1226699354782>,  
<http://www.king5.com/news/consumer/Adult-women-also-engaging-in-cyberbullying--92988949.html>

<sup>3</sup> <http://www.niot.org/blog/cyberbullying-campaigns-using-tools-good>

<sup>4</sup> <http://www.sun-full.org>

## PROSOCIAL BEHAVIOR AND POSTING BENEVOLENT COMMENTS ONLINE

Prosocial behavior means an individual's social responsiveness for benefiting others (Barton 1986) and it involves a series of behaviors that can bring about positive outcomes for society (Bar-Tal 1976) including sympathy, charity, donating, exchange, kindness, altruism, sharing, and helping. Prosocial behavior is basically an altruistic behavior that an actor offers benefit or help for an individual or a group without expecting any external compensation (Mussen and Eisenberg 1977). Extended from this concept, online prosocial behavior is a voluntary behavior intended to benefit others, including an individual and a group, in the online context. Hence, posting benevolent comments online is a type of online prosocial behavior. The behavior of posting benevolent comments is an act of voluntarily providing information or emotional support such as encouragement, compliment, consolation via posts or comments to benefit or help an individual or a group within an online community (Bar-Tal 1976; Mussen and Eisenberg 1977).

Prosocial behavior represents a social exchange, i.e., reciprocal acts of benefits in which individuals offer help, advice, approval, or rewards to one another without negotiation of terms and without knowledge of whether or when the other will reciprocate (Molm et al. 2000). Examples of social exchange include knowledge contribution in the context of knowledge management system (Kankanhalli et al. 2005). Similar to knowledge contribution, posting benevolent comments is considered as a social exchange because it helps establish relations with others online yet the behavior is voluntary without negotiation of terms or expectation of compensation. This study therefore employs social exchange theory as the theoretical lens.

## QUALITATIVE STUDY

### Research Method

Based on the mixed method guidelines with the developmental purpose (Venkatesh et al. 2013), we first conducted an exploratory qualitative study. This study conducted interviews with 57 people who had posted a benevolent comment on Internet forums before. The interviews were conducted one-on-one in an informal environment and lasted from 10 to 20 minutes each. Interviewees were asked to list tangible and intangible benefit and cost factors that affected their online posting and were presented additional questions to clarify the factors.

### Data Analysis and Results

In analyzing the response contents, a total of 159 responses from 57 interviewees were categorized and conceptualized into main concepts. After initial coding, similar responses were grouped into concepts which were intended to evolve

into theoretical constructs. The inter-rater agreement scores averaged 0.82, while Cohen's Kappa scores averaged 0.81.

It shows the overall occurrence of 7 concepts in the benefit category and 2 concepts in the cost category. Among the 7 concepts in the benefit category regarding the decision making in online posting, self-presentation occurred with a frequency of 41 (34.2%), followed by pleasure with a frequency of 34 (28.3%), social contribution with a frequency of 17 (14.2%), companionship with a frequency of 16 (13.3%), reputation with a frequency of 6 (5.0%), monetary rewards with a frequency of 4 (3.3%), and reciprocity with a frequency of 2 (1.7%). Among the 2 concepts in the cost category, social anxiety occurred with a frequency of 36 (92.3%), followed by effort with a frequency of 3 (7.7%).

## QUANTITATIVE STUDY

### Theoretical Framework

Based on the exploratory study, we developed the theoretical framework (see Figure 1). Although the qualitative study identified nine factors, we keep only those factors with the response frequency of 10 or more than that. We therefore adopt four benefit factors (online self-presentation, pleasure, online social contribution, and online social companionship) and one cost factor (online social anxiety) from the coding results in developing the theoretical framework. Some of the factors are renamed by considering the research context, i.e., online. In addition to those explored benefit and cost factors, we propose a new factor, the net value of benevolent comment. Net value is perceived as an assessment on the rate of the benefit and cost of a behavior in social exchange theory (Gupta and Kim 2010).

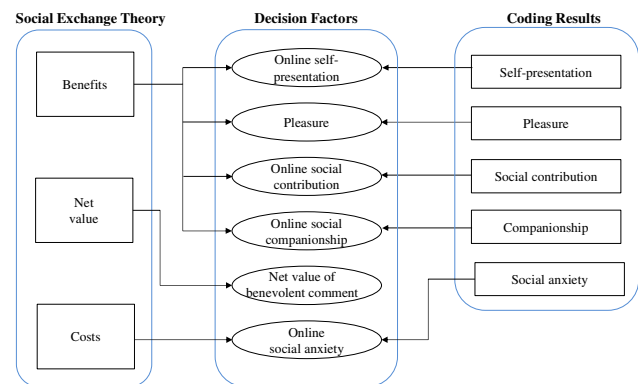


Figure 1. Theoretical Framework

### Hypotheses

Based on the theoretical framework, we developed hypotheses. Benevolent comment intention means *the degree to which one believes that one will engage in posting benevolent comment in the selected online community* (Lin 2007). As the core variable representing

the main ideas of social exchange theory, the net value of benevolent comment means *an individual's assessment of the ratio of perceived benefit relative to perceived cost of posting benevolent comment in the selected online community* (Gupta and Kim 2010; Sirdeshmukh et al. 2002). In social exchange theory, the net value of exchange is presumed as an assessment of the ratio of perceived benefit relative to perceived cost of a behavior (Gupta and Kim 2010; Kim et al. 2013). Hence, the benevolent comment net value is produced by the perceived benefit and cost of the users in the Internet forums.

*Hypothesis 1 (H1): The net value of benevolent comment has a positive impact on the benevolent comment intention.*

Online social contribution means *the degree to which one's posting of benevolent comment is socially valuable to the selected online community* (Keyes 1998). By posting a benevolent comment on the Internet forums, the users think that they are making a social contribution as a vital member of the online community, and social benefit from the kind of belief. In line with this, in the context of the Internet forums, in case when the users perform a valuable behavior to develop the community or gain a belief that they can contribute to it, the users are expected to positively influence the intention of the behavior.

*Hypothesis 2 (H2): Online social contribution has a positive impact on the benevolent comment intention.*

Pleasure means *the perceived enjoyment obtained from posting benevolent comment in the selected online community* (Kankanhalli et al. 2005). Altruism exists when people help others and feel the intrinsic enjoyment without being paid (Smith 1981) and an altruistic behavior brings about pleasure in prosocial behavior (Kankanhalli et al. 2005; Lin 2007). Therefore, pleasure derived from an altruistic motivation of the users in the Internet forums is expected to positively influence the benevolent comment intention.

*Hypothesis 3 (H3): Pleasure has a positive impact on the benevolent comment intention.*

Social benefit is the utility based on the ability to enhance one's social well-being, e.g., social status and relationship. Online social contribution is thus perceived as a social benefit from the poster's perspective. As the social benefit increases, the overall net value should increase. Online social contribution should therefore increase the net value of benevolent comment.

*Hypothesis 4 (H4): Online social contribution has a positive impact on the net value of benevolent comment.*

Hedonic (affective) sources of net value have long been recognized as affecting the value (Kim et al. 2007). As the benefits increase in comparison with costs, the overall net value increases. Hence, the benefit of pleasure obtained by posting a benevolent comment will have a positive effect on

the net value of benevolent comment which is online prosocial behavior.

*Hypothesis 5 (H5): Pleasure has a positive impact on the net value of benevolent comment.*

Online self-presentation means *the extent to which an individual presents his or her preferred images through posting benevolent comment in an online community of interest* (Kim et al. 2012). People have a tendency to present their identities in a preferred manner to others (Schau et al. 2003). As people perceive higher benefits from online self-presentation, the overall net value of benevolent comment posting should therefore increase.

*Hypothesis 6 (H6): Online self-presentation has a positive impact on the net value of benevolent comment.*

Online social companionship means *the level of online friendship gained from the posting of benevolent comment in the selected online community* (Cohen et al. 2000; Rook 1987). Since the online context provides a very limited discussion environment for activities like exchanging comments on the Internet forums done together among friends (Mesch 2005), online social companionship can be especially helpful for those who suffered from social difficulties offline and alleviate their loneliness or social anxiety (Amichai-Hamburger et al. 2013). Therefore, the benefit of online social companionship should increase the overall net value of benevolent comment.

*Hypothesis 7 (H7): Online social companionship has a positive impact on the net value of benevolent comment.*

Online social anxiety means *the level of anxiety resulting from the posting of benevolent comment, e.g., the prospect or presence of negative social evaluation of the comment, in the selected online community* (Schlenker and Leary 1982). Social anxiety stands for an anxiety expressed as a result of an individual evaluation that was given or is to be given in a real or imaginary social situation (Schlenker and Leary 1982). Online social anxiety as psychological cost should therefore decrease the overall net value of posting benevolent comment.

*Hypothesis 8 (H8): Online social anxiety has a negative impact on the net value of benevolent comment.*

## Research Method

We developed the survey instrument by adopting existing validated scales wherever possible. The measurement items were anchored on seven-point Likert scales (1 = strongly disagree, 7 = strongly agree).

This study conducted an online survey of Internet forum users. The study obtained 205 valid responses. There were 103 female (50.25) and 102 (49.8%) male respondents. The average age of respondents was 32.8 years (standard deviation = 11.7): 26 respondents in the 10s (12.7%), 70 respondents in the 20s (34.1%), 43 respondents in the 30s (21.0%), 38 respondents in the 40s (18.5%), 28 respondents

in the 50s or above (13.7%). Those respondents join and use several Internet forums, such as Nate Pann (51.2%), Daum Agora (28.3%), SLR Club (5.4%), PAXNet (4.4%), Today's Humor (2.0%), People Using Mac (2.0%), and others. Each respondent visits the selected Internet forum 8.85 times per week on average (standard deviation = 17.12).

## Data Analysis and Results

This study first conducted a confirmatory factor analysis using Smart PLS 2.0 to validate the measurement model. The standardized path loadings were all significant and greater than 0.7. The average variance extracted (AVE) for each construct was greater than 0.5. The composite reliability (CR) and Cronbach's  $\alpha$  for all constructs exceeded 0.7. The convergent validity of the measurement instrument was thus supported. Also, discriminant validity of the instrument was established.

The hypothesis testing results indicate that *the net value of benevolent comment net value* (H1), *online social contribution* (H2), and *pleasure* (H3) have significant effects on the *benevolent comment intention*, explaining 57 percent of its variance. The results also indicate that *online social contribution* (H4), *pleasure* (H5), and *online social anxiety* (H8) have significant effects on the *net value of benevolent comment*, explaining 44 percent of its variance. However, we did not find significant effects of *online self-presentation* (H6) and *online social companionship* (H7) on the *net value of benevolent comment*. Therefore, H6 and H7 were not supported. We further tested multicollinearity. The testing results with variance inflation factors (VIF) and condition index showed that multicollinearity is not likely to be a concern in this study.

## DISCUSSION AND IMPLICATIONS

### Discussion of Findings

This study, consisting of an exploratory qualitative study and a confirmatory quantitative study, has several important findings. The results of the empirical test in the main study show that three factors (net value of benevolent comment, online social contribution, and pleasure) have significant effects on the benevolent comment intention. The most notable finding is that the net value of benevolent comment is a main motivator leading to the posting of benevolent comments online. This finding agrees with the social exchange theory (Molm 1997) that explains the overall assessment of social exchange behavior (i.e., posting benevolent comments) based on cost-benefit analysis determines the behavior.

Next finding is that three factors (online social contribution, pleasure, and online social anxiety) have significant effects on the net value of benevolent comments. Net value is assessed based on the comparison between benefits and costs (Blau 1964; Molm et al. 2000). Among the explored

benefit factors, online social contribution and pleasure are significant to the net value. Online social contribution and pleasure represent benefits to the social group and the individual respectively. Thus, social benefit (i.e., online social contribution) and personal benefit (i.e., pleasure) increase the perception of net value. As the cost factor, online social anxiety has a negative effect on the net value of benevolent comment. This finding explains that social anxiety takes a role of psychological cost in determining the overall value of posting comments.

However, the main study did not find a significant effect of online self-presentation on the net value of benevolent comment. This could be due to the fact that self-exposure level is quite low in online posting so that it is hard to feel value by projecting their identity. Actually, people tend to present them only using nickname or ID in many cases. Another possible reason is that online self-presentation is likely to affect the net value indirectly through the perception of pleasure. A post-hoc analysis shows that pleasure mediates the relationship between self-presentation and the net value (t-value = 14.00,  $p < 0.001$ ).

The main study also did not find a significant effect of online social companionship on the net value. The communication environment in the online context is very restrictive in most cases. The characteristics of non-face-to-face interaction make it difficult to form social companionship in such online context (Amichai-Hamburger et al. 2013). Especially, it is not easy to form or strengthen relationships only in the online context, such as Internet forums because of the restrictive communication environment.

### Implications for Research and Practice

This study offers several key implications for research, especially because it is among the first to comprehensively examine the decision factors in leading to the posting of benevolent comments online through the lens of social exchange theory by adopting a mixed methods approach. This study thus adds value to the literature by conceptualizing benevolent comment posting as online prosocial behavior in relation to the prevention of cyberbullying and examining it empirically.

This study adopted mixed methods based on the application of social exchange theory (Blau 1964; Molm et al. 2000). This study advances the theoretical understanding of benevolent comment posting and its drivers in the online context.

From a practical perspective, this study has implications for promoting prosocial behavior (i.e., posting benevolent comments) as a way to prevent cyberbullying and create new culture in a cyber world. This study informs social media and SNS providers on how to promote prosocial behavior in terms of benevolent comment posting. Specifically, those providers should consider the four factors (net value of benevolent comment, online social

contribution, pleasure, and online social anxiety) that motivate people to post benevolent comments online.

This study suggests that SNS providers should understand that online users assess the overall net value of benevolent comment posting based on the comparison between relevant costs and benefits. SNS providers should therefore work on improving the net value of such postings.

This study also informs that one psychological cost factor, online social anxiety, decreases the net value. People worry about how others respond to their benevolent comment postings online. SNS providers can identify those who post abusive comments frequently as responses to others postings. Based on the list of such abusive commenters, SNS providers can consider limiting their postings. Overall, this study takes an important step in examining the posting of benevolent comments as online prosocial behavior as a way to prevent or reduce cyberbullying. We hope that more effort will be devoted to this important research area and that the proposed model will serve as a useful guide for such future work.

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