

# Behind the Digital Mask: Unveiling the Drivers of Anonymous Negative Word-Of-Mouth in Education

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**Abstract:** This study investigates factors influencing anonymous negative electronic word-of-mouth (NeWOM) regarding school services among Gen Z on social media. Grounded in Protection Motivation Theory (PMT) and Spiral of Silence Theory (SoS), the research examines the roles of fear of negative evaluation (FNE), response efficacy (RE), perceived opinion support (POS), self-efficacy (SE), threat severity (TS), online privacy concerns (OPC) and Vulnerability (VU). A quantitative approach was employed, utilizing PLS-SEM analysis with data from 478 respondents. The findings demonstrate that online anonymity significantly amplifies NeWOM, with fear of negative evaluation (FNE) and online privacy concerns (OPC) being the most influential factors. In contrast, perceived opinion support (POS) and self-efficacy (SE) were found to be statistically insignificant. Additionally, the study reveals that Vulnerability (VU) positively moderates the relationship between online privacy concerns (OPC) and NeWOM, highlighting the role of perceived risk in shaping anonymous online behavior. These findings highlight the psychological and social drivers of anonymous NeWOM and emphasize the need for proactive reputation management and transparent communication in education.

**Keywords:** anonymous; negative word-of-mouth; school services, students; genZ; Protection Motivation Theory; Spiral of Silence Theory

## I. INTRODUCTION

The rapid expansion of social media has transformed communication dynamics, particularly in Vietnam, where platforms such as Facebook (72.7 million users), TikTok (67.72 million users), and YouTube (63 million users) have seen exponential growth (Digital 2024, 2024). Research confirms that negative electronic word-of-mouth (NeWOM) spreads more rapidly than positive information due to its heightened emotional intensity and higher engagement levels (Kim et al., 2016; Cheung & Thadani, 2012). In particular, anonymous NeWOM has gained prominence as users leverage anonymity to express dissatisfaction without social or legal repercussions (Christopherson, 2007; Lapidot-Lefler & Barak, 2012).

Within the education sector, anonymous negative word-of-mouth poses a growing challenge, impacting institutional reputation and student perceptions. Gen Z students, as active digital users, frequently utilize anonymous posting features on social media to share criticisms about school services, administration, and academic experiences (An Tú, 2023). The ability to remain anonymous allows for uninhibited expression, leading to stronger negative sentiments and potential reputational risks for educational institutions (Be & Tuyen, 2024; Sỹ et al., 2017). Additionally, privacy concerns and fear of judgment further drive students toward anonymous platforms, making this a critical area of study in digital consumer behavior.

Despite extensive research on NeWOM in restaurant and hotel services, ... (Sukhu & Bilgihan, 2023; Zhang et al., 2014), studies on anonymous negative discourse in education services remain limited. This study extends prior research by offering a comprehensive model that captures the interplay between psychological, social, and technological influences on anonymous NeWOM behavior among Gen Z in the educational sector. By examining the impact of fear of negative evaluation (FNE), response efficacy (RE), self-efficacy (SE), perceived opinion support (POS), threat severity (TS), online privacy concerns (OPC) and Vulnerability (VU), this research highlights how anonymity shapes digital interactions and amplifies negative word-of-mouth. Furthermore, the findings provide practical recommendations for

educational institutions to develop digital engagement strategies, address student concerns, and implement more effective reputation management practices in an era where online discourse significantly impacts institutional credibility.

## **II. LITERATURE REVIEWS**

### **2.1. Anonymous negative word of mouth behavior**

When consumers encounter negative experiences throughout their decision-making journey, it motivates them to complain privately to family, friends, and colleagues. Richins (1983) referred to this phenomenon of interpersonal communication as 'negative word-of-mouth' (NWOM). According to Singh (1988), NWOM occurs when consumers share their dissatisfaction with others, including friends and members of their social network. Another perspective from the study of Grégoire & Fisher (2008) suggests that the spread of NWOM (e.g., customers' efforts to damage a company's reputation among family and acquaintances) can be considered an indirect form of retaliation. By sharing negative experiences, customers hope to harm the company's reputation and encourage others to avoid using its services.

In the digital era, the development of the Internet has driven consumers to share their negative experiences about a specific brand not only with friends and relatives but also on various online platforms such as Facebook, Instagram, Twitter, WhatsApp, review websites, and blogs. Consequently, NWOM has evolved into electronic negative word-of-mouth (e-NWOM) (Grégoire et al., 2009). Hennig-Thurau et al. (2004) defined e-NWOM as any negative statement made by potential, current, or former customers about a product or company and transmitted to a large audience via the Internet.

Research related to anonymity began to attract attention in the early 2000s, as researchers examined and evaluated its impact on various specific behaviors. Particularly, the growth of the Internet as a communication medium has sparked interest among researchers in fields such as communication, social psychology, and industrial-organizational psychology to investigate issues related to social behavior in this unique digital context. A key focus has been the increasing role that anonymity seems to play in computer-mediated communication (CMC) (Christopherson, 2007).

Internet anonymity has become a controversial issue; it protects freedom of speech but hinders accountability, facilitating crimes or harassment. Some scholars view online anonymity as a fundamental freedom that should be protected from government intervention and corporate interests (Castells, 2002; Lessig, 2009). Meanwhile, others argue for stronger online identification measures to protect vulnerable groups, such as minors, from exploitation, antisocial behavior, and fraud (Citron, 2014). (Christopherson, 2007) defined anonymity as a state in which an individual cannot be identified or singled out by others, preventing them from being judged, criticized, or punished.

Previous studies have been limited in researching the specific behavior of anonymous interactions on social media. Based on a review of prior research, NWOM, particularly in the context of anonymity, remains an emerging and underexplored area. Even more limited is the research on anonymous negative word-of-mouth (ANWOM). ANWOM on social media refers to consumer behavior in reacting to negative brand experiences on social networking platforms while maintaining an unidentified identity.

### **2.2. Background theory**

#### **2.2.1. Spiral of silence Theory**

The Spiral of Silence Theory (SoS) is one of the most widely tested theories in communication science (Glynn et al., 1997; Matthes et al., 2018; Preiss et al., 2006; Scheufle & Moy, 2000) for meta-analysis and evaluation. The theory posits that an individual's willingness to express an opinion on a particular topic is primarily determined by social cognitive mechanisms. Noelle-Neumann (1974) introduced this theory as an attempt to explain the willingness to express opinions based on various social and psychological approaches to interpreting thought and behavior (Athanesyan & Ter-Harutyunyan, 2017; Arthur et al., 2021). The theory emphasizes that people continuously monitor their social environment, or the "climate of opinion," to identify prevailing viewpoints and adjust their behavior accordingly (Noelle-Neumann, 1991). When individuals perceive that their opinion is not supported by the majority, they may choose to remain silent or modify how they express their opinion in public, primarily due to the fear of social isolation (Petrič & Orehek, 2024).

This study extends the SoS theoretical framework for the first time to explain an indirect and anonymous form of opinion expression. Specifically, instead of remaining completely silent due to fear of isolation, individuals may choose anonymous negative word-of-mouth (ANWOM) as an alternative mechanism to minimize social risk. The

characteristics of social media, anonymity and access to a consensus-seeking community, help decrease the fear of isolation, thereby encouraging individuals to express their views in an indirect manner.

### **2.2.2. Protection motivation theory**

The Protection Motivation Theory (PMT) is one of the most useful models for predicting protective behaviors in health behavior change research aimed at promoting preventive actions (Estebarsari et al., 2023). PMT has also been proposed to identify factors leading to the management or coping behaviors in response to health threats (Rogers, 1975; Balla & Hagger, 2025). Additionally, PMT has proven to be a valuable theoretical framework for understanding how individuals make decisions regarding security behaviors (Robert & France, 2015). In the field of information security (infosec) behavior research, PMT is also considered one of the most widely applied theories (Crossler et al., 2014; Johnston et al., 2015; Siponen et al., 2024).

Therefore, in examining the motivations behind anonymous negative word-of-mouth (ANWOM) behavior in this study, the authors employ PMT. This marks the first time PMT has been applied in research related to word-of-mouth behavior in general and to ANWOM behavior in particular.

### **2.3. Hypothesis development**

#### **2.3.1. Fear of negative evaluation and anonymous negative word of mouth**

Fear of negative evaluation was first defined by Watson & Friend (1969) as "apprehension about others' evaluations, distress over their negative evaluations, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively". According to the spiral of silence theory, originally developed by Noelle-Neumann (1974), individuals tend to remain silent when they perceive that their opinions are not supported by the majority, as they fear social isolation (Gearhart & Zhang, 2014). Moreover, more recent studies on the spiral of silence have also focused on individuals' self-monitoring ability, which refers to the extent to which a person actively observes, adjusts, and controls their public image (Snyder, 1979). High self-monitors tend to regulate their behavior to maintain their social image, which in turn influences their willingness to express opinions (Hayes et al., 2005, 2010). When they perceive that their views are not widely accepted, instead of remaining silent, they may modify how they express their opinions to avoid social isolation (Petrič & Orehek, 2024). Marie and Pierre (2002) also argued that individuals with a high fear of negative evaluation are often concerned that complaining may negatively affect their social relationships. As a result, they tend to complain less or engage less in negative word-of-mouth. However, when they feel the need to express dissatisfaction, they are more likely to opt for anonymous communication as a way to minimize the risk of social isolation. Thus, we hypothesize:

H1: Fear of negative evaluation positively influences anonymous negative word-of-mouth.

#### **2.3.2. Perceived opinion support and fear of negative evaluation**

As described by Dalisay et al. (2012), refers to the extent to which an individual perceives that their opinion on a given issue aligns with the opinions of others. According to the spiral of silence theory, if an individual perceives their viewpoint as being in the minority or lacking widespread societal support, they are less likely to express their true thoughts in public due to fear of social isolation. Kushin et al. (2019) emphasized that in the context of social media - where opinions are publicly visible and engagement indicators such as likes and comments provide immediate feedback - individuals heavily rely on these cues to assess the level of opinion consensus. When individuals perceive strong support for their views, they experience increased confidence, which in turn reduces their fear of negative evaluation. Conversely, a lack of support may heighten such fears. Rössler & Schulz (2013) found that individuals who believe they belong to the majority feel safer expressing their opinions on social media. In other words, when an individual perceives that their opinion aligns with the majority, they are more likely to feel secure and willing to participate in discussions without excessive concern about potential negative consequences (Shin et al., 2022). Based on these findings, we hypothesize:

H2: Perceived opinion support negatively influences fear of negative evaluation.

#### **2.3.3. Online privacy concerns and anonymous negative word of mouth**

Privacy concern reflects a user's concern regarding information disclosure (Zhou & Li, 2014). In the context of e-commerce, privacy concerns escalate when consumers feel uncertain about who is collecting their personal data, how it is being processed, and for what purposes (Nowak & Phelps, 1995; Lanier & Saini, 2008). These feelings of insecurity may lead individuals to avoid disclosing personal information to marketers (Phelps et al., 2000). Based on protection motivation theory, individuals tend to assess the risks and benefits of certain behaviors in order to make self-protective decisions. When applied to the online privacy context, individuals with higher levels of privacy concerns are more likely to adopt proactive privacy-protective behaviors (Larose & Rifon, 2007; Rifon et al., 2007). Furthermore, the concept of anonymity is closely related to privacy. According to Christopherson (2007) anonymity is defined as the inability of others to identify or attribute an individual's personal identity. Therefore, this study considers privacy concerns as a protective motivation that triggers coping behaviors to address perceived privacy risks. Thus, we hypothesize:

H3: Online privacy concerns positively influence anonymous negative word-of-mouth on social media.

#### **2.3.4. Threat severity and anonymous negative word of mouth**

Perceived threat severity refers to an individual's belief about the seriousness of a threat they are facing (Rogers, 1975; Witte, 1992) or their perception of the potential harm that may occur when encountering a risky situation (Salleh et al., 2012). According to protection motivation theory, when individuals assess a threat and perceive it as highly risky, they tend to increase their protective motivation and engage in defensive behaviors to minimize the threat (Prentice-Dunn & Rogers, 1986; Rogers, 1975). Applying this theory to anonymous negative word-of-mouth behavior on social media, individuals who recognize the potential negative consequences of negative word of mouth—such as the risk of public backlash (Dutta et al., 2020), damage to their social image (Qiu et al., 2018), personal retaliation, or legal repercussions (Rains, 2007) - may view anonymity as a protective mechanism. Anonymity enables them to share negative information without facing personal accountability or other adverse consequences (Lapidot-Lefler & Barak, 2012; Forestal & Philips, 2020). Furthermore, in the context of social media, when users perceive that they are exposed to severe threats - such as privacy violations, online surveillance, personal data collection, or unauthorized information sharing with third parties (Salleh et al., 2012) - they are likely to strengthen their protective motivation to prevent potential negative outcomes. In this case, a higher perception of threat severity on social media drives individuals to engage in risk-prevention behaviors, such as anonymity, to mitigate adverse consequences and protect their privacy. Hence, we hypothesize:

H4: Perceived threat severity positively influences anonymous negative word-of-mouth (NeWOM) on social media.

#### **2.3.5. Self-efficacy and anonymous negative word of mouth**

In the context of research on behaviors related to protection motivation, self-efficacy refers to individuals' beliefs in their ability to perform recommended actions (Maddux & Rogers, 1983; Rogers, ; Witte, 1992). Specifically, it involves assessing one's capability to implement coping mechanisms in response to a threat (Mousavi et al., 2020). Accordingly, during the coping appraisal process, individuals tend to engage in protective behaviors when they believe they have sufficient ability to adopt those behaviors. For instance, when a user considers whether to follow recommendations for preventing malware intrusion, even if they believe the suggested solution is effective, they will still evaluate their own ability to successfully install and operate the software (Witte, 1992). Applying these insights to the context of anonymous negative word-of-mouth, individuals engaging in negative word-of-mouth may use anonymity as a coping mechanism to mitigate potential risks. Additionally, the belief in one's ability to effectively utilize anonymous tools positively influences protection motivation, increasing the likelihood of engaging in anonymous negative word-of-mouth. Based on these findings, we hypothesize:

H5: Self-efficacy positively influences anonymous negative word-of-mouth on social media.

#### **2.3.6. Response efficacy and anonymous negative word of mouth**

Response efficacy refers to one's belief that the actions or measures will effectively reduce the threat or certain risk (Villamor et al., 2023). According to protection motivation theory, when an individual perceives a protective measure as highly effective, they are more strongly motivated to engage in that behavior (Villamor et al., 2023). Similarly, Bolkan, (2018) suggests that if an individual recognizes the existence of an effective method to protect themselves from a perceived threat and believes they have the capability to take the necessary actions to minimize risks, they are more

likely to adopt protective measures. Therefore, if an individual believes that anonymity features can help them avoid risks associated with identity exposure when spreading negative information on social media, they are more likely to utilize such features as a self-protection mechanism. Hence, we hypothesize:

H6: Response efficacy positively influences anonymous negative word-of-mouth on social media.

**2.3.7. Vulnerability and anonymous negative word of mouth**

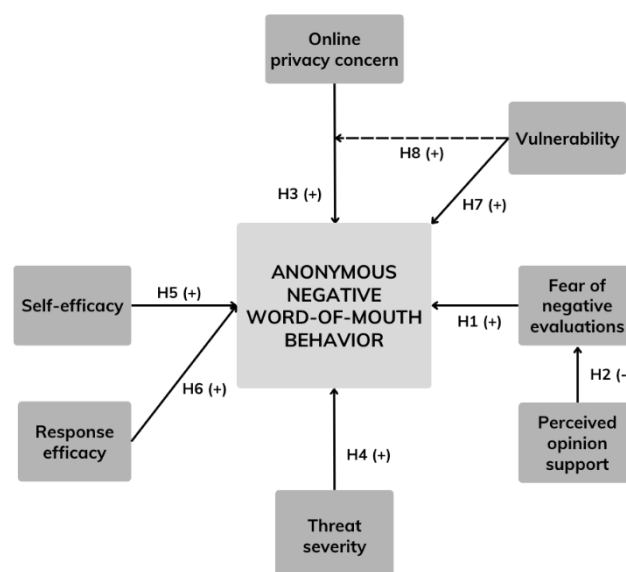
Online vulnerability is defined as an individual's capacity to experience detriments to their psychological, reputational, or physical wellbeing (Davidson & Martellozzo, 2013) as a result of the experiences that they may encounter whilst engaging in online activities (Buglass et al., 2017). Based on protection motivation theory, a high perception of threat severity and vulnerability motivates individuals to engage in risk-prevention behaviors (J. Kim et al., 2022). In the context of negative word-of-mouth regarding school services, when individuals perceive that expressing negative opinions could lead to adverse consequences and simultaneously feel vulnerable to negative reactions, they tend to seek protective measures to minimize risks. In such cases, online anonymity serves as an effective coping mechanism, allowing individuals to express their views safely without facing direct negative repercussions. Concealing one's identity helps reduce the risk of backlash or criticism, especially in sensitive social contexts or when discussing controversial topics, thereby enabling individuals to voice their opinions without concern for personal consequences (Verhagen et al., 2013). Therefore, higher vulnerability to external stressors increases individuals' likelihood of utilizing anonymity when engaging in negative word-of-mouth about an organization.

H7: Online vulnerability positively influences anonymous negative word-of-mouth on social media.

Individuals with higher levels of vulnerability tend to perceive threats more acutely and severely, leading them to adopt more self-protective measures (Rippetoe & Rogers, 1987). This implies that if an individual is concerned about privacy but has low vulnerability, they may recognize potential risks but not necessarily take immediate protective actions. Conversely, individuals with high vulnerability perceive privacy threats as having a direct negative impact on them, thereby increasing their motivation to use anonymity as a protective measure. As a result, the higher the level of vulnerability, the stronger the privacy concerns, which in turn promotes the use of anonymity as a defense mechanism to safeguard personal information.

H8: Online vulnerability positively moderates the relationship between privacy concerns and anonymous negative word-of-mouth.

We proposed a hypothesis model:



**Figure 1:Proposed Model**



### **III. RESEARCH METHODOLOGY**

#### **3.1. Research design**

This study employs a quantitative research approach to examine the factors influencing anonymous negative electronic word-of-mouth (ANWOM) regarding school services among Gen Z on social media. A cross-sectional survey design was adopted, allowing for data collection at a single point in time to analyze the relationships between the identified variables. Partial Least Squares Structural Equation Modeling (PLS-SEM) was applied to assess the hypothesized relationships, given its effectiveness in handling complex models with multiple constructs and its suitability for exploratory research.

#### **3.2. Research measurement**

The study constructs were measured using validated multi-item scales adapted from prior research. All items were measured using a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree).

Fear of Negative Evaluation (FNE) was measured by eleven items adapted from Carleton et al. (2006) to assess individuals' concerns about being judged negatively by others. For perceived opinion support (OPS), four items were adapted from Chun & Lee (2017). Online privacy concerns (OPC) was measured by five items adapted from Mousavi et al. (2020). A four-item scale adapted from Mousavi et al. (2020) was employed to measure threat severity (TS). Self efficacy (SE) and response efficacy (RS) were adapted from Mousavi et al. (2020) as well. Four items to capture vulnerability (VU) were adapted from Dyussebayeva et al. (2020). Finally, anonymous negative word-of-mouth (ANW) was captured using three items adapted from Grégoire & Fisher (2006).

The questionnaire was pre-tested with a small sample of respondents to ensure clarity, reliability, and validity before full-scale data collection.

#### **3.3. Sample collection**

In this study, the research team conducted a survey targeting individuals aged 17 to 26 who are living and working across various provinces and cities nationwide. The survey participants were selected based on their interest in anonymous negative word-of-mouth (NeWOM) behavior regarding school services. By conducting this survey, the study aims to provide a detailed understanding of the factors influencing anonymous NeWOM behavior in the context of school services.

A total of 478 survey responses were collected. However, among these responses, and 30 participants belonged to an age group outside the study's defined range and also had never engaged in anonymous negative word-of-mouth regarding school services. These responses were excluded from further analysis. The remaining 448 valid responses were retained as the final research sample, processed for data analysis, and used in the official statistical examination.

### **IV. RESULTS**

#### **4.1. Descriptive Statistics**

The descriptive statistics results indicate a significant gender disparity in the survey sample, with 63.6% of respondents being female and 36.4% male. This aligns with the trend that women tend to share negative information more frequently than men. In terms of age distribution, the 19-22 age group accounted for the highest proportion (74.11%), followed by the 23-30 age group (19.87%) and the 16-18 age group (6.03%). University students often have extensive experiences with school services, making them more likely to engage in anonymous negative word-of-mouth (NWOM), whereas high school students tend to be more risk-averse, and graduates are more inclined to provide direct feedback to the school.

Regarding educational background, the majority of respondents held a college or university degree (84.15%), followed by those with a postgraduate degree (8.5%) and high school education (7.1%), which aligns with the sample's age characteristics. In terms of social media usage, 54.5% of respondents used social media for 1-4 hours per day, 33.7% for 4-7 hours per day, while those using social media for over 7 hours per day had a lower proportion. Notably, only 2.5% of respondents spent less than 1 hour per day on social media, reflecting the characteristics of Generation Z, who are highly tech-savvy and consider social media an essential part of daily life.

**4.2. Measurement Model**

The research team assessed the reliability and validity of the measurement scale using Cronbach’s Alpha, Composite Reliability (CR), convergent validity (outer loading, AVE), and discriminant validity (HTMT). The results indicate that Cronbach’s Alpha values for all variables exceeded 0.6, ranging from 0.724 to 0.901, surpassing the threshold recommended by Robinson et al. (1991). Similarly, Composite Reliability (CR) values were all above 0.7, with composite reality (rho\_c) exceeding 0.8. These findings confirm that the measurement scale is reliable, as both Cronbach’s Alpha and CR meet the required standards.

**Table 1: Scale Reliability Assessment Table**

Factors	Cronbach Alpha	Composite reality (rho_a)	Composite reality (rho_c)
ANW	0.744	0.754	0.855
FNE	0.901	0.902	0.917
OPC	0.769	0.769	0.844
POS	0.863	0.701	0.877
RE	0.762	0.763	0.849
SE	0.724	0.728	0.845
TS	0.764	0.775	0.851
VU	0.794	0.795	0.859

The research team assessed convergent validity through Average Variance Extracted (AVE) and outer loading. The results indicate that all observed variables had outer loading values above 0.5, ranging from 0.503 to 0.70. Additionally, the AVE values for the factors ranged from 0.503 to 0.678, exceeding the 0.5 threshold recommended by Fornell and Larcker (1981). Based on these two criteria, the measurement scale is considered to have satisfactory convergent validity.

**Table 2: Average Variance Extracted (AVE)**

Factors	Average Variance Extracted (AVE)
ANW	0.664
FNE	0.503
OPC	0.520
POS	0.678
RE	0.586
SE	0.645
TS	0.590
VU	0.549

**4.3. Structural Model**

**Collinearity Statistic (VIF) - Inner VIF**

In this study, the research team examined multicollinearity using the VIF, following the recommendations of Hair et al. (2014). According to this guideline, a VIF value of 5 or higher indicates the presence of multicollinearity, which may affect the model’s stability. The analysis results show that VIF values range from 1.000 to 3.855, all of which are below the threshold of 5. This confirms that the model does not suffer from multicollinearity, ensuring the validity of the variables in the analysis.

**Hypothesis Testing**

Additionally, the research team conducted hypothesis testing using the Bootstrapping method to assess the statistical significance of the regression coefficients in the model. According to the evaluation criteria, if the p-value < 0.05, the null hypothesis (H0) is rejected, meaning the variable is statistically significant. Conversely, if the p-value > 0.05, the null hypothesis is accepted, indicating that the variable is not statistically significant. The test results, as presented in Table (...), show that 6 out of 8 hypotheses were supported.

Specifically, hypotheses H1, H3, H4, H6, H7, and H8 all have a p-value of 0.000, indicating statistically significant relationships. The beta coefficients range from 0.237 to 0.366, reflecting a moderate to strong impact of these factors on anonymous negative word-of-mouth (ANWOM) on social media. In contrast, hypotheses H2 and H5 have p-values of 0.625 and 0.498, respectively, which exceed the 0.05 significance level. As a result, they are not statistically significant and were rejected.

Moreover, the moderating role of vulnerability in the relationship between online privacy concerns and ANWOM was also confirmed. With a p-value of 0.000 and a T-value of 8.288, this relationship is statistically significant, suggesting that vulnerability plays a crucial role in moderating the effect of privacy concerns on ANWOM in online environments.

**Table 3: Hypothesis Testing**

Hypothesis	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics ( O/STDEV )	P values	
H1: Fear of negative evaluation has a significant positive effect on anonymous negative word-of-mouth on social media.	0.25	0.25	0.033	7.61	0.000	Support
H3: Online privacy concerns positively influence anonymous negative word-of-mouth on social media.	0.237	0.238	0.035	6.755	0.000	Support
H2: Perceived opinion support negatively affects the fear of negative evaluation.	0.05	0.033	0.08	0.625	0.532	Non-Support
H6: Response Efficacy has a positive impact on anonymous negative word-of-mouth on social media.	0.256	0.257	0.025	10.273	0.000	Support
H5: Self-efficacy positively affects anonymous negative word-of-mouth on social media.	0.017	0.017	0.025	0.678	0.498	Non-Support
H4: Threats severity has a positive impact on anonymous negative word-of-mouth on social media.	0.346	0.346	0.032	10.873	0.000	Support



H7. Vulnerability positively influences anonymous negative word-of-mouth on social media.	0.31	0.31	0.033	9.323	0.000	Support
H8. Vulnerability positively moderates the relationship between online privacy concerns and anonymous negative word-of-mouth on social media.	0.361	0.357	0.044	8.288	0.000	Support

**V. DISCUSSION**

**Fear of negative evaluation**

With a beta coefficient of 0.250, fear of negative evaluation is a significant factor driving anonymous NeWOM among Gen Z. As a generation highly engaged in digital spaces, Gen Z values community acceptance and fears public judgment. The anonymity of social media provides a safe outlet for expressing dissatisfaction without facing criticism. This fear often leads individuals to be less confident and hesitant in sharing their opinions openly, leading them to choose the least risky way to share their concerns. This behavior is particularly evident in academic settings, where students fear repercussions from professors or social isolation from peers if they voice concerns publicly.

**Perceived opinion support**

The hypothesis testing results show that perceived opinion support is not statistically significant in influencing anonymous NeWOM, with a p-value of 0.625 and a beta coefficient of 0.05. This suggests that Gen Z may still engage in negative word-of-mouth behavior regardless of whether they perceive their opinions as widely supported.

**Online privacy concerns**

The hypothesis test result shows that online privacy concerns positively influence Gen Z’s anonymous NeWOM behavior, as indicated by the beta coefficient of 0.326. Thus, individuals who are more worried about their online privacy tend to use anonymity to express dissatisfaction with services. Growing up in the digital era, Gen Z is highly aware of data security risks and prioritizes protecting their privacy. Studies suggest that trust in digital platforms significantly affects online engagement. When individuals feel their data is at risk, they are more likely to utilize anonymous features to voice concerns. The fear of data exploitation and online surveillance further reinforces their preference for anonymous expression of dissatisfaction.

**Threat severity**

The research findings show that perceived threat severity is the most important factor that positively affects anonymous NeWOM behavior, with a beta coefficient of 0.346. When Gen Z perceives potential risks associated with publicly criticizing their institutions, they opt for anonymous communication to avoid negative consequences. In academic settings, students fear disciplinary actions or damage to their reputation if their complaints are traced back to them. The fear of social backlash also contributes to the preference for anonymous methods to voice dissatisfaction safely.

**Self-efficacy**

The hypothesis test result indicates that self-efficacy does not have a significant impact on Gen Z’s anonymous NeWOM, as shown by the beta value of 0.017. This suggests that regardless of an individual’s confidence in using anonymous online tools, they may still engage in NeWOM due to other underlying motivations. Given Gen Z’s familiarity with technology and digital platforms, accessing anonymous features does not require advanced skills. The widespread availability of anonymous posting options on social media allows even less tech-savvy users to participate in anonymous NWOM without difficulty.

**Response efficacy**

The result shows that response efficacy significantly influences NeWOM behavior, as reflected in beta coefficient of 0.256. When Gen Z perceives that anonymity successfully protects them from negative consequences, they are more likely to engage in anonymous NeWOM. Anonymity ensures that individuals can share their dissatisfaction without fear of personal repercussions, reinforcing their willingness to participate in negative discourse about academic services.

**Vulnerability**

The study finds that vulnerability is the second significant factor influencing Gen Z’s anonymous NeWOM, with a beta coefficient of 0.310. Thus, individuals who feel emotionally or socially vulnerable are more likely to use anonymity to engage in negative word of mouth behaviors. The main subjects of this study belong to Gen Z, the generation with the lowest stress tolerance and highest vulnerability among all generations. Furthermore, this generation is also highly knowledgeable about technology and social media. This enables them to flexibly use anonymity features and methods

to protect themselves when expressing negative personal opinions without fear of social repercussions. Furthermore, vulnerability moderates the relationship between online privacy concerns and anonymous NeWOM on social media, as indicated by the beta coefficient of 0.361. This means that the relationship between online privacy concerns and anonymous negative word-of-mouth will be stronger in the presence of vulnerability. Students who feel concerned about online privacy are naturally cautious in sharing personal information. When combined with high vulnerability, this concern intensifies, making them more hesitant to express opinions under their real identity. In this case, anonymous negative word-of-mouth acts as a defense mechanism, allowing them to voice dissatisfaction without risking privacy breaches or unwanted consequences.

## **VI. CONCLUSION**

### **6.1. Conclusion**

This study yielded three main findings. First, it clarified the concept of Gen Z's anonymous negative word-of-mouth on social media and identified its influencing factors, forming the basis for a proposed research model on Gen Z's NWOM behavior on social media regarding educational services. Second, it developed a structured research framework to examine the key determinants driving Gen Z's anonymous NWOM in the digital environment, contributing to the theoretical understanding of Gen Z's behavior in digital spaces and emphasizing the relationship between privacy concerns and anonymous negative word-of-mouth behavior. Lastly, the study determined that the strongest influence on anonymous NWOM behavior is threat severity, followed by vulnerability, response efficacy, fear of negative evaluation, and online privacy concerns. Furthermore, this research is the first to apply the Protection Motivation Theory (PMT) to the context of negative word-of-mouth, integrating both PMT and the Spiral of Silence theory to provide a comprehensive perspective on the psychological and social mechanisms underlying this behavior. These findings provide valuable insights for educational institutions to develop strategies that mitigate NWOM and foster a more transparent and communicative academic environment.

### **6.2. Suggestion**

For educational institutions, creating secure feedback channels helps limit anonymous NWOM by allowing students to express concerns without fear. Schools should also provide digital literacy training to raise awareness about online privacy risks and responsible communication. Additionally, teaching communication and emotional management skills enables students to express opinions constructively, reducing reliance on anonymous complaints. Establishing psychological support teams helps vulnerable students manage stress positively instead of resorting to NWOM. Finally, stress management education and promoting responsible social media use can prevent impulsive negative word-of-mouth behavior.

For Gen Z, using official feedback channels ensures concerns are addressed effectively instead of fueling dissatisfaction in informal online groups. Students should also propose constructive solutions rather than merely complaining to encourage institutional improvements. Understanding the consequences of anonymous NWOM and fostering open discussions can create a more positive academic environment.

For families, parents should enhance their knowledge of online safety and guide their children in responsible digital engagement. Teaching communication and emotional regulation skills helps young people express concerns appropriately. Additionally, collaboration between parents and schools strengthens feedback systems, ensuring students' voices are heard through formal channels rather than anonymous platforms.

### **6.3. Limitations and recommendations for future research**

Despite our best efforts, this study still has certain limitations.

First, while concerns about negative evaluation, online safety, and privacy are common among Gen Z, NeWOM behavior can also be influenced by other factors such as institutional characteristics (e.g., school policies, sharing culture), geographical differences, and even variations across different social media platforms. These contextual factors may lead to differences in the motivations behind NeWOM. Future research could incorporate these control variables to enhance the accuracy of behavioral analysis.

Second, this study focuses on NeWOM related to educational services, which is a subset of the broader education sector. Given the increasing importance of education and growing governmental and institutional interest in educational

reform, future research could extend its scope to the education sector as a whole to provide a more comprehensive perspective.

Third, this study primarily examines anonymous negative word-of-mouth behavior of Gen Z on social media. However, it does not explore the similarities and differences between negative and positive anonymous word-of-mouth. Future studies could analyze these two dimensions to increase the diversity of research topics and provide more nuanced insights for educational institutions.

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