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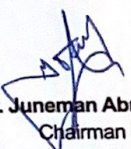
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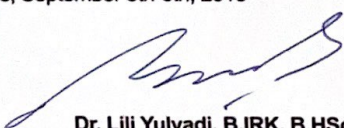
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# Cyber Incivility Perpetrator: The Influenced of Dissociative Anonymity, Invisibility, Asynchronicity, and Dissociative Imagination

S K T Febriana<sup>1</sup>, Fajrianti<sup>2</sup>

<sup>1</sup>Universitas Lambung Mangkurat, Banjarmasin, Indonesia

<sup>2</sup>Universitas Airlangga, Surabaya, Indonesia

silviakristanti@gmail.com

**Abstract.** cyber incivility is a communication behavior that violates ethics for mutual respect between one person and another in online. The impacts of cyber incivility include decreasing of satisfaction and work commitment, deliberate in job deviation until turnover intention. Unfortunately, empirical studies have so far only addressed the antecedents of cyber incivility perpetrators from the point of view of work domains and user communications user personalities, but rarely review online characteristics that cause a person to engage in social disinhibition. Therefore this study aims to prove the influence of anonymity, invisibility, asynchronicity, and dissociative imagination on cyber incivility behavior. This study uses correlational design with multiple linear regression analysis techniques. The subjects were 111 workers from various types of work (66 females, 45 males, mean of age = 32,8739, standard deviation of age = 5,73) domiciled in Indonesia recruited by purposive sampling. The result shows that anonymity, invisibility and asynchronicity have a significant effect on the presence of cyber incivility.

## 1. Introduction

The development of computer-mediated information and communication technology further facilitates the process of good communication between superiors and subordinates, colleagues, colleagues, and even consumers and clients (1-3). Nevertheless, the development of increasingly sophisticated online communication media proves that short messages, chat rooms, social networking sites, websites can also be a space for cyber incivility (4). Forms of cyber incivility behavior such as, using abusive, sarcastic, degrading language, saying something painful, not replying to messages at all, canceling meetings in a short time (5). Cyber incivility is a form of online communication that violates ethical norms with the aim of harming others (6). This concept is related to cyberbullying, the difference is if bullying is done by intimidating the target repeatedly, while the incivility is more ambiguous with low intensity (7).

Survey data shows 91% of workers have experienced cyber incivility from supervisors and co-workers, even organizations in America estimate US \$ 5 billion in health costs to overcome victims of stress due to rude e-mails (6). Regarding this phenomenon, various empirical studies have proven the impact of cyber incivility. For example, a study shows that workers who experience the threat of personal welfare through online messaging show low work commitment, job dissatisfaction, and even engage in work irregularities (6). Individuals who experience cyber incivility feel a decrease in energy and increasing negative emotions (8). Even a study shows that this condition causes increasingly severe psychological stress and continues later (9). Even worse this condition causes fatigue and absenteeism, leading to ever increasing shifting intentions (10).



Based on the prevalence and the impact, the problem is that empirical studies have only dealt with the aspects of work and personality to explain the antecedents of cyber incentive perpetrator. For example, a study using the stress tension model shows that workload conditions accompanied by innovative email treatment led to cyber incivility (11). Another study by integrating the five-factor model, Abridged Big Five Circumplex and reasoned action theory proves how the characteristics of an extroverted, anxious and inadvertent personality in acting can be involved as a cyber incentive perpetrator (2). Whereas in fact the psychological characteristics of behavior in online communication are different from behaviors that occur in the real world (12). If in traditional or face-to-face communication, the process involves verbal and nonverbal cues such as facial expressions, paralanguage, the presence of social contact cues, which allow emotions to be felt more fully by the recipient and the sender of the message. The existence of verbal and non-verbal cues causes both parties to easily make feedback to seek clarity by asking questions or repeating information directly. However, the online communication process is more text based with the absence of communication partners. As a result, this condition causes limitations in understanding non-verbal cues and delays in direct feedback (13). The absence of communication partners by not confronting each other leads to an anonymous feeling that leads to the effect of disinhibited (encouraging) someone to say and do things that will not be done when face to face (1). As a result, a person is easy to express personal feelings or do things that lead to aggressive and hostile behavior in a relaxed and more open way without feeling any obstacles (14).

Referring to the problem shows the need for further needs to explain how the process of cyber incivility is occurring and proactive actions to minimize this from the point of view of the psychological characteristics of online behavior. The phenomenon of disinhibited social behavior in online communication is caused by toxic online disinhibition (14). This disinhibited behavior refers to behaviors that are no longer controlled by concerns about self-presentation or the judgment of others so as to enable a person to apply their own views about what is not normal for them (12). As the study proves that cyberbullying behavior is strongly influenced by toxic disinhibited factors, this is not related to the duration of activity using the internet (15). Toxic online disinhibition occurs because of anonymity and limitations of social cues, such as facial expressions, tone of voice, and body language that cannot be seen directly in online communication (10). It is confirmed (14) that the presence of disinhibited behavior in online communication is principally caused by psychological characteristics such as anonymity, invisibility, asynchronicity, solipsistic introjection, dissociative imagination and minimization of authority status.

Furthermore related to the role of anonymity in cyber incivility, a longitudinal study (16) proves that in an anonymous situation a person is more at risk for cyberbullying. Empirical evidence explains that anonymous factors influence the increasing behavior of cyber aggression. For example, (17) proves that anonymity is so that someone feels that he believes that he is not caught with online content that is not permanent, in which this condition triggers someone to act cyber aggression. This study explains in an anonymous situation individuals experience a decrease in self-control so they feel the freedom to act and say aggressive things. In line with this (18) it proves that the presence of cyberbullying behavior is caused by perceptions of anonymity and belief in irrelevance between online conditions and real life. Likewise the study (19) explained that the occurrence of cyberbullying caused by anonymous conditions allows a person to feel less identified, feel less responsible, and the behavior of his behavior is unknown to others. Various empirical facts are reinforced by a meta-analysis study which proves that cyberbullying is predicted to be strong by an attitude of trust in accepting the behavior (1). Thus it can be concluded that the anonymity factor influences the presence of cyber incivility behavior by being mediated by beliefs. **Therefore the first hypothesis (H1) in this study is: "the more someone experiences anonymity, the easier it is to do cyber incivility"**

The study literature explains how the characteristics of online communication can trigger cyber incivility behavior. For example, an experimental study proves that feelings are not identified by others due to invisibility because the lack of an eye contract causes a person to behave unhindered and trigger cyberbullying. This study proves that invisibility is the strongest predictor that triggers cyberbullying compared to anonymity (20). Invisibility is a situation in which a person's identity is known but cannot be seen or heard by others because they do not meet each other. This opportunity causes individuals not

to experience anxiety to be seen or heard by others when typing messages or responding to information (14). Referring to the empirical evidence, it can be concluded that invisibility influences the presence of cyber incivility behavior. **Therefore the second hypothesis (H2) in this study is: "The higher someone feels invisibility, the easier it is to do cyber incivility"**

Meanwhile, asynchronicity and dissociative imagination also show a positive influence on the presence of unhindered behavior. This explains that the response that can be delayed due to synchronicity in online communication gives a person the opportunity to escape responsibility after posting messages that are personal, emotional, or hostile. Likewise with dissociative imagination factors that allow one to separate their online personality from real-world responsibilities that cause a person not to care about their words or actions online because they are isolated from real life (21). Thus it can be concluded that asynchronicity and dissociative imagination factors influence the presence of cyber incivility behavior. **Therefore the third hypothesis (H3) in this study is: "the more a person experiences synchronicity, the easier it is to do cyber incivility", while the fourth hypothesis (H4) is: "the more a person experiences dissociative imagination, the easier it is to do cyber incivility"**

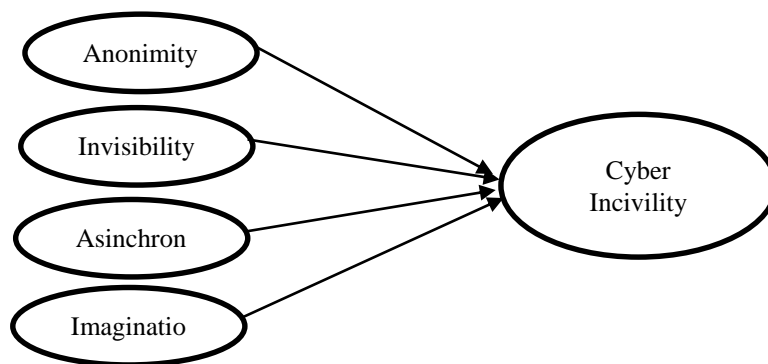


Figure 1. Model Cyber Incivility Perpetrator

## 2. Method

### 2.1. Design and Participants

This study uses a correlational design with multiple linear regression analysis technique with the support of Lisrel 8.7 software. then acting as an independent variable namely anonymity, invisibility, asynchronicity, and dissociative imagination, while the dependent variable is cyber incivility. Research subjects were recruited online with purposive sampling method.

The number of subjects was 111 workers (66 females, 45 males, mean of age = 32.8739, standard deviation of age = 5.73) domiciled in Indonesia. The background of the subject is 54.3% have received S2 education and 29.6% S1 education. Types of work of subjects include, lecturers, administrative staff, government employees, human resources, human capital, psychologists, counselors, marketing, and bankers.

### 2.2 Materials and Procedure

Data collection is done using a psychological scale in Indonesian. The choice of answers refers to the Likert scale with five answer choices. Next to measure the dependent variable, the author translates cyber incentive scale (2). Participants were asked how far they were involved in cyber incivility behavior in their current work environment, using a scale from 1 ("Never") to 5 ("Always"). The measurement instrument consists of 6 items to explain the cyber incivility experience that perpetrators have done with  $r = 0.87$ ,  $p = 0.001$ . The measuring instrument items are as follows (2):

Table 1. *Cyber Incivility Scale (Perpetrator) ((2)*

No.	Question Item	Standardized loading
1.	Say something hurtfull via email	0.82
2.	Say something that demeans or insults others through email.	0.92
3.	Email sent using rude and rude tone.	0.78
4.	Using Capital Letters (LARGE LETTERS) to shout to others via email..	0.69
5.	Ignore someone's request via email (for example, request a meeting or meeting schedule)	0.70
6.	Replying to someone's email without answering questions from an email	0.80

Whereas to measure the independent variables of anonymity, invisibility, asynchronicity, imagination dissociative, the authors used the translation of toxic disinhibition scale (21). with cronbach alpha less than 0.7 and a loading factor of more than 0.5. The measuring instrument items are as follows:

Tabel 2. Anonimity, Invisibility, Asinchronicity, Dissociative Imagination Scale

No.	Question Item	Loading faktor
<b>Anonimity</b>		
1.	I think that other people don't know where I am in the social networking forum	0,821
2.	I think that I can hide my identity on the social networking forum	0,854
3.	I think there is no need to use "Name" or can use "fake names" on social networking forums.	0,730
4.	I think I can change my identity in social networking forums (for example, changing gender, career, etc.)	0,646
<b>Invisibility</b>		
5.	I think that I can't see other people's facial expressions on social networking forums	0,882
6.	I think that I can't see the faces of other people on social networking forums	0,899
7.	I thought that I could not hear the voices of others on the social networking forum	0,872
8.	I thought that I did not know the response of others to my statement on the social networking forum	0,575
<b>Asynchronicity</b>		
9.	On social networking forums, I think other people will reply to my message after a few hours or a few days.	0,674
10.	I think that I don't need to immediately reply or respond to someone else's message in a social networking forum.	0,724
11.	I think that feedback and response from others will be delayed on the social networking forum.	0,841
12.	I thought that the message I posted on the social networking forum would not immediately get an answer or response	0,716
<b>Imajinasi Disosiatif</b>		
13.	I think that in my social networking forum (virtual) can be a different person compared to real life	0,683
14.	What happened on the social networking forum is not relevant to my real life..	0,720
15.	I think that the rules and norms in social networking forums are different from real life	0,802
16.	I think what I say and do in social networks is not directly related to my real life	0,799

### 3. Result

#### 3.1. Validity dan Reliability

Based on the cofirmatory factor analysis (CFA) test of the standardized estimation value shows that all indicators have good validity with the loading value > 0.60 (above 0.60). The indicator is considered valid if it has a standardized loading above 0.70, even though the research that is still in the

standardized loading development stage 0.50 to 0.60 is still acceptable (24). In detail, the CFA test proves that the third anonymity indicator has standardized loading below 0.70 (0.69), as well as the fourth cyber incivility indicator (0.67) and fifth cyber incivility (0.69). While the indicators of invisibility, asynchronicity, and imagination have good validity because all standardized loading is above 0.70. So it can be concluded that the indicators that form the variables of anonymity, invisibility, asynchronicity, imagination and cyber incivility are all valid.

Furthermore, the variables have good reliability if they have composite reliability values ( $\rho_C > 0.70$ ) and average variance extracted ( $AVR > 0.50$ ) (24). Based on this, this study proves that anonymous variables ( $AVE = 0.595$ ;  $\rho_C = 0.854$ ), invisibility ( $AVE = 0.846$ ;  $\rho_C = 0.957$ ), asynchronicity ( $AVE = 0.619$ ;  $\rho_C = 0.865$ ), imagination ( $AVE = 0.651$ ;  $\rho_C = 0.881$ ), cyber incivility ( $AVE = 0.605$ ;  $\rho_C = 0.901$ ). So it can be concluded that the variables of anonymity, invisibility, asynchronicity, imagination and cyber incivility are all reliable.

The fit model is indicated by a p-value that is not significant ( $> 0.05$ ) and RMSEA below 0.08 (24). This study proves the model for each variable as follows, an anonymous variable (Chi-square = 14.35, df = 2, p-value = 0.00077, RMSEA = 0.237) indicates the model is not fit. While the invisibility variable (Chi-square = 1.55, df = 2, p-value = 0.46073, RMSEA = 0.000), asynchronicity (Chi-square = 3.93, df = 2, p-value = 0.13986, RMSEA = 0.094), imagination (Chi-square = 14.51, df = 2, p-value = 0.00071, RMSEA = 0.238), cyber incivility (Chi-square = 78.57, df = 9, p-value = 0.0000, RMSEA = 0.265). This proves that invisibility is the most fit model.

### 3.2. Hypotheses Testing & Discussion

The model shows that Chi-Square = 336.61 with 199 degrees of freedom (df = 199) and p value ( $p = 0.000$ ), ( $\chi^2 / df = 1.691$ ), NCP = 137.61 with evidence the interval 90.85-192.24 indicates that the model is basically this is not fit. Furthermore, RMSEA = 0.079 with RMSEA = 0.064: 0.094 evidence interval proves that the model is quite "reasonable" and not in the "rejection" category so that the RMSEA model has good accuracy in assessing the fit model. (ECVI = 4.04, ECVI saturated model = 4.60, ECVI for independence model = 26.55) shows that the model is good to be replicated in subsequent studies. Model AIC = 444.61, Independence CAIC = 3002.60, saturated CAIC = 1444.51 concluded that the model is fit because the AIC and CAIC values are smaller than saturated (C) AIC and independence (C) AIC. Whereas if viewed from other fit goodness criteria shows (NFI = 0.88, TLI, CFI = 0.95, GFI = 0.78, AGFI = 0.72), criteria based on CFI showing good models ( $> 0.90$ ), overall this study shows the model good or fit.

Based on the results of multiple linear regression analysis with the support of Lisrel 8.7 software it is found that: Anonymous has a significant positive effect on the presence of cyber incivility behavior ( $t = 6.05 / > 1.96$ ) (H1: Accepted). Anonymous has a significant positive effect on the presence of cyber incivility behavior ( $t = 6.05 / > 1.96$ ) (H1: Accepted). The findings show that the more a person feels anonymity, the stronger the possibility of being involved in cyber incivility. As Dissociative anonymity allows individuals to express themselves and do some behavior that is not available in a real social environment. Individuals feel free from expectations and cost constraints and the risk of social sanctions for their actions. This provides an individual opportunity to separate online behavior from their true lifestyle and personal identity. Thus, they feel they can avoid responsibility for online behavior, even feel innocent (irresponsible) for inappropriate behavior that has been done (14,22).

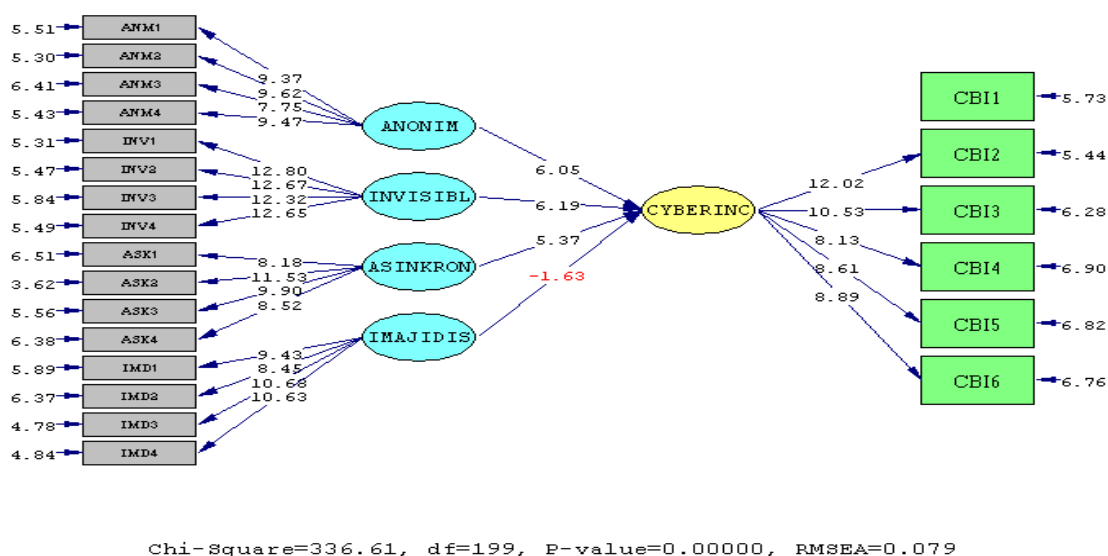


Figure 2. Multiple Linnier Regression Results predicting Cyber Incivility

Furthermore, the analysis shows that: Invisibility has a significant positive effect on the presence of cyber incivility behavior ( $t = 6.19 / > 1.96$ ) (H2: Accepted). The findings show that the more someone feels invisibility, the stronger the possibility of being involved in cyber incivility actions. This finding is in line with (20) which has proven that invisibility is the strongest predictor that triggers cyberbullying compared to anonymity. Invisibility is a condition because it does not meet each other so that a person's identity is known but cannot be seen or heard by others. This opportunity causes individuals not to experience anxiety to be seen or heard by others when typing messages or responding to information (14).

In the third analysis shows that: asynchrony has a significant positive effect on the presence of cyber incivility behavior ( $t = 5.37 / > 1.96$ ) (H3: Accepted). The findings show that the more a person feels asynchrony, the stronger the possibility of being involved in cyber incivility. In online communication, it is possible that interactions are not synchronized. This allows one to take minutes, hours, days or even months to reply to a message that results in a delay in the feedback process. This condition trains one's mind to lead to expressions that violate social norms (14). Whereas in the fourth analysis shows that: imagination does not significantly influence the presence of cyber incivility behavior ( $t = -1.63 / < 1.96$ ) (H4 : rejected).

This shows that the state of imagination has no significant effect on the presence of cyber incivility behavior. These findings contradict (14) and (21) which explain that dissociative imagination is a condition in which a person consciously or unconsciously feels that the imaginary characters formed in their online persona are different and separate from demands and responsibilities in the real world, so that circumstances this can evolve in complexity. However, through this finding shows that not everyone does not heed the rules and norms that apply in online behavior. In fact they can still be responsible for seeing their online life as a rule and norm that is also in everyday life.

Discussing about the confirmatory fit model results show that Chi-Square = 336.61 with 199 degrees of freedom ( $df = 199$ ) and a significant p value ( $p = 0.000$ ), indicating that this model is basically not fit. Whereas if viewed from other fit goodness criteria shows (NFI = 0.88, TLI, CFI = 0.95, GFI = 0.78, AGFI = 0.72), this criterion proves that only CFI shows a good model ( $> 0.90$ ), while (RMSEA = 0.079) also shows a good model or Fit because the value is below 0.08. Based on these findings it can be concluded that the Fit model

Overall this article presents empirical evidence of toxic disinhibited (22) online links with cyber incivility behavior. This shows that disinhibited theory can explain cyber incivility from the point



of view of the characteristics of online communication which is certainly different from social. Characteristics of online, text-based and impersonal communication can trigger difficulties in coordinating and resolving disputes and ultimately lead to disputes (23). This implication is very important because media differences can affect inherent characteristics that limit or free up users (13). As with the characteristics of online media with a low social presence and the opportunity for anonymity to cause deindividuation and disinhibited, causing individuals to feel the freedom to express themselves and have the opportunity to engage in anti-social behavior.

This finding is in line with the experimental study (20) which has proven the feeling of being unidentified by people due to lack of eye and invisibility factors having a large impact on disinhibited behavior causes one to dare to express opinions and trigger disinhibited communication behavior. And another study (21) which proved that the factor of dissociative anonymity asynchronicity had a significant effect on toxic disinhibition. As well as the study (15) which proves toxic disinhibition is the strongest predictor of cyberbullying behavior. However, the current study found that factors of dissociative imagination have no effect on the presence of different cyber incivility behavior with disinhibited theory (14) and study (21) therefore future research needs to consider these findings.

#### 4. Conclusion

Cyber incivility is a form of work deviation behavior that is often experienced by employees in this era of online media technology sophistication. Research efforts and advance our understanding of cyber incivility in the workplace in order to reduce and anticipate this dangerous behavior in its various forms. We hope this article can inspire scientists to investigate further the phenomenon of cyber incivility and help encourage practitioners to develop policies and actions regarding ethical behavior in communicating online to reduce and anticipate the effects of cyber incivility.

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