MODEL OF CYBERBULLYING BEHAVIOUR FROM THE LENS OF MEDIA SYNCHRONICITY THEORY (MST)

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ABSTRACT. Cyberbullying is considered as one forms of bullying and is getting more attention from many researchers. A national report from CyberSAFE Malaysia shows that approximately 3,600 indicated that school children aged of 7 to 19 years old were being cyberbullied. To further examine this issue, this research develops a model grounded on Media Synchronicity Theory (MST) to explain the features of social media that promote the cyberbullying behaviour amongst Malaysian youth of aged of 19 to 26 years old. Nominal Group Techniques (NGT) was used to elicit how features of social media contribute to cyberbullying behavior. The questions were developed based on the *Activity Theory (AT)*. The emergent features were analyzed and used to develop a model grounded by *Media Synchronicity Theory (MST)*. The model postulates three hypotheses how social media features contribute to cyberbullying behavior. The model can be empirically validated to understand how features of social media are related to cyberbullying behavior. Following the empirical studies, awareness and guidelines on the usage of social media amongst Malaysian youth can be proposed.

Keywords: Cyberbullying behaviour, Nominal Group Technique (NGT), Media Synchronicity Theory (MST)

INTRODUCTION

The proliferation of ICT has contributed to the growth of internet usage around the globe especially in Malaysia. Malaysian Communications and Multimedia Commission (MCMC) has reported 16.8 million Malaysians are using the internet for social media ("Malaysia has over 20.1m internet users," 2015). Social media networks such as Facebook, Twitter, Instagram, WhatsApp and many more are receiving great attention from youth around the globe. Within these few years, the upsurge in usage of social media has increased the potential of social media users particularly youth of being bullied online.

The topic of cyberbullying among youth has attracted the interests of many researchers. Cyberbullying is considered to be one of the forms of bullying. According to Olweus (1994) and Levy et al. (2012), the act of bullying must come with – the intention which could cause harm or injury, discrimination in power between the perpetrators and the victims in terms of strength, social status, intellect and fame, recurrence over a certain period of time and in-

volves Information and Communication Technologies (ICTs) over the internet (Pendergrass, 2014).

A report from Microsoft Global Youth Online Behaviour Survey reports that 33% of adolescents aged between 8 to 17 years old were bullied online in Malaysia (Balakrishnan, 2015). A national report from CyberSAFE Malaysia which has conducted a survey on 13,945 school children aged of 7 to 19 years old shows that approximately 3,600 indicated that they were being cyberbullied ("CyberSAFE in Schools", n.d.). Recently, previous studies show about 54% of adolescents worldwide experienced cyberbullying when using social media (Patton et al., 2014). Through the use of social media, adolescents are experiencing cyberbullying in many forms such as – receive direct attack from cyberbully, become a victim of false acquisitions, being made fun of, being called mean names, receive unfriend (boycott) treatments and online firestorms (Görzig et al., 2013; Hosseinmardi et al., 2016; Rost et al., 2016). From the perspective of adolescence, social media is becoming a place where they are experiencing peer victimizations experience that leads to negative symptoms such as depressions, loneliness and low self-esteem (Xu et al., 2012).

Despite the upsurge of users of social media and the increase rate of cyberbullying cases reported, the understanding of how social media facilitates and perpetuates cyberbullying behaviour is remarkably lacking and warrant further examination. Therefore, this research attempts to fill in the gap of knowledge from the related studies by examining how social media features promote cyberbullying behaviour among Malaysian youth.

This research implemented the Activity Theory (AT) framework as guidance for formulating questions for the interview. Following the qualitative analysis, the emergent themes for social media features mentioned were analyzed. These features were mapped against the Media Synchronicity Theory and a model was developed.

LITERATURE REVIEW

Cyberbullying can be described as "willful and repeated harm inflicted through the use of computers, cell phones, and other electronic devices" or can also be considered as "an aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself" (Hinduja & Patchin, 2014; Goodboy & Martin, 2015).

Cyberbullying is varied from traditional bullying because the perpetrator only requires a valid e-mail address to form or join in groups online. Hence, it is very easy to create counterfeit accounts and start to anonymously bullying others online. Moreover, cyberbullying nowadays is targeting different individuals in different contexts. For example, in the university context, cyberbullying influence learners' attitude and perception to use online tools alongside with the face to face learning (Aricak et al., 2008). Cyberbullying happens across the geographic borders and at all time.

Features of Social Media That Could Promote Cyberbullying

Cyberbully does not require physical strength so it may provide an opportunity for smaller, weaker individuals to dominate others (Hinduja & Patchin, 2014; Dempsey et al., 2009). Recently, a research was conducted to understand the long term effects of media exposure on cyberbullying behaviour among adolescents (den Hamer & Konijn, 2015). The results revealed that higher levels of exposure to media showing antisocial and risk behaviour influence cyberbullying behaviour. The cyberbullying behaviour increased faster over time with higher levels of exposure to antisocial media content.

Anonymity appears to be a distinguishing feature of cyberbullying versus offline or traditional bullying, as the cyberbullies claimed they would not involve in offline bullying (Vandebosch & van Cleemput, 2008). A research by Kowalski and Limber has reported that at least half of the respondents did not know the real identity of the perpetrators (Kowalski & Limber, 2007). On social media itself, the perpetrators may use fake profiles to harass their victims. This feature coherently distinguishes cyberbullying from the face-to-face traditional bullying in which the identities of the perpetrators are known to the victims.

The rate and volume of information distribution on social media can intensify the potential adverse effects resulted from cyberbullying (Dooley et al., 2009). For example, Slonje and Smith found that cyberbullying by spreading photos or videos is more outrageous and offensive than other types of materials used by cyberbully as their faces can be recognized via the abused photos or videos (Slonje & Smith, 2008).

Social media networks offer a free and open access platform for everyone to share information and knowledge. Due to the instant, private and hidden communication offered by the social media networks, it is difficult to monitor harmful activities (such as spreading rumours and false accusation) going on the social media (Best, Manktelow, & Taylor, 2014). Thus, it is difficult to trace and catch those who harassed others on social media.

In summary, there are some features of social media that can contribute to the propensity of cyberbullying behavior. These features will be further examined as described in the following section.

METHODOLOGY

Nominal Group Techniques (NGT) was used in this research. This method is particularly suitable for examining controversial topic like cyberbullying (Cdc, 2006). Through this qualitative method, researchers can get richer information for examining a recent phenomenon happening. The NGT has been conducted in a local public university in the Northern region of Malaysia to elicit how the features of social media contribute to cyberbullying behaviour.

As this study is explorative and qualitative in nature, seven postgraduate students representing youth were involved in this session. . United Nations (UN) defines a universal definition of youth as those who are in between of 15 to 25 years old. However, "youth" definition may vary depending on the programs implemented by the Member States ("Youth - Definition | United Nations Educational, Scientific and Cultural Organization", n.d.). As for this research, "youth" was defined as university students those between the aged of 19 to 26 years old as this range of age represents the average age of the Malaysian university students (Sedgwick, 2000).

The students were selected through purposive sampling based on their age between 19 to 26 years old, high involvement in social media networks on daily basis and their willingness to participate in this research. A set of 24 questions based on the Activity Theory (AT) framework have been asked and deliberated among the participants during the NGT session.

The session was conducted for almost 2 and half hours. The whole session was recorded on video for reference. The researcher began the session with a brief introduction and asked the questions to the participants. Each participant gave their own answers and later discussed by all of the group members for any additional information.

The data gathered from the NGT were analyzed to discover the features of social media related to cyberbullying that were mentioned by the participants. The dual coding analysis were conducted until the results were saturated or no new information or theme emerged. These

features were then compared with Media Synchronicity Theory (MST) to develop relevant hypotheses.

RESULTS AND ANALYSIS

Demographic Details. All participants are doing their master degree. 75 percent of them were in the age range of 25-26 while 15 percent of them are between 22-24 years old. 71 percent of them rated themselves to be very good in Internet proficiency while the rest rated them as good. All of them have registered to more than one social media networks. The reason of having registered to a number of social media accounts is primarily for communication and interaction with friends and families. They also use social media to share information such as photos, events, files and documents. The following section discusses the key analysis results from the NGT session.

What Are the Features of Social Media That Could Promote Cyberbullying Behaviour Among Malaysian Youth?

The coaxial coding analysis of the NGT session revealed three themes related to social media features and cyberbullying:

Speed of content distribution (F1). Most of the participants stated that the potential of any information is very likely to become viral on social media is very high especially in Facebook and Twitter.

> *"…nowadays, if you do something bad, you will become viral on Facebook…"* – P1

Multiple Platforms for Cyberbullying. Facebook, Instagram and Twitter allow for simultaneously photo posting by automatically tying them together to a page. If one have the intention to harass or attack others on multiple platforms of social media simultaneously, he/she can easily accomplish it as the social media networks provide this feature. This can be an alternative for the perpetrators to attack others on various platforms as they can reach to more users.

> *"…my friend purposely shared the content from our WhatsApp group onto her Facebook. I don't understand why she did that and I was angry of what she did…"* – P2

Multiple Media Used for Cyberbullying. Cyberbullying behaviour does not only occur in the form of text but can also other forms. One can be harassed or attacked on social media by malicious and inappropriate photos, videos, audios and nasty symbols or emoticons.

> *"…last semester, someone took my profile photo in Facebook and used it as his or her profile photo without my permission …"* – P3

The Proposed Model

Based on the qualitative analysis above, a conceptual model is proposed. Three features of social media networks that could promote cyberbullying behaviour on social media were identified from the data collected from the NGT were mapped against the Media Synchronicity Theory (MST.

Speed of content distribution (F1). The speed of content distribution contributes to the ability of a content to be uploaded and shared across social media in a short period of time (Brewer & Kerslake, 2015). A report from Facebook in 2012 indicated that 2.5 billion content were shared and 2.7 billion 'likes' were clicked on daily basis (Chan, 2012). Caviglione et. al found that social media networks provide a high acceleration in content transmission that could reach to a wider audience instantly or within a short period of time (Caviglione,

Coccoli, & Merlo, 2013). Thus, the speed of transmission in social media networks offers the ability to instantly spread information among the users. In MST theory this speed of the communication medium to deliver information or messages to the recipients is known as Transmission Velocity (TV)

Multiple Platforms for Cyberbullying (F2). An online survey conducted by Pew Research Center shows that more than half of the online users (52%) were registered to multiple social media platforms (Duggan, Ellison, Lampe, Lenhart, & Madden, 2015). With new social media platforms were created each year, there was a hike in the rate of multiple platform used at 10% from the year 2013 to 2014 and most likely to continue to increase (Gahagan, Vaterlaus, & Frost, 2016). Hence, there is a possibility that cyberbullying might occur in multiple platforms of social media simultaneously by the same perpetrator if they have more than one social media platforms. The ability of social media to afford concurrent transmission is known as Parallelism (PR) in MST theory.

Multiple Media Used for Cyberbullying (F3). Cyberbullies have the freedom to use multiple source of media other than just plain text in their postings such as photos, videos and online polls to harass others (Brewer & Kerslake, 2015). These numerous ways of sending information is known as symbol sets in MST theory. Table 1 summarizes the result that mapped the features of social media mentioned in NGT and the features in MST theory.

Table 1. Summarized results from the NGT.

Results from the NGT	Constructs in MST
Potential of Information to Become 'Viral' (F1)	Transmission Velocity (TV)
Multiple Platforms for Cyberbullying (F2)	Parallelism (PR)
Multiple Media Used for Cyberbullying (F3)	Symbol Sets (SS)

Only three out of five Media Capabilities of MST (TV, PR and SS) were selected as they matched to only three features of social media that were identified from the NGT (F1, F2 and F3). Adopting only relevant features related to the phenomenon being investigated is quite common in MST related research (DeLuca & Valacich, 2005; Holahan, Mooney, Mayer, & Finnerty Paul, 2014).
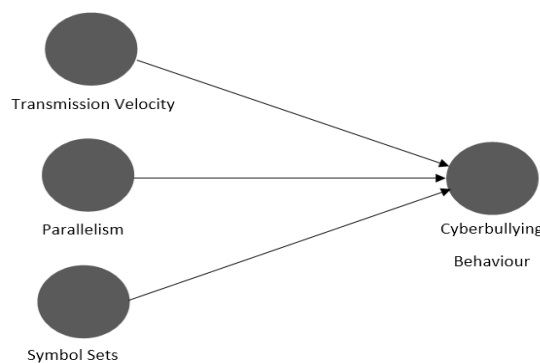

Figure 1. Proposed model grounded on Media Synchronicity Theory (MST)

Three hypotheses were developed from the proposed model: *(H1) Transmission Velocity feature of social media positively correlates with Cyberbullying Behaviour*, *(H2) Parallelism feature of social media positively correlates with Cyberbullying Behaviour* and *(H3) Symbol Sets feature of social media positively correlates with Cyberbullying Behaviour*.

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CONCLUSION

This paper examines the features of social media networks that may contribute to the cyberbullying behaviour in social media networks in the perspective of technology. Further empirical investigation is required in order to determine the model explanatory ability.

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