COVID-19 Crisis and Emotion (Tweet Twist)

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Abstract

The purpose of this study is to investigate the determinants emotions in tweet during COVID-19 phase. People all over the world were under severe stress and were concerned about their health after a devastating pandemic struck the world in the form of a novel coronavirus disease (COVID-19) in late December 2019. Many nations imposed strict lockdowns and quarantines, causing citizens to maintain social isolation, throwing many companies to a halt. Thousands of people took to Twitter during these challenging circumstances to express their feelings about being caught in the middle of a storm. Twitter witnessed an outpouring of emotions ranging from fear, anger, and sadness associated with the spread of a novel virus that has no known cure, to voices of support and trust for nations' official response to the pandemic. In studying the emotional response (anger, fear, and sadness) on Twitter about the COVID-19 crisis, we thus see a tale of two crises unfold choosing health or economy. We capture collective emotions theme on social media and investigate the patterns and impact of these negative emotions during various stages of the disease outbreak. It also provides crucial insights to health officials and government agencies on communicating crisis information to the public via social media. However, most experts predict that COVID-19 will become an endemic disease after its pandemic phase, once enough people have developed immunity to COVID-19 (through vaccination or infection). In other words, COVID-19 is expected to become a recurring disease like the flu. When this will happen is hard to predict and it will most likely vary from place to place.

Keyword: COVID-19

1.0   Introduction

The COVID-19 coronavirus has wreaked havoc on the lives of millions of families around the world from its start at the beginning of 2020. Coronavirus had infected about 15

million people in 188 countries by the end of June 2020, resulting in over 500 thousand deaths. Figure parsing is a critical mechanism for focusing the viewer on the relevant information in a scene. Generally, objects, especially those that afford interaction, become the figure, and the remaining space becomes the ground (Palser et al., 2018).

As we move through our daily lives, we experience a variety of emotions. An emotion is a subjective state of being that we often describe as our feelings. Emotional expression refers to the way one displays an emotion and includes nonverbal and verbal behaviors (Gross, 1999). Emotions result from the combination of subjective experience, expression, cognitive appraisal, and physiological responses (Levenson, Carstensen, Friesen, & Ekman, 1991). An emotion often begins with a subjective (individual) experience, which is a stimulus. Often the stimulus is external, but it does not have to be from the outside world. One also performs a cognitive appraisal in which a person tries to determine the way he or she will be impacted by a situation (Roseman & Smith, 2001).

People respond verbally to the emotions. This verbal expression is publicly visible on social media sites like Facebook and Twitter, where users respond to a wide variety of posts (Tian et al., 2021;2017). Twitter users post, respond to and share other's posts online. These posts have an emotional connotation attached to these messages. Studying emotions attached to the user's tweets can thus be an effective tool in curbing or mitigating public's negative sentiment towards a proven technique of handling a crisis. While analyzing the sentiment of people from their posts, creating an effective map of their negative emotions is required as the negative emotions such as fear and sadness could create unrest and unnecessary anxiety among citizens, while the positive emotions create reassurance Furthermore, people express their emotions, such as fear on social media platforms (Vemprala et al., 2021;2020).

2.0 Literature Review

2.1. Theory of Planned Behavior

Intention behavior that corresponds to inner thoughts and conflicts and gaining as much info knowledge as possible. Internal and external factors that represent perceived behavioral control (PBC), attitudes and subjective norms (SN) in the theory of planned behavior have shown that the intention connects the possible factors that will lead to emotion regulation. The TPB theory emphasizes the importance of these three main determinants (perceived behavioral control, attitudes and subjective norms) (Ajzen, 1985; Ajzen & Driver, 1991, 1992) in predicting the intentions and future behavior of humans as these determinants exhibit measurable and perceived characteristics (Sentosa & Mat, 2012). This study aims to expand the idea of proofing the selective factors which possibility increase emotion regulation and increase the level of intention to regulate the emotion.

This study focuses on certain determinants in social media that will lead to emotion regulations. The complexities lifestyles and lack of knowledge regarding the awareness of self-regulation may lead to severe illness and other mental health issues (Saharudin, 2020). Recent research on the TPB explores the intention behavior of emotion regulation with different methodological and applied fields such as psychology and applied psychology, the value-belief-norm, the psychology and industrial behavior concept, and social psychology.

Many studies have been done, and the TPB is considered as one of the most robust ways to explain the intention of individual behavior. In the current research context, social media users with positive attitudes towards tweeters 'tweet believe that friends and relatives expect them to regulate the same emotion, and they also have sufficient knowledge, time and money to invest on emotion awareness program regulation. A higher subjective norm may indicate a higher likelihood of engaging in such activity. Perceived behavioral control refers to "the controllability of conducting a certain behavior". Thus Widad FAROKAM is one of the application innovated from Widad Education hub, will lead the future research through this issues.

Figure 1 presents the research model adopted for future study.
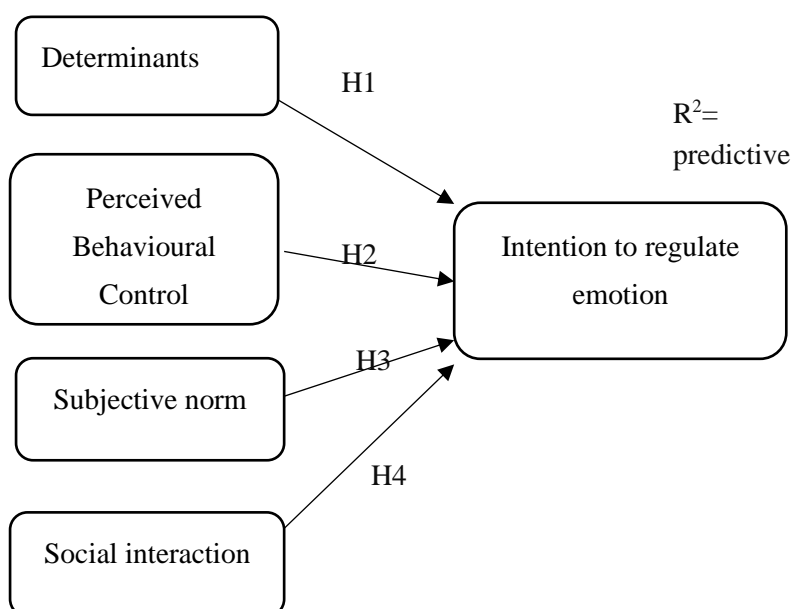
3.0 methodology

3.1. Data collection

Data will have collected via an retention process of system and intervention through online questionnaire. The respondents are Malaysian residents who have using power and are potential users of virtual system.They will selected using the quota sampling technique. The sample was divided into five clusters—northern, east coast, central, southern and east Malaysia. The selected participants were split evenly among each of the five clusters and ranged from 12 to 45 years of age. The questionnaire will circulate based on the quota. Table 1 presents the preliminary data on respondents' categorization on this emotion theme based, which circulated only for this concept paper. The table represents the percentages for all the three emotions respectively. Around 30 tweets were collected from Twitter users. 10 tweets regarding each emotions are used.

Table 1. Premilinary Data.

Emotion	Number (Tweet)	Percentage (%)
Theme		
Anger	R2= β	10
Fear	R2= β	50
Sadness	R2= β	40

R2= β 30 Tweets with 10 tweet users

4.0 Data Analysis and Results

The data analysis will have based on the two stage PLS-SEM using SmartPLS 3. The first stage evaluates the measurement model by investigating the reliability and discriminant validity of constructs. The second level assesses the structural model by testing the proposed hypotheses through variables' path coefficients and statistical significance. The PLS-SEM approach is useful in this study due to its ability to work with complex models with many indicator variables, exogenous and endogenous constructs, and non-normal data distributions (Astrachan, Patel, & Wanzenried, 2014; Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014). Also, the PLS-SEM can assist researchers who conduct exploratory research in developing theory with its ability to estimate the model that commonly displays a high degree of statistical power compared to the CB-SEM method (Hair, Ringle, & Sarstedt, 2011; Henseler; Law & Fong, 2020). Thus, PLS-SEM can determine the most successful variable in understanding consumer intent in this study.

4.1. Measurement Model

The measurement model is the first stage in the PLS-SEM method that specifies the constructs' internal consistency reliability, convergent validity, and discriminant validity. The reliability of the constructs was measured through Cronbach's alpha and composite reliability. A considerable threshold for the reliability should be more than 0.60 for exploratory research (Hair, Risher, Sarstedt, & Ringle, 2019). The future study will established convergent validity as the indicator loadings that passed the threshold value of 0.60 with AVE value of more than 0.50. Then discriminant validity will analyze via the heterotrait-monotrait (HTMT) ratio of correlation.

4.2. Structural Model and Hypothesis Testing Analysis

This future study will have used the bootstrapping method (5000 resample) to test the model with different research hypotheses. To assess the structural model, the path coefficient of exogenous to endogenous variables, the t-values, and squared multiple correlation (R^2) values of explained variance on the endogenous variable were evaluated. The path coefficient value ranges from -1 to +1, where a path coefficient estimated close to +1 shows a strong positive relationship while -1 shows a strong negative relationship with an annotation of path coefficients (β).

Based on five predictors of Intention, the coefficient of determination, R^2 will show statistically significant evidence in supporting all the hypotheses (H^x (PBC $\rightarrow$ Intention, β, $p < 0.01$).

4.3. Practical Implications

Practically, this study will help software developers in promoting the latest invention, especially in related with mental illness and promoting health in public.

5.0 Conclusion

The future study will explore the TPB integrated with others proposed variable on peoples' intention to regulate the emotion. This study strengthens the relationship between intention to emotion regulation with behavior.

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