A Study about Depression Identification via Social Media  
TreO Talk Paper

LI, Xiaoyang, Mandy  
The Hong Kong Polytechnic University  
xiao-yang.li@connect.polyu.hk

ZOU, Li, Maria  
The Hong Kong Polytechnic University  
li.zou@connect.polyu.hk

Cho, Vincent  
The Hong Kong Polytechnic University  
vincent.cho@polyu.edu.hk

Abstract

Severe stress and depression constitute serious challenges to people in both personal and public health. Numerous university students suffer from depression each year while only fractions of them receive proper and competent treatments. Following the trends of the era, social media has been prevalent among university students and include disclosed depression references. The purpose of this study is to examine the effects of various stressors and the “Big Five” personality traits towards the intention of disclosing depression. Addition to the disclosure intention, this study will also explore if the respondents have presented their depression via social media profiles. In this study, 200 WeChat users will be surveyed on their experiences from stress factors under four categories – academy, relationship, personal hassle and practical issues. Apart from the main study, some post hoc findings have been found and will be discussed and analyzed, including the differences of participants’ behaviors of group by gender, year of study and frequency of posts. Our theoretical model builds on Francisco, Arce, Vilchez and Vales’s theoretical model (2016), which indicates that stress leads to some chronic and acute situations and events which have negative influence on individual’s moods.

Figure 1: Theoretical framework

To validate the theoretical model (shown above), over 200 undergraduates have participated in the survey and completed an online questionnaire. According to the findings, participants tended to have stress stem from academic performance, academic workload and practical issues when compared to pressure from relationship. Besides, the results also showed that there was a moderate level of depression among students and that students had higher intention to disclose themselves. Statistics also interpreted that older people, males and participants with more frequent posts had a higher tendency to get depression. Stress factors were significant in predicting depression as stresses from academic issue, relationship issue and practical issues had positive associations with depression and thus hypothesis H1 was supported. Besides, with the classification of “Big Five Personality”, people who are of less extraversion or less openness or less agreeableness would be more likely to have depression, while people who get more neuroticism could have larger possibility to get depressed and thus hypotheses H2a, H2b, H2c and H2d were supported. Regarding the effects brought by disclosure intention on actual disclosure via various means on WeChat, they were positively related to each other for disclosure intention and actual disclosure behavior, which was counted by the numbers of negative posts shared by the participants. In addition, it was found that frequency of post was also positively related to disclosure behavior, which was as expected. Besides, people who get more disclosure intention would be more likely to expose themselves by negative emoticons, texts and pictures posted, with $\beta = 0.058^*$ in the relationship, which was in accordance with the hypothesis as well.

Reference