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A Study of Negative Emotional Disclosure Behavior in Social Network Media: Will an Unexpected Negative Event and Personality Matter?

Abstract

Why would people feel the need to disclose their negative emotions? Using the theory of conservation of resources, we hypothesize disclosure intention and behavior would be influenced by duration and severity of the negative emotional state. Moreover, we predict the effect of unexpected events and “the Big Five” personality traits on disclosure intention. Besides disclosure intention, we also tapped if the respondents have disclosed their negative emotions on their Facebook profile. In this study, we surveyed 255 Facebook users on their experiences from negative life events under four categories – social relationship, work, health and monetary issues. The results support all of our hypotheses. In particular, our post-hoc analyses show differences between females and males on the influence mechanism behind their disclosure intention. Females are more likely to disclose their problems relating to social relationship, work and health problems on Facebook than males.

Keywords: negative emotional disclosure intention, disclosure behavior, negative life event, big five personalities.

Introduction

Today a lot of people utilize social media platforms for sharing information and social networking. Most of the time people like to share their happiness via their Facebook page. This behavior is intended to show the positive and beautiful side of oneself to others (Qiu, Lin, Leung and Tov, 2012). However, people have ups and downs in their life. Especially when faced with stress, people tend to be anxious and depressed, but may not voice out their negative emotions unless they need to seek help or support. With the rise of social networking websites, a lot of information is provided for different investigations. In 2013, Ya'an in China's Sichuan province suffered a disastrous earthquake. A team of PhD students, referred to as the "Voice of Xa'an", came together for data mining. This team tries to retrieve tweets posted by Xa'an residents for analysis in order to investigate public panic mood. It shows that the information retrieved from social networking sites is useful to study people's mood states such as depression and emotional distress.

Disclosure behavior is an emerging issue in the literature. Chen and Sharma (2015) applied the Theory of Reasoned Actions (TRA), to study the disclosure behavior in terms of disclosure of identity, state and disposition on social networking sites. They found that attitude towards a social networking site is a main driver for the extent of self-disclosure on the social networking site. Similarly, Sun, Wang, Shen and Zhang (2015) utilized the privacy calculus model (Dinev and Hart, 2006) and justice theory (Colquitt, Conlon, Wesson, Porter and Ng, 2001) to elaborate the trade-off between privacy risks and benefits associated with the intention to disclose the location of a person to a social network service. They found that perceived benefits have stronger impacts on location disclosure intention for males than for females. In contrast, privacy risks have stronger impacts on location disclosure intention for females than for males. These findings suggest that people rationally determine a trade-off between risks and benefits of self-disclosure. In the present research, we argue that people act more irrational when it comes to self-disclosure of negative life events. Specifically, we believe that when faced with a negative life event, people wish to seek help and release stress, while considering other potential consequences of self-disclosure less rationally.

People's interpretation and thoughts regarding a specific situation influence their emotions and behaviors (Beck, 1967). Hence, influences of negative life events vary depending on the individual. The same negative life event may be perceived as more severe by and the suffering may take longer

for one person as for another. If an event is perceived as particularly severe with a long duration by an individual, there might be a higher likelihood that the person will disclose his/her feelings to others.

Apart from perceived severity and duration of a negative life event, another important factor is whether the negative life event came unexpected. If one is unprepared for a negative event, the natural fight-or-flight response is activated, causing anxiety and stress (Burg, 1992). Sharing the unexpected negative event with others might provide social support and might help gain advice from others how to deal with the circumstances. For this reason, we examine whether the expectancy of a negative life event influences the likelihood for self-disclosure.

Though past studies of negative emotional disclosure have mostly focused on clinical patients, they indicate that personality is an important factor in intention to disclose oneself. For example, Zakowski et al. (2011) found that neurotic patients will have higher distress than extraverted ones due to the effects of written emotional disclosure. Fang, Landis, Zhang, Anderson, Shaw, and Kilduff (2015) conducted a meta-analysis and identified personality characteristics, including “the Big Five”, related to the centrality of a person in a social network. Along this vein, Loiacono (2015) included “the Big Five” personality traits to investigate the intention to disclose personal information on a social networking site. She revealed that perceived risk and perceived benefits, as well as extraversion, agreeableness, and neuroticism have a strong impact on a person’s intention to self-disclose.

Thus, previous literature provides an indication that personality might be an important factor regarding self-disclosure. We aim to take those previous studies one step further by not only including intention for self-disclosure, but also actual behavior. Research suggests that intention is closely related to actual behavior (Fishbein & Ajzen, 1980). In the present research, we intend to investigate whether people with a high intention for self-disclosure are more likely to publicly share their thoughts and feelings on the social media platform Facebook.

Therefore, this study provides a seminal work addressing the following questions: What is the influence of duration and severity of negative emotional state on emotional disclosure? Do unexpected events bring out bigger echoes than expected events? Are people with certain

personality characteristics more likely to disclose their negative emotions than others? How is disclosure intention related to online disclosure behavior?

Literature Review

Besides voluntary self-disclosure of personal information on social networking sites, Shibchurn and Yan (2015) built a hypothetical model using the concept of privacy calculus and the incentive theory to study reward-based disclosure. They found a positive correlation between reward-level and disclosure intention but an insignificant effort of extrinsic motivations on disclosure intentions.

Public self-disclosure can have various consequences, e.g. it may impact one's chances of being hired for a certain position. Chiang and Suen (2015) used person-environment fit and elaboration likelihood model to investigate how argument quality and source credibility of self-presentation in LinkedIn would affect the recruiter hiring recommendation. They found that recruiters make inferences about job seekers' person-job fit and person-organization fit on the basis of argument quality of the self-presentation, which in turn predict recruiters' intentions to recommend job seekers for hiring.

Furthermore, negative emotional disclosure behavior was related to improvements in health-efficacy, emotional well-being and functional well-being among women suffering from breast cancer (Shim, Cappella, & Han, 2011). Yet, emotional disclosure of negative life events is seen as riskier than disclosure of positive life events (McCarthy, 2015).

In this regard, social skills might be important (Anderson et al., 2004). The authors (2004) conducted a study on the influence of social skills on interpersonal emotional disclosure of negative events. They indicated that an interactive transfer of positive affect between individuals of high social skills can provide an interpersonal interaction benefit to negative emotional disclosure. Yang (2014) proposed that social sharing of negative emotions within a group depends on the interpersonal trust and will have influence on the group climate and group cohesion. In sum, past literature is lacking a clear understanding of how personalities such as "the Big Five" of an individual affect his or her negative emotional disclosure via social media.

Theoretical Framework Development

Negative emotional disclosure is an indication of help seeking behavior due to stress from negative events. According to the Conservation of Resources (COR) Model (Lazarus and Folkman, 1984; Hobfoll, 1989), individuals seek to acquire and maintain resources, including psychological well-being, personal characteristics (e.g., “the Big Five”), conditions (e.g., duration and severity of a negative emotional state), and energies (e.g., time, and energy). Stress occurs when there is a loss of resources, or a threat of loss. Hence, the COR helps to elaborate that negative life events lead to stress because resources (e.g., time and energy) are lost in the process of facing a negative life event. Individual difference variables, such as “the Big Five” personality traits, are treated as resources that may influence the negative emotional disclosure intention, which is a help-seeking intention. In sum, we attempt to investigate the problem from the perspective of the theory of conservation of resources and the personality trait to study negative emotional disclosure in a social networking site. Figure 1 depicts our theoretical framework as follows.

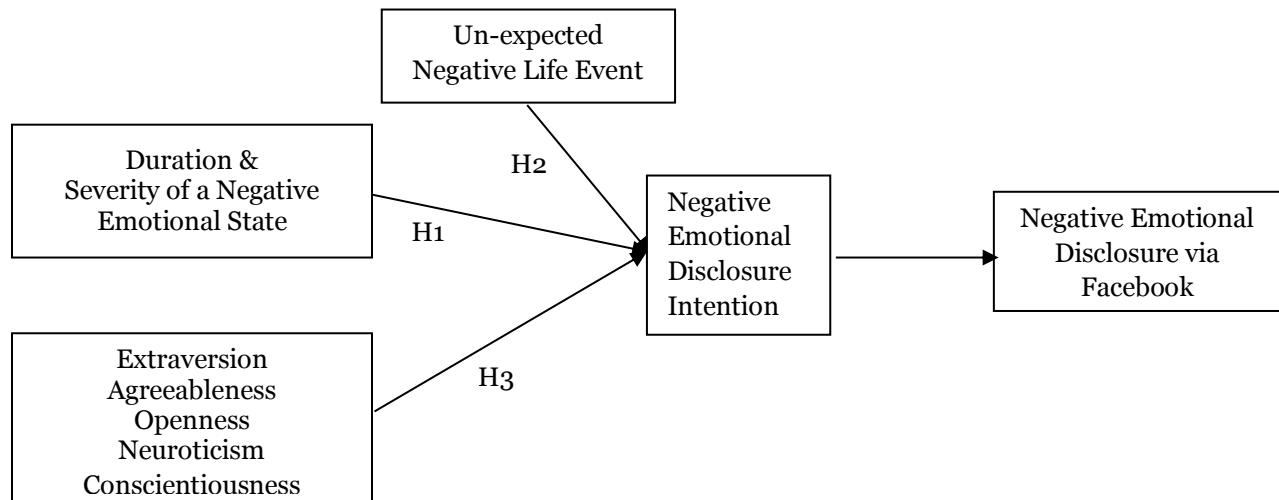


Fig. 1. Theoretical framework

Duration and Severity of a Negative Emotional State

Beck (1967) argued that people’s emotions and behaviors are influenced by their interpretation and thoughts about a situation. Negative emotions are mainly due to negative life events (Garnefski et al., 2001; Schacter et al., 2011). With different natures of negative life events, the duration and

severity of the negative emotional state may vary. While duration refers to the time period of a person being affected by his or her negative emotions, severity is on the seriousness of the negative emotional state over the period. For instance, a person may have experienced a mosquito bite, which is not a serious issue, but the itchiness lasts for a few hours. The case is different for severe negative emotional states, such as depression. According to the theory of conservation of resources (Lazarus and Folkman, 1984), people tend to retain their energy, e.g. if faced with a severe negative life event, by pulling various resources from the environment. In this regard, a depressed individual may disclose his/her feeling in order to gain sympathy and acceptance from others.

Accordingly, a long and serious disturbance will strengthen a person's desire to disclose his/her feelings in an attempt to gain acceptance from others or to release stress (Gerber et al., 2013; Segal et al. 2009). Hence, we hypothesize the following:

H1: Duration and severity of a negative emotional state both have a positive impact on negative emotion disclosure.

Unexpected Negative Life Event

An unexpected event is an event that deviates from what is expected with costly and unfavorable outcomes (Schützwohl and Reisenzein, 1999). Being unprepared for an event activates our innate fight-or-flight response, resulting in negative stress and even anxiety (Burg, 1992). This stressful response may cause a person's ill feeling of imagining that a series of bad things will happen.

Communicating about an unexpected event is a way of relief by sharing the negative feelings and gaining social support from others. Moreover, when disclosing one's negative feelings about the unexpected event, the recipients may propose helpful advice to resolve the problem. Therefore, we suggest the following hypothesis:

H2: The degree of un-expectancy of a negative life event is positively related to negative emotion disclosure intention.

Personality

Personality theories aim to distinguish people's individual differences based on their emotions, behavior patterns and cognition (Michel et al., 2004). Different personalities have different influences on the relationship between negative life events and emotional expression. Studies suggest that the Five Factor Model ("Big Five") provides an in-depth assessment of an individual's personality (Funder, 2000; McCrae and Costa, 1997). The "Big Five" factors are openness, conscientiousness, agreeableness, extraversion and neuroticism. The "Big Five" have been widely used in research and have been translated into many languages (John and Srivastava, 1999). Personality is essential to negative emotion disclosure intention and behavior (Larsen and Ketelaar, 1991), as elaborated in the following.

Extraverted people are active, assertive, sociable and talkative. These people have more friends and are more satisfied with their friendships than the introverts (McCrae and Costa, 1997). They like to pursue happiness experiences and hedonism values. Studies found that extraverts who use Facebook tend to disclose themselves in group photos instead of individual photos. In terms of emotion disclosure, they rarely hide their emotions in front of others. On the contrary, they have a higher need for social affiliation (Costa and McCrae, 1992) and for strategic self-presentation (Seidman, 2013).

H3a: Extraverts have high intention to disclose themselves.

People high on *agreeableness* are good-natured and gentle as opposed to people low on agreeableness who tend to be suspicious and inflexible. Agreeable people are friendly, kind, sympathetic and warm (Costa and McCrae, 1992). They have high concern for others and are thus likely to have successful friendships (Asendorpf and Wilpers, 1998). In addition, agreeable individuals have more control over their online self-presentation and will disclose their action self on Facebook. They are less attention-seeking and will use Facebook mainly for communication and connection with others (Seidman, 2013). Thus, we hypothesize that people high on agreeableness will disclose their actual emotions on Facebook:

H3b: Agreeable people have a high intention to disclose themselves.

People who are high on *openness to experience* tend to be open-minded and sensitive, while those who are low on openness are more down-to-earth and insensitive (McCrae and Costa, 1999). Individuals open to experience are the group of people who frequently use social media and who are more active on Facebook than others (Correa et al, 2010). They treat Facebook as a supplement to their real-life activity, as they use Facebook to plan activities and learn about others. Further, they like to reveal their personal information on their blog (Amichai-Hamburger and Vinitzky, 2010). Therefore, we expect the following:

H3c: People who are high on openness to experience have high intention to disclose themselves.

People high on *neuroticism* are anxious and depressed, while those who have lower neuroticism values are relatively calm and emotionally stable (McCrae and Costa, 1999). Costa and McCrae (1999) found that neurotic people typically feel isolated and experience more psychological distress. They spend less time on social media (Moore and McElroy, 2012) and hence we expect that neuroticism will be negatively related to general self-disclosure and emotional disclosure:

H3d: Neurotic people have low intention to disclose themselves.

Conscientious people are diligent and make long-term plans. They are careful and responsible while those less conscientious are disorganized and irresponsible. Conscientious individuals desire for high quality interpersonal relationships (Asendorpf and Wilpers, 1998). Social media could be seen as a sort of distraction for them (Hughes et al. 2012). Studies found that conscientiousness individuals rarely use Facebook and have a low frequency of activity on Facebook (Ryan and Xenos, 2011). Even when they use Facebook, they use it carefully and present themselves cautiously.

H3e: Conscientious people have low intention to disclose themselves.

Disclosure behavior refers to the posting of messages, including texts and emoticons, on the Facebook profile to express one's feelings and emotional status. According to Fishbein and Ajzen (1980), behavioral intention is an overall evaluation on the consequence of an action. Hence, disclosure intention is closely related to the actual disclosure of negative emotions. Thus, we hypothesize:

H4. Disclosure intention is positively related to disclosure behavior through profile posts and status.

Some researchers argue that age increases knowledge, skill and experience, which can affect a person's disclosure behavior (e.g., Christofides, Muise, and Desmarais, 2011). Moreover, females tend to disclose their emotions more willingly than males (Mulcahy, 1973). Therefore, we considered demographic variables such as age, gender, education, and Facebook usage as control variables in this study.

Measurements

In the questionnaire, the respondents had to complete 30 questions measuring "the Big Five" personality traits from the International Personality Item Pool (IPIP, Goldberg et al., 2006), using a 7-point Likert-type scale ranging from 1 (very inaccurate) to 7 (very accurate). For instance, "I am the life of the party" is used for measuring extraversion, "I sympathize with other's feelings" for measuring agreeableness, "I follow a schedule" for measuring conscientiousness, "I get upset easily" for measuring neuroticism, and "I am full of ideas" for measuring openness to experience.

Next, the respondents were asked to recall a recent negative life event. The date and details of the event were described by the respondent in a few short paragraphs. We categorized the mentioned event of each respondent according to its nature: social relationship problem, work problem, health problem, or monetary problem. Based on this event, respondents had to indicate their emotions on the Negative Emotional State (NES) rating scale (Garrett and Maddock, 2001). On this scale subjects indicated the severity of their negative emotions as raised from the negative life event. Ratings for the NES ranged from 1 to 7, where a rating of 1 corresponded to "no negative feelings" and the scale descriptors "clam, indifferent, neutral", a rating of 4 corresponded to "moderately

negative feelings” and the descriptors “uncomfortable, uneasy, bothered”, and a rating of 7 corresponded to “extremely negative feelings” and the descriptors “upset, shocked, queasy”. Moreover, the duration of their emotional disruption was also written down. The respondents rated how long they experienced the negative emotion, using a 7-point scale with 1 equaling “a few minutes”, 2 equaling “an hour”, 3 equaling “several hours”, 4 equaling “a day”, 5 equaling “a few days”, 6 equaling “a week”, and 7 equaling “more than a week”.

Whether the negative life event was expected was rated with two items: “This negative life event is totally unexpected,” and “This negative life event is a usual incident I encountered before.”

We used two items for measuring participants’ disclosure intention. The first item was “I want to hide my feelings so that nobody would know how I really felt from the negative life event.” The second item was “I want to disclose my negative emotion as raised from the negative life event.” All the items of un-expectancy of a negative life event and disclosure intention were measured using a 7-point Likert-type scale with 1 being “strongly disagree” and 7 being “strongly agree”.

A professional translator fluent in both Chinese and English was hired to translate the Chinese version of the survey into English. After the translation process, we verified both the English and Chinese versions and back translated the Chinese version into English to ensure they carried identical meanings. During the survey, the questionnaire was printed in both languages to give respondents a clear understanding of the items being surveyed.

Moreover, we tapped those messages capturing emotional expressions posted on participants’ Facebook profile within a week after the negative life event specified by the respondent. To identify the emotional expressions relevant to the negative life event, we searched for dialogue among the respondent and his/her friends mentioning the negative life event. These emotional expressions, which included status and text messages, were collected and checked for any negative emotional disclosure. For instance, a respondent had quit his job due to high work pressure. On his Facebook he posted a short message showing worries of his career and changed his status with a moody emoticon. This prompted some dialogue between the participant and his friends, who displayed sympathy and concern. This is an example of indication of negative emotional disclosure due to a negative life event, in this case work pressure and quitting one’s job.

We applied HowNet (He and Zhou, 2011), a sentiment dictionary containing both Chinese and English words, to capture the negative emotion disclosure of the respondent. The dictionary contains keywords of six categories including negative emotion. Based on this dictionary we determined whether the respondents had expressed negative feelings in their text messages. For instance, HowNet classifies “sad” as a keyword for negative emotion. If the respondent’s message contained this kind of keyword as listed in HowNet, we concluded the respondent disclosed his/her negative emotion. To ensure validity of our coding, a research assistant double checked the messages manually to ensure they were aligned with negative emotional disclosure. The research assistant also coded the respondents’ status, which were dependent on whether the respondent showing an emoticon of negative mood. This coding was double checked by the principal researcher in this study.

Four variables were used to measure disclosure behavior: 1) disclosure in the status via emoticon, 2) disclosure via posting text messages on Facebook, 3) disclosure via any of the above two means, and 4) number of means being used for disclosure. Regarding first and second variables, if the respondent disclosed any negative emotion in his/her status via emoticon or text message on Facebook, the corresponding variables (disclosure in the status via emoticon or disclosure via posting text messages) were coded as 1, otherwise they were coded as 0. The third variable (disclosure via any of the two means) was also coded as 1, if either emoticon or text message showed negative emotions. In the fourth variable we counted the total number of means used for disclosure. If a respondent disclosed his/her negative emotion via posting both a text message and a negative emoticon as his/her status, then the last variable was coded as 2. If either emoticon or text message had been used, the fourth variable was coded as 1. In case a respondent who did not disclose any negative emoticon or text message on Facebook within a week after his/her mentioned event, all four variables of disclosure behavior were coded as 0.

Survey Procedure

There were over 1.43 million Facebook users in the 1st quarter of 2015, which was nearly double the amount of WhatsApp users at the time. Moreover, Whatsapp was acquired by Facebook in October 2014. Thus, Facebook has become a dominant force on how we communicate online and

hence we surveyed negative emotion disclosure via this popular social media site. Respondents were examined via self-reports of a negative life event over the past few weeks from the date of the survey.

Table 1

Descriptive statistics of the respondents and their negative life events

Gender: Male (132, 51.8%), Female (123, 48.2%)	Age: 16-20 (34, 22.7%), 21-25 (39, 26.0%), 26-30 (76, 50.7%), 31-40 (56, 37.3%), 41-45 (28, 18.7%), 46-50 (19, 12.6%), 50 or above (3, 2.0%)
Education: Secondary School (40, 15.7%), Diploma/Higher diploma (78, 30.6%), Graduate (105, 41.1%), Post graduate (32, 12.5%)	
Cronbach's alpha of Big Five: Neuroticism ($\alpha = .88$), extraversion ($\alpha = .81$), openness to experience ($\alpha = .75$), agreeableness ($\alpha = .82$), conscientiousness ($\alpha = .85$)	
Average duration in minutes of using Facebook in a day: 5 (35, 13.7%), 20 (78, 30.6%), 40 (61, 23.9%), 60 (47, 18.4%), 80 (28, 11.0%), 100 (3, 1.2%), 120 or above (3, 1.2%)	
Nature of the negative life event: Social relationship problems (65, 25.5%), Work problems (72, 28.2%), Health problems (56, 22.0%), Monetary problems (62, 24.3%)	
Average duration of the negative emotional state: A few minutes (21, 8.2%), an hour (52, 20.4%), several hours (80, 31.4%), a day (62, 24.3%), a few days (28, 11.0%), a week (7, 2.7%), more than a week (5, 2.0%)	
Number of respondents who disclosed their negative emotion: not disclosing any negative emotion on Facebook (83, 32.5%), disclosing via the status (82, 32.2%), posting messages on Facebook (152, 59.6%), both means (62, 24.3%)	

To identify respondents and record their activities on Facebook, we utilized the referral social network in a renowned university in Hong Kong. We approached all potential respondents personally on campus with a response rate of 10.0%. The respondents were also encouraged to invite their friends to participate. As a reward, each respondent received a supermarket coupon of fifty Hong Kong dollars (or 6.40 US dollar) after completed the questionnaire.

We conducted our survey from 1st August, 2015 through 30 October, 2015. Each respondent was required to fill in a questionnaire and to accept the “Friend Requests” by one of our research assistants on Facebook. This arrangement enabled us to tap the respondents if they disclosed any feelings related to a negative life event to their friends in the past few weeks. With intensive promotion of the survey, we successfully reached 255 people who were frequent users of Facebook. Table 1 shows descriptive statistics of their profiles and their negative life events.

Analyses and Findings

We obtained means, standard deviations, and bivariate correlations for all variables used to analyze our hypotheses. We checked for multivariate normality of the data and found that the data was fairly normally distributed.

Table 2
Descriptive Statistics and Reliability

Variables	Mean*	Std. Dev.
Disclosure intention (Cronbach's alpha = 0.895)		
DI1: I want to hide my feeling so that nobody would know how I really felt from the negative life event (reverse coded).	3.16	1.35
DI2: I want to disclose my negative emotion as raised from the negative life event.	5.23	1.21
Negative Emotional State (Cronbach's alpha = 0.912)		
NES1: Feeling upset	5.12	1.32
NES2: Feeling uneasy	4.98	1.28
NES3: Feeling bothered	5.35	1.35
Expectancy of the negative life event (Cronbach's alpha = 0.853)		
Ex1: The mentioned negative life event is totally unexpected.	3.68	1.40
Ex2: The mentioned negative life event is a usual incident (reverse coded).	5.29	1.43

* 1- strongly disagree and 7 – strongly agree

We tested sample bias by comparing key constructs from earlier respondents and later respondents using the Kolmogorov-Smirnov two-sample test (Siegel and Castellan, 1988). This test assessed whether significant differences exist in the distribution of respondents and non-respondents for a given variable, including differences in central tendency, dispersion, skewness, and so forth. The results showed that the data of the earlier survey and the later surveys were fairly equal.

Reliability refers to the extent to which a construct is free from errors and yields consistent results. Cronbach's alpha was used to measure the internal consistency of the multi-item scales included in this study. As the Cronbach's alpha values of all of the constructs were above 0.7, it was claimed that they were all reliable. Moreover, as all of the measures of the constructs were used in past studies, and the questionnaire was validated by experts in the fields of IT and behavioral science before it was administered, the content validity of all the constructs were deemed as acceptable.

Table 3
Factor analysis^a

	1	2	3
DI1 ^R	.726	.229	.147
DI2	.785	.142	.292
NES1	.156	.827	.154
NES2	.126	.843	.162
NES3	.186	.895	.125
Ex1	.227	.149	.895
EX2 ^R	.219	.120	.842

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
^a Rotation converged in 5 iterations.

Convergent validity of the measurement scales was evaluated using the two criteria suggested by Fornell and Larcker (1981), namely that (1) all the indicator factor loadings should be significant and exceed 0.70, and that (2) the average variance extracted (AVE) for each construct should exceed the variance due to measurement errors for that construct (i.e., should exceed 0.5). The factor loadings of the 7 items are shown in Table 3. All items exhibited a loading value higher than 0.7 on their respective constructs. Thus, acceptable item convergence on the intended constructs was achieved. The AVEs of the constructs, as shown in Table 3, were all greater than the variances due to measurement errors. Hence, both conditions for convergent validity were amply fulfilled.

The correlation matrix of the data set is shown in Table 4. This enables us to examine all the potentially overlapped constructs. If the items comprise a construct that do not overlap much with other constructs (i.e., the AVE of a construct is larger than its squared intercorrelations with other constructs), the discriminant validity of the construct is assured (Fornell and Larcker, 1981). Table 4 shows that the diagonal elements (reporting the square root of the variance shared between a construct and its measures) are all higher than the correlations among the target constructs without exceptions, which suggest discriminant validity of all the constructs is assured in this study.

Table 4
Correlation matrix

	AVE	1	2	3
1. DI	.571	.756		
2. NES	.732	.367**	.855	
3. Ex	.755	.263**	.159**	.869

** Correlation is significant at the 0.01 level (2-tailed).

Judging from the standard deviations of all items, the sampled data had enough variation to represent the population. The means of the items, as shown in Table 2, suggest that the respondents tended to disclose their negative emotion as a whole (mean = 5.03). Their perceived negative emotional state was moderate (mean = 5.15) and their negative life event was on average not unexpected (mean = 3.20).

To check the existence of any common method bias, we conducted the Harmon one-factor analysis suggested by Podsakoff and Organ (1986). A factor analysis combining every variable in the research framework did not detect a single factor explaining the majority of covariance. In addition, the results of the regression analysis showed different degrees of significance for the regression coefficients. The above evidence collectively suggested that common method bias was not a serious concern in this study.

The results of the regression analysis are presented in Table 5. The R^2 of disclosure intention for model one (just the control variables), models two and three (including the main effects) were .212, .350, and .421.

For the control variables, they had significant impact on the disclosure intention. The model 1 as shown in Table 5 indicated that females had a higher tendency to disclose their negative emotions ($\beta = -.158^{***}$), same for young people ($\beta = -.236^{***}$), and for highly educated people ($\beta = .168^{***}$). It is in line with previous research that young people may not worry much when they disclose negative emotions compare with the more mature ones (e.g., Christofides, Muise, and Desmarais, 2011). Regarding education, the more educated people may believe that disclosing their negative emotion will be psychologically helpful for them. For the nature of the negative life events, both model 2 and model 3 in Table 5 showed that people were more likely to disclose their negative emotions when the event was related to social relationships ($\beta = .054^*$), work ($\beta = .097^{**}$), or health problems ($\beta = .059^*$), but less likely for monetary problem.

Table 5
Regression analyses on disclosure intention

	model 1 Control Variables	model 2 Main Effects	model 3 Main Effects
<u>Control Variables</u>			
Gender	-.158***	-.132***	-.122***
Age	-.236***	-.215***	-.185***
Education	.168***	.135***	.115***
Social relationship problems	.068*	.059*	.054*
Work problems	.126***	.105**	.097**
Health problem	.058*	.060*	.059*
Monetary problem	.048	.043	.041
<u>Main Effects</u>			
NES		.270***	.252***
Duration		.165***	.147***
Un-expectancy			.081**
Extraversion			.105**
Agreeableness			.058*
Openness			.111***
Neuroticism			.017
Conscientiousness			.022
<u>Model Information</u>			
R ²	.212	.350	.421
ΔR ²		.138	.071

Our findings, as indicated in Table 5, showed that the NES was a significant factor in predicting disclosure intention. According to the first-order effects shown in model 2, the severity of a negative life event, which was measured by negative emotional state (NES), was positively associated with disclosure intention and thus hypothesis 1a was supported. Moreover, the duration of the negative emotional state was also positively associated with disclosure intention and thus hypothesis 1b was supported. The R², being .350, was increased by .138 which was a considerable difference from the explained variance purely from the control variables. This indicated that the severity and duration of a negative life event were the dominant factors to explain disclosure intention. Comparing their influence as indicated in model 2, NES ($\beta = .270^{***}$) presented greater impact on disclosure intention than that of duration ($\beta = .165^{***}$). Severity of a negative life event might have stronger influence on disclosure intention than its duration.

Hypothesis 2 predicted that the un-expectancy of the negative life event would be positively related to disclosure intention. Our finding as shown in Table 5 supported the hypothesis ($\beta = .081^{**}$).

Thus, when the negative life event is unexpected and the person involved likely discloses his/her emotion.

For the effect of personality, our findings showed that people who are extravert ($\beta = .105^{**}$), agreeable ($\beta = .058^{*}$), and open ($\beta = .111^{***}$) were more likely to disclose their negative emotions. For the neurotic and conscientious individuals, they were less likely to disclose their negative emotion. Hence, our findings supported H3a to H3e.

Table 6
Regression analyses on disclosure behavior

	model 1 Disclosure via status	model 2 Posting messages in Facebook	model 3 Disclosure via any two means	model 4 Number of means used for negative emotion disclosure
<u>Control Variables</u>				
Gender	-.122 ^{***}	-.162 ^{***}	-.168 ^{***}	-.165 ^{***}
Age	-.224 ^{***}	-.235 ^{***}	-.235 ^{***}	-.248 ^{***}
Education	.134 ^{***}	.152 ^{***}	.112 ^{***}	.115 ^{***}
Social relationship problems	.079 [*]	.055 [*]	.068 [*]	.063 [*]
Work problems	.105 ^{**}	.110 ^{**}	.119 ^{**}	.131 ^{**}
Health problem	.061 [*]	.078 [*]	.055 [*]	.055 [*]
Monetary problem	.043 [*]	.042	.045	.048
<u>Main Effects</u>				
Disclosure intention	.286 ^{***}	.323 ^{***}	.335 ^{***}	.338 ^{***}
<u>Model Information</u>				
R ²	.325	.355	.382	.390

Regarding the influence of disclosure intention on actual disclosure via different means on Facebook, Table 6 shows they were highly significant with β equal to .286^{***}, .323^{***}, .335^{***}, and .338^{***} on disclosing the negative emoticon in the status, posting text messages, any two means as mentioned, and number of means, respectively. Hence, H4 is strongly supported. From our findings, it seems that people prefer to disclose their negative emotions via text messages instead of emoticons.

Post-hoc Analysis

Our results indicated that gender was a significant factor (see Table 5) influencing disclosure intention, which is an interesting area to explore. According to Knowledge Networks (2007), nearly half of teenage female respondents surveyed had used internet-based instant messaging to say something they would not say in person, compared with just over a third of teenage male respondents. This raises an interesting question – is gender in the Asian region an important factor in understanding disclosure intention? Our result supported that females had higher tendency to disclose their negative emotions than males. Hence, a follow up analysis was conducted to further investigate further on the issue: the effect of gender on disclosure intention. Here we divided the data into two different groups: males (group size = 132), and females (group size = 123).

The regression models predicting disclosure intention were estimated using IBM®AMOS 21, which provides maximum likelihood estimates (AMOS Development Corporation, 2015). The main purpose for using AMOS was that it more easily permits statistical tests of differences in a single model for two (or more) samples. When constraining a path to be equal in the two samples and simultaneously estimating parameters, one degree of freedom is freed, thereby providing a χ^2 test of their equivalence.

Comparing the regression results as shown in Table 7, AMOS showed that males and females have various difference in their disclosure intention. Females intend to disclose their negative emotion for issues related to social relationship, work, and health problems than males. Moreover, females are likely to disclose their negative emotion than males for prolonged negative emotional state. This could be because females are more mindful about social relationships than males. Gender schema theory suggests that such differences stem from gender roles and socialization processes reinforced from birth rather than from biological gender (Bem, 1981; Bem and Allen, 1974; Kirchmeyer, 1997; Lynott and McCandless, 2000). Thus, females have stronger desire to manage their negative emotions than males. This would be because females are less tolerate of negative emotions over time and are more self-protected than males.

Table 7
Regression analyses on disclosure intention by gender

	Male	Female	Differences
<u>Control Variables</u>			
Age	-.202***	-.166***	-.036
Education	.125***	.098**	.027
Social relationship problems	.039	.101**	-.062*
Work problems	.057*	.123***	-.066*
Health problem	.033	.088**	-.055*
Monetary problem	.067*	.023	.044
<u>Main Effects</u>			
NES	.232***	.263***	-.031
Duration	.111**	.171***	-.060*
unexpected event	.065*	.102**	-.037
Extraversion	.108**	.091**	0.017
Agreeableness	.068**	.033	0.035
Openness	.101***	.123***	-0.022
Neuroticism	.015	.022	-0.007
Conscientiousness	.020	.045	-0.025
<u>Model Information</u>			
R ²	.405	.440	-0.035

Discussion

Implications for Theory and Current Debate

Building on the COR Model (Lazarus and Folkman, 1984; Hobfoll, 1989), this study theorized that negative life events produce stress due to loss of resources (e.g., time and energy), which could then be relieved through help-seeking behavior in the form of public self-disclosure. Indeed, duration and severity of a negative life event were positively related to self-disclosure on Facebook.

Furthermore, the present research examined whether resources like “the Big Five” personality traits influence negative emotional disclosure intention. Previously, Chen and Sharma (2015) found that the personality trait extraversion related to extent of self-disclosure. Loiacono (2015) included all “Big Five” personality traits and her results showed that in addition to extraversion, agreeableness and neuroticism had a strong impact on a person’s decision to self-disclose. However, Locaicono only looked at self-disclosure of personal information. In contrast, we

focused on self-disclosure behavior of negative life events. Our results provide further support for the importance of extraversion and agreeableness in self-disclosure behavior. In addition, our findings suggest that openness to experience appears to be a highly relevant factor regarding self-disclosure of negative life events.

Implications on Commercial Practice

From this study, we can conclude that a negative life event is likely to urge people to disclose their negative emotions. In practice, social media is getting more common as an effective medium to disclose negative emotions without much embarrassment. In order to encourage people to disclose their negative emotions, social media platforms may consider creating more pre-formatted wordings, phrases or emoticons that help users express themselves quicker and easier. In this study, we found that females are more sensible when managing negative emotions than males and hence social media appears particularly useful for them to disclose negative emotions.

These results also bear high relevance to organizational managers. Employees are generally expected to exhibit appropriate self-disclosure behavior to represent their companies and foster good relationships with colleagues to prevent negative interpersonal consequences. Research among teachers showed that people's credibility can be harmed if they exhibit negative self-disclosure online (Cayanus & Martin, 2008). The same might happen in other organizational contexts, if co-workers, supervisors and/or customers read an employee's negative self-disclosure online. Therefore, if negative events occur within an organizational context, managers should be aware of the negative self-disclosure behavior this might prompt from their employees. Implementing other support systems like open communication within the organization might help alleviate employees' need to seek social support elsewhere, e.g. in an online context.

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Limitations and Conclusion

As of the case for all empirical researches, this investigation too has several limitations. A notable weakness lied in the cross-sectional research design, where all measurement items were collected at the same point in time from the students' perspectives. Given that the investigated constructs were not supposed to remain unchanged over time, this research method might not fully capture the dynamics of disclosure intention. This constraint may lead to the problem of same-source bias,

which is fortunately not a serious concern as confirmed in our analysis. To address the above issues, future research should consider employing multi-methods and longitudinal research designs. A longitudinal study combining qualitative and quantitative data would enable a process-oriented perspective that cannot be achieved by using a variance-based approach, such as the one employed here.

The present research was conducted with participants from Hong Kong, where people do not need to fear oppression based on their gender. Therefore, our results that females are more willing to disclose their negative emotions are based on an environment in which both genders have equal opportunities for self-disclosure. Results might be different in a country where certain societal groups, including females, might be oppressed by social pressure, leading to a glass-ceiling effect. This would be a highly relevant topic for future research.

Our study was conducted on the social media platform Facebook and hence focused on online self-disclosure behavior. A study with adolescents found a strong correlation between online and offline self-disclosure (Schouten, Valkenburg, & Peter, 2007). However, whether our findings regarding online self-disclosure behavior directly translate to offline behavior remains to be examined in future research.

This study provides a general view on negative emotional disclosure intention and respective behavior. Somehow, why people do not like to disclose their negative experience is still unclear. Future studies should look into those people who disclose their positive life experience and under what conditions they are willing to disclose their negative experience. Moreover, it would be interesting to know how responses from friends affect the emotional disclosers. Furthermore, only text messages and emoticons have been examined, while Facebook also allows users to post pictures, songs, and so forth. Hence, future research should also include those means of negative emotion expression.

Learning to effectively manage and cope with life's stressful events can make a difference between being healthy or unhealthy, happy or depressed. One way to reduce stress is to learn to expect the unexpected. Be prepared for the events you planned for, but also for the ones you don't. Always have a backup as contingency plan and alternative solutions are no doubt good ideas. Many people

waste a lot of time stressing about things that may go wrong, things that are not expected; instead of utilizing the time in a wisely and constructive way to come up with solutions and options.

In general, people communicate in different ways: face to face interactions, phone calls, whatsapp, emails, blogs, etc. Each means of communication has its unique characteristics and one may be more favorable over the others in certain situations. We argue that social media, which become more and more popular, facilitate people to communicate anytime and anywhere. From time to time, it is also used for emotional disclosure. Our findings have shown that disclosure intention via social media is mainly affected by the severity and duration of the negative emotional state raised by a negative life event; and is enhanced by the un-expectancy of the negative life event. For the effect of personality, people who are extravert, agreeable, and open to experience were more likely to disclose their negative emotions. For the neurotic and conscientious individuals, they are less likely to disclose their negative emotion via social media.

From our data, young people do not worry much when they disclose negative emotions compare with the more mature ones. Regarding education, the more educated people believe that disclosing their negative emotion will be psychologically helpful for them. For the nature of the negative life events, people are more likely to disclose via social media their negative emotions when the event is related to social relationships, work, or health problems, but less likely for monetary problem.

In our post-hoc analyses, our data indicated differences between genders. Females are less tolerant of negative emotions over time and are more willing to disclose their issues via social media relating to social relationships, work and health problems than males.

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