The Effect of New Media News Push on College Students' Anxiety

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Abstract: With the COVID-19 pandemic sweeping the world, new media platforms have played an important role in news feeds related to the epidemic with their quick and concise features. Such major public health emergencies not only cause great losses to the national economy, but also affect the public psychology. Based on the theory of expanded parallel process model (EPPM), through the questionnaire survey method to collect the relevant data, and the use of SPSS software for data statistics and analysis, build new crown epidemic situations of new media news push on college students' emotional impact model, and using correlation and regression analysis, explore the new media influence on college students' anxiety of epidemic information push. The results show that during the epidemic period, the surveyed college students have a strong initiative to contact and spread the epidemic information through social media, accounting for a large proportion of them. Browsing the epidemic information has become their daily routine. During the epidemic period, epidemic-related information showed the characteristics of all-platform dissemination, and college students generally expressed trust in epidemic-related information spread on social media. In terms of the mental health level of college students during the epidemic period, those who showed anxiety, depression and stress have a large proportion in the surveyed college students.

Keywords: COVID-19, Social media, Extended parallel process model, Anxiety.

1. Introduction

1.1. Research Background

The unexpected onset of new pneumonia has brought profound impact on the whole world and all walks of life. At the same time, it has also created a torrent of public opinion, accelerating the fermentation and loss of control in the network public opinion field. Tuchman, a famous scholar, claimed in Making News that "news is a constructed reality", and the mimicry environment constructed by media has a profound impact on people's cognition of the world [1]. In the normal epidemic period, the communication content of new media platforms has an impact on the social mood of college students. COVID-19 swept the world in December 2019 and was still raging around the world until February 2021. This public health emergency not only caused global economic and political turmoil, but also had an indelible impact on public psychology. According to an article published by China Youth Daily in 2019, one in four of college students in China admitted to experiencing symptoms of depression. Social media information push is also a factor affecting college

students' mood swings [2]. At present, refined management has been achieved in COVID-19 control, and China has entered the normal management stage of "dynamic zeroing". The phenomenon of information epidemic and the social emotion of panic caused by the early stage of COVID-19 in 2020 have been resolved after the establishment of the epidemic information disclosure mechanism [3].

A university of Pennsylvania study found, the current generation of college students, dubbed Generation Z, has become the most important demographic group on the Internet, accounting for 19% of the population [4].

In February 2021, the China Internet Network Information Center published its 47th Statistical Report on Internet Development in China: In 2021, the quantity of online users aged between 20 and 29 in China accounts for 17.8% of the overall Internet population [4]. At present, Internet users aged between 20 and 29 have become the third largest group of Internet users in China [4]. In terms of occupational structure, students have become the largest group of Internet users in China, accounting for 21.0% [4]. During the outbreak of COVID-19, reports and information related to the epidemic flooded on social media are bound to have a certain impact after being contacted and absorbed by the contemporary college students.

1.2. Research Gap

During the epidemic, as a top priority, "fighting the epidemic" has become a common topic. Therefore, a variety of studies have shown that no matter in areas with severe epidemic or other regions, the most intuitive content of new media information push is the number and frequency of push, which is most obvious during the period of severe epidemic. Taking Hubei Province, the most severely affected province at that time, as an example, the WeChat official account of Hubei Federation of Trade Unions pushed up to 1,129 pieces of content, topping the list [5]. During the epidemic period, the daily push volume was around 20 pieces, which was quite a large number. The number and frequency of push by labor unions in other provinces and cities increased during the epidemic period, and the push quantity is basically proportional to the severity of the epidemic [5].

These new media mainly provide users with information transmission services through various digital terminals such as computers, digital TV and mobile phones [6]. Previous studies have found that the push of new media and the influence of social media on college students is a double-edged sword. The positive is that its communication function in time, expand the students' social circle, the development of the Internet, especially the social media, broke the geographical isolation, dispelling the border region and family kinship groups, college students can through social media greatly expand its social scope, but the negative effect on the college students' social media still exists, according to the survey, The phenomenon of media dependence of contemporary college students is widespread. The excessive use of social media also leads to college anxiety [6]. So, will the excessive use of social media cause anxiety among college students?

1.3. Fill the Gap

After reading various studies and coming up with the findings, this paper tries to fill in the gaps in that knowledge. This paper reviews and applies expanded parallel process model theory to study whether college students' exposure to information pushed by new media will affect their emotions in the context of COVID-19.Ever since the outbreak of the pandemic, a large number of scholars began to work on the relationship between the information people received ,and the state of mind people held .Combining the analysis of people's mental health could get from former scholars' research on the previous major events and the experience of people's daily life.The psychological states of college students were connected, to some extent, to the social media feeds that the college students received during the outbreak period of COVID-19.

In order to verify the research hypothesis, this study will be based on asphalt concept, combined with the existing research results and Extended Parallel Process Model (EPPM), using the method of questionnaire survey among college students. The personal protection of college students needs to be strengthened. Public health emergencies have brought a series of influences on college students' study, life and psychology. This article through to guide the ideological and political education and psychological behavior analysis, combined with the research results of scholars at home and abroad, discussed in today's new media is developing rapidly, the new media of COVID-19 related information spread among college students and college students anxiety during the relationship between them, for the college students' anxiety and depression mood dredge to provide theoretical support, This paper puts forward some suggestions for the mental health education of college students in the face of emergencies in the future, and appropriately guides students to pay attention to their mental health while doing a good job in self-protection. In the new era, college students should also make correct judgments on network public opinions under the guidance of new media.

2. Literature Review

2.1. Definition & Development

Leventhal's parallel process model and Rogers' idea of protective motivation are combined in the expanded parallel process model, both of which have been expanded. The core structure of EPPM is as follows: fear, threat (perceived harshness and perceived susceptibility are its two components.), effectiveness (including reaction effectiveness and self-efficacy) and two answers (risk control and fear control).

Fear is thought of as a harmful feeling response to a perceived threat. It's an internal, negative emotion, a logical and physical threat. When measuring fear in empirical studies, participants are usually assessed to indicate their "fear," "fear" and "anxiety" levels about a particular health threat. In other words, participants had specific health threats, such as fear and anxiety.

Perceived threat consists of two aspects (severity and sensitivity), representing danger or harm in the environment.

Severity: Awareness of the severity or importance of the threat (for example, sunlight or UV exposure are harmful to my health and may even lead to death).

Vulnerability: A person thinks the threat will affect his or her beliefs or outlook (for example, a college student who likes to sunbathe or tan thinks it will hurt him or her).

Combine the effectiveness, feasibility and ease of use of proposed responses to deter or avert threats. There are two basic dimensions: response efficacy and self-efficacy.

Response effectiveness: the perceived efficiency of the suggested action that can lower the threat (e.g., staying away from UV light exposure or less sun exposure will lessen harm) Self-efficacy is the capacity of an individual to carry out the suggested action (e.g., I can reduce the number of times I use tanning beds

Tsoy argues that fear of the COVID-19 pandemic is higher than the itself, it's driven by the indiscriminate push of information through social media [10]. People continue to accept relevant provisions promoted by social media, especially when there are issues or crises related to life, health and safety. Social media messaging is therefore thought to be an important contributor to anxiety caused by the disease. The Extended parallel process model introduces a variable efficacy that response efficacy, in other words, engaging in protective behavior as recommended by the health protection movement, the self-control and effectiveness of perceived threat were improved [10].

2.2. Summary

Taking COVID-19 as the background, this study explores the impact of COVID-19 on college students' anxiety by associating it with news related to the epidemic pushed by new media. The EPPM model has four key components, namely fear, perceived threat, efficacy, and hazard control response. The threat include (1) severity and (2) susceptibility and effectiveness. Both concepts should be considered when studying the impact of social media information push and its impact on the behavioral intentions of subjects, because one can dominate the other. That is to say, the threat can be exaggerated or downplayed as an informational attribute.

3. Method

3.1. Research Design

This paper reviews and applies EPPM theory to explore whether there is a correlation between social media use, preventive behavior, threat perception of COVID-19 and self-efficacy through questionnaire survey, and explore the impact of new media epidemic information push on college students' anxiety [11]. Method of the reason is that this study will be college students during the epidemic outbreak of new media information media contact associated with the relationship between anxiety, discusses college students' group in the face of the sudden emergencies, the new media of information dissemination to the impact of their psychological, it is also presented by four parts: reliability analysis, validity analysis, correlation coefficient analysis and regression analysis

3.2. Date Collection

To test the above hypothesis, data were collected through a questionnaire, which was piloted among 117 respondents. Information on age, gender, and educational background of respondents, collect these data and observe the influence of sample characteristics on the reception of social media information push. The final questionnaire consisted of 17 items across predefined dimensions: the efficacy, perceived the threat of COVID-19, social media messaging, and preventive behavior.

3.2.1. Reliability Analysis

At the early stage of the survey, we first used the questionnaire star to design. It is expected to distribute 100 questionnaires, recover 96 valid questionnaires, and use SPSS to analyze the reliability and validity of the data by S P S S. The final questionnaire contains 17 items, and the dimension consists of four parts: X1, X2, X3, and Y.

X1. Effectiveness (self-efficacy and response efficacy): This dimension includes 3 items.

X11. Perceived self-efficacy included 2 items measuring respondents' beliefs about their ability to respond to pushing COVID-19-related information on social media. For example: " I will keep social distancing when I go out and avoid close contact such as shaking hands.”

X12. Response efficacy included 1 item measuring respondents' beliefs about the effectiveness of preventive response to COVID-19 messages delivered by social media feeds. For example: " I can keep abreast of the outbreak.”

X2. Defensive response: This dimension includes measuring the perception of COVID-19 risk gained through social media (including 4 items)

X21. Items denied include: "I think serious situation only happens on the Internet, far away from me".

X22. For example: "When I worry about the epidemic, I will deliberately block the information pushed on social media."

X3. Perceived threat (sensitivity and severity). Measure of people's perception of the severity of COVID-19 and their risk of developing the disease (including 4 items)

X31. Sensitivity Project: "Information on social media fills me with fear and pressure about the epidemic."

X32. Severity projects like: "I think COVID-19 will threaten my life and health".

Y. College students feel anxious and afraid about the COVID-19 outbreak

Reliability analysis is used to study the reliable answer accuracy of the quantitative data (especially the attitude scale questions), and the higher the reliability of the test, the more reliable the results are. It can be seen from the above the table 1 that the reliability coefficient value is greater than 0.9, which indicates that the reliability quality of the research data is very high.

Table1: X1Reliability statistics.

	Clone Bach Alpha	The number of items
X1	0.941	3
X2	0.922	4
X3	0.890	4
Y	0.960	2

3.2.2. Date Analysis

Table2：Frequency.

Variables		n	%
Gender	Male	41	42.71
	Female	55	57.29
Degree	Graduate or above	3	3.13
	Undergraduate	38	39.58
	Junior college	24	25.00
	High school and below	31	32.29
Social media use	1 h a day	6	7.00
	1-3 h a day	36	38.00
	3-5 h a day	44	46.00
	more than 5 hours	10	9.00
Get information on social media	Yes	59	61.89
	No	37	38.11
Total		96	100.0

After collecting all the questionnaires, the collected data will be imported into SPSS for analysis. Of the 96 respondents, most are female (57.29%, n = 55), and the most participants are undergraduate students (39.58%, n = 38), the sample has high educational background (See Table 2). The model is tested by reliability analysis and validity analysis. Referring to descriptive statistics, EPPM efficacy and anxiety generation ranged from 1.00 to 5.00, except for EPPM threat, which ranged from 1.33 to 5.00. Nearly 53 percent agreed that they have seen many ccoronavirus-related images on social media, while 31 percent of identify with it. More than 60 percent confirmed that they had seen many posts

on social media related to COVID-19 health information. As for other people's comments on social media related to the pandemic, 47 percent agreed that they were aware of them. More than 50 percent also saw people stay tuned for information about COVID-19 in social media. The last, more than 61% of respondents said "yes" to survey questions about social media coverage of COVID-19.

4.   Results

The validity study was used to analyze whether the study items were reasonable and meaningful, and the measurements reflected the extent of the survey. The consistency between the measured results and the content to be investigated is the KMO value to verify the validity level of the data. The KMO value is used to judge the suitability of the information extraction. From the above table, the KMO value is 0.951, greater than 0.7 (See Table 3), and the data can be effectively extracted from the information.

Table 3: KMO and Bartlett test.

KMO The number of tangents to sample.		0.951
Bartlett spherical	Approximate chi-square	996.175
degree Inspection	degree of freedom	119
	Significance	<.001

Regression analysis is used to study the influence relationship of X (independent variable) on Whether there is any influence relationship, influence direction and influence degree; as known from the chart, the model R square value is 0.880. The closer R is to the adjusted R, the more stable the data is (see Table 4). Where the independent variable has an r-squared value of 0.880 for Showing good explanatory power, the r-squared after two adjustments is close to the r-squared before the adjustment, indicating that the data is stable.

Table 4: Model summary.

model	R	R-side	Adjust the R side	Errors in standard estimates
1	.938a	.880	.873	.65319

a.   Predictors: (constant), social media feed，threaten， Preventive behavior

ANOVA studies the difference of X (classification) for Y (quantitative), such as the perceived threat difference relationship of different education groups; analyzes whether X and Y are significant (p-value less than 0.05 or 0.01), and ANOVA is used to verify this hypothesis. If the significance is less than 0.05, the regression equation is meaningful (see Table 5). The significance is less than 0.001, indicating that the regression equation is meaningful.

Table 5: ANOVAa.

	Sum of squares	Degree of freedom	mean square	F	Significance
Return to	15.747	5	1.965	290.358	0.001
Residuals	14.327	90	0.911		
total	30.074	95			

a.   Dependent variable：Perceived threats
b.   Predictors: (constant), gender, grade

Regression analysis (See Table 6) is used to study the influence of X (quantitative or classification) on Y (quantitative), whether influence relationship, influence direction and degree, analyze the significance of X, if the significance (p-value less than 0.05 or 0.01 is) that X on Y, from table 6, X1, X2, X3 significance coefficient are less than 0.05, so X1, X2, X3, grade has the effect to Y have statistical significance.

Table 6: Regression.

model		Coefficients are not standardized		Normalized coefficients	B	sig
		t	Standard error	Beta		
1	(constant)	.130	.842		3.376	.001
	gender	.152	.260	.044	.300	.252
	grade	-.610	.236	-.228	-.852	.001
	X1	.596	.207	.356	.539	.011
	X2	.356	.215	.194	.291	.178
	X3	.853	.148	.207	.273	.000

a. Dependent variable：defensive behavior

The inhibition of threat was positively associated with the generation of anxiety. If EPPM threat is low, anxiety will be reduced regardless of EPPM efficacy levels. At the same time, when the threat of EPPM was high, the frequency of anxiety was quite gradually increased with the increase of EPPM efficacy, confirming the assumption

5. Discussion

Based on the above conclusion, the new media push against during the outbreak of epidemic information influence on college students' anxiety, as it can be seen that part of the psychological state of college students is not optimistic, in addition to the impact of the epidemic, they epidemic information on social media contact behavior has deep influence on their mental health, the study found that During the epidemic period, some college students will be caught in the flood of epidemic information, and most of them will spend a lot of time to collect, browse and share epidemic information, so that they are completely exposed to the epidemic information released by new media. They will learn about the epidemic information through multiple channels. Whether it is the active push from parents and friends, or the automatic push from weibo, Douyin and other platforms, all become the contact point between college students and the epidemic information. During the epidemic period, college students are more willing to take the initiative to learn about the epidemic information and pay close attention to how the epidemic is evolving.

6. Conclusion

This paper is based on the research on the impact of news feeds from new media platforms on college students' anxiety in the context of COVID-19. Based on EPPM, a questionnaire survey is used to build a model of the impact of news feeds from new media on college students' emotions in the context of COVID-19. Finally, it is concluded that the epidemic related news feed of new media platform is an important factor affecting college students' anxious emotional behavior.

The disadvantages of this paper are that due to the epidemic, face-to-face interviews cannot be conducted with the respondents, so as to better understand the emotional state of the respondents during the epidemic. Secondly, due to the long period of time since COVID-19 has not been over

since the end of 2019, Unable to horizontal according to the change of new crown outbreak in China dimension to investigate college students' social media epidemic information between the contact impact on their psychological as well as in research in the study of the theory of the whole thesis detailed enough, in addition, this study relate only to the domestic situation of college students, research scope does not include all over the world. I hope these problems can be gradually solved and improved in the future study.

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