

Research on the Social Experience of Mobile Internet Products

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Abstract. There are many factors affecting the social experience of the product, such as the contents, UI design, interactive mode and communication method. Taking Wechat and Weibo as examples, this paper studies the influencing mechanism of social experience of the product which leads to group indifference by questionnaire survey. The questionnaire involves five aspects including target users' characteristics, product contents, ways of social interaction, privacy and security mechanisms and the review mechanism. The results indicate that: (1) If the positioning of products is different, the arrangement and the design of the products are different as well as the social experience produced; (2) if the audiences are different, the content structure of products and the social interactive methods are different, so is the social experience generated; (3) the bigger the product's freedom is, the bigger the negative social experience is; (4) the bigger the number of phenomenal user is, the easier the negative social experience of product produces. In brief, in the product of mobile internet products, the commercial positioning, the scope of audience, the freedom degree and the number of phenomenal user are the four key factors which affect the product's social experience.

Keywords: Mobile internet product · Social experience · User experience

1 Background

With the rapid development of mobile Internet, more and more users are involved in the use of mobile applications as social media. Social media is “a group of Internet-based applications that build on the ideological and technical foundations of Web 2.0, and that allow the creation and exchange of user generated content” [1]. Typical social media Products include: instant messaging services like Wechat and QQ, social networking services like Renren and Facebook, microblog services like Weibo and Twitter [2]. In the 39th China Internet development statistics report on CNNIC shows: Until the December 2016, China's Internet users reached 731 million, of which mobile phone users occupy the 95.1% of entire Internet users [3]. Mobile Internet promotes China's economy, culture, education, life, social intercourse develop towards sharing, intelligence, scene oriented and value oriented. It has become an important media for the dissemination of all kinds of major public events. However, with the penetration of mobile applications in the various aspects of people's daily environment, the negative

social experience of products is gradually increasing, especially the phenomenon of group indifference. How to avoid this kind of negative social experience is an urgent event which needs to solve the problems cooperating with all aspects of society.

2 Literature Review

For mobile Internet products, good social experience will not only let users feel the information superiority, the sense of time as well as sense of freedom while using the mobile, but also enhances the users' viscosity feeling and brings positive energy and a sense of harmony to society. Liu and Ma took China's famous mobile Internet applications - Weibo as the research object, proposed the spread model of the social experience of the Internet product, that is latent, growth, spread, outbreak, decay and death [4]. Each stage will have a different impact on the user. Some of the effects are due to the upgrading of products, such as product content updates, changes in the design of the interface, the changes in the way of interaction as well as the expansion of the transmission path, etc. For example, due to the upgrading of products it is leading the users appear the barrier in the style of use and habits, which most users have a language attack on function and interactive product interface, namely social experience of negative product. It may also be because of the differences of products in the information architecture, interface design style, and so on, so as to produce the gap in the effectiveness of social experience. For example, Chen found through a comparative study that due to the different modes of communication between Weibo and Wechat in the dissemination of information, resulting in negative social experience when the product appears, the molecular fission as a way to spread [5]. The Weibo is faster than the one to one mode for the spread of Wechat.

The user's cultural background, the acceptance of the information content, the different degree of social relations, and the authenticity of the product information itself, as well as the difference of transparent degree can also cause effect and direction of social experience of different products. For example, Liu and Ma by using the method of complex network, explored the dissemination of negative social experience effect in different fields, when users paid attention to the information content and the acceptance [4]. Chang takes the user relationship as the breakthrough point, and discusses the negative social experience effect of the mobile product when the disadvantaged group releases negative information in the social relationship [6]. Due to the weak relationship provides most of the information, and online most of the audience and the weak relationship exist a certain distance between the parties in space and time. It is not clear to understand the specific situation in a state of "pluralistic ignorance", so most people keep a calm, surrounded, suspicious, guessing state to the information. A lot of people cannot accurately and timely response to the surface concern, but also they cannot correctly interpret the reaction of others, resulting in a negative social experience of the product - "group apathy".

This paper will present the China Mobile Internet social mainstream products - "Wechat" and "Weibo" as an example, it researches the results in negative social experience by means of questionnaire, especially the influence mechanism of the group indifference to this phenomenon.

3 Questionnaire Survey

3.1 Methods

This research investigates the influence mechanism of the two mobile Internet social mainstream products of negative social experience in China from the target population characteristics, product content, social interaction, privacy and security mechanisms and the review mechanism. The object of the study was 60 young people aged 18–25 years, who were often using these two mobile social media. There are 31 persons who have bachelor's degree, 22 persons who have master's degree, and 6 persons who have degree under the bachelor, as well as a doctorate.

3.2 Questionnaires

See Table 1.

Table 1. The questionnaire about the social experience of mobile internet products

No.	Questions
Q1	What is your educational background?
Q2	What is your view about the degree of involving new, strange and special things, and breaking news in Weibo and Wechat?
Q3	What is your opinion about the degree of involving info about chicken soup in Weibo and Wechat?
Q4	How often do you interact with strangers in Weibo and Wechat?
Q5	How often do you interact with relatives, friends, colleagues and other acquaintances in Weibo and Wechat?
Q6	Have you met internet trolls in Weibo and Wechat?
Q7	What is your perspective of filtering the bad info (violence, pornography, rumors) in Weibo and Wechat?
Q8	How often do you receive the negative info?
Q9	Have you met usability problems frequently in Weibo and Wechat?
Q10	How often do you publish your personal info in Weibo and Wechat?
Q11	What is your perception of the info's propagation speed in Weibo and Wechat?
Q12	What is your opinion about the degree of concerning the same info in Weibo and Wechat?

4 Analysis and Conclusions

(1) The products' positioning is different, therefore, the information involved in it is different, which generates the different social experience. The position of Weibo is the people who are related or unrelated to the users while the one of Wechat is the people

that have a certain relationship with the users. Therefore, the type of information involved in Weibo is more extensive than Wechat's, and it is more likely for Weibo to involve such information as new, novel, special and breaking news. However, for Wechat, it concentrates more on health care, life philosophy and users' life pictures. Table 2 verifies this view. Two Apps have a significant difference on the two problems—"What is your opinion about the degree of involving new, strange and special things, and breaking news in Weibo and Wechat?" and "What is your opinion about the degree of involving Info about chicken soup in Weibo and Wechat?". In the first problem, the average score of Weibo is higher than Wechat, and in the second problem, Wechat's score is higher than Weibo, seen in Table 3.

Table 2. ANOVE of the degree of the certain information types involved in Weibo and Wechat

		Sum of squares	df	Mean square	F	Sig.
Degree of involving new, strange and special things, and breaking news	Between groups	16.133	1	16.133	10.983	.001
	Within groups	173.333	118	1.469		
	Total	189.467	119			
Degree of involving info about chicken soup	Between groups	9.075	1	9.075	5.326	.023
	Within groups	201.050	118	1.704		
	Total	210.125	119			

Table 3. Score comparison of the degree of the certain information types involved in Weibo and Wechat

		N	Mean	Std. deviation	Std. error
Degree of involving new, strange and special things, and breaking news	Weibo	60	3.63	1.178	.152
	Wechat	60	2.90	1.245	.161
	Total	120	3.27	1.262	.115
Degree of involving Info about chicken soup	Weibo	60	3.10	1.189	.153
	Wechat	60	3.65	1.412	.182
	Total	120	3.38	1.329	.121

By the correlation analysis between the data of "What is your opinion about the degree of involving new, strange and special things, and breaking news in Weibo and Wechat?" and the data of "What is your opinion about the possibility of negative social experience appearing in Weibo and Wechat?", we found that at the level of $\alpha = 0.01$, there was a significant correlation between the above two items, whose correlation coefficient was 0.308. This indicates that the wider the product's position is, the greater the possibility of the negative social experience is (Table 4).

(2) The products' audience is different, so their Information Architecture and interactive ways are different, which lead to the different social experience. Table 5 shows that there is a significant correlation between "How often do you interact with strangers in Weibo and Wechat?" and "How often do you interact with relatives,

Table 4. Correlation analysis between products’ information types and possibility of the negative social experience

		Degree of receiving new, strange, special and entertaining info	Possibility of negative social experience appearing
Degree of receiving new, strange, special and entertaining info	Pearson correlation	1	.308**
	Sig. (2-tailed)		.001
	N	120	120
Possibility of negative social experience appearing	Pearson correlation	.308**	1
	Sig. (2-tailed)	.001	
	N	120	120

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

Table 5. Comparison of the audience’s familiarity degree to users

		Sum of squares	df	Mean square	F	Sig.
Communicate with strangers	Between groups	16.875	1	16.875	9.525	.003
	Within groups	209.050	118	1.772		
	Total	225.925	119			
communicate with acquaintance	Between groups	110.208	1	110.208	82.525	.000
	Within groups	157.583	118	1.335		
	Total	267.792	119			

friends, colleagues and other acquaintances in Weibo and Wechat?” It indicates that there is a difference in communicating with strangers and a discrepancy in communicating with acquaintance in interactive activities (such as add friends, chat, comment, forward and like).

Figure 1 shows that in Weibo the function of forwarding is particularly prominent and the one of chatting is relatively weak, while in Wechat the chatting function is quite well and the forwarding function is weaker. It is roughly consistent with our speculation that Weibo is more inclined to browse and forward information for strangers, and strangers can also see the comments each other just because it has a wider audience. And the Wechat’s audience is the person who has a definite relationship with the user, so Wechat is designed for communicating with each other, and only friends can see each other’s comments. Thus, the more powerful the forwarding function of the product is, the greater the effectiveness of its social experience is; the stronger the chatting function is, the less the effectiveness of its own social experience is.

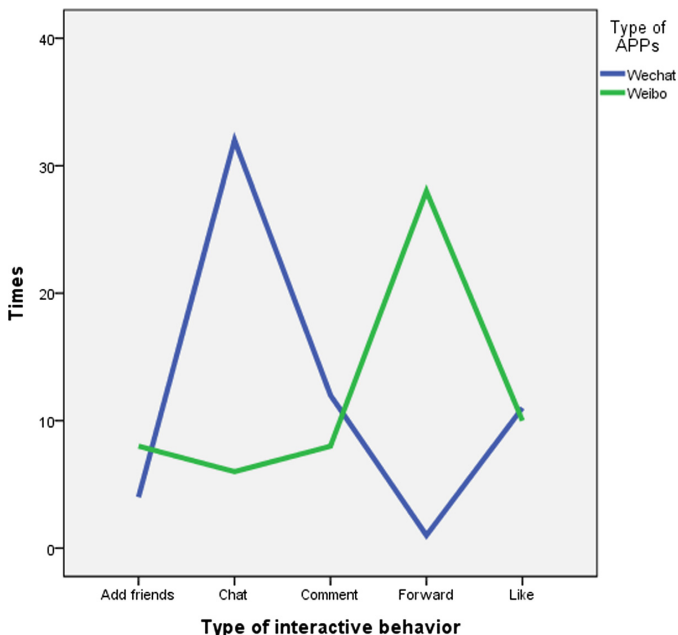


Fig. 1. Comparison of the frequency of products’ interactive behavior

(3) The freedom of the product is closely linked to its social experience. Tables 6 and 7 show that there is a significant difference in the two products’ usability, and a few use obstacles arise in Weibo. These obstacles in usability not only partly limits users’ freedom of interaction but also affect the possibility of negative social experience’s occurrence. And there is a weak correlation relationship between them, too, shown in Table 8. This manifests that the usability of products affects the production of undesirable social experience.

Table 6. Comparison of the means of products’ usability

	N	Mean	Std. error
Weibo	60	3.15	.157
Wechat	60	2.57	.164
Total	120	2.86	.116

Table 7. ANOVA of the products’ usability

	Sum of squares	df	Mean square	F	Sig.
Between groups	10.208	1	10.208	6.605	.011
Within groups	182.383	118	1.546		
Total	192.592	119			

Table 8. Correlation analysis between products’ usability and possibility of the negative social experience

		Troubles in usability	Possibility of negative social experience appearing
Troubles in usability	Pearson correlation	1	-.187*
	Sig. (2-tailed)		.041
	N	120	120
Possibility of negative social experience appearing	Pearson correlation	-.187*	1
	Sig. (2-tailed)	.041	
	N	120	120

*Correlation is significant at the 0.05 level (2-tailed).

There is an important difference about users’ opinions in “Have you met internet trolls in Weibo and Wechat?”, so is the issue of “What is your opinion of filtering the bad info (violence, pornography, and rumors) in Weibo and Wechat?” The result is given in Table 9. The subjects think that the freedom degree of Wechat is lower (that is, the perception of filtering bad information is high), so it is less likely to meet internet trolls and surely the possibility of negative social experience is also low. However, the freedom degree of Weibo is high, that is, the perception of filtering bad information is low, therefore it is more likely to meet internet trolls and the possibility of negative social experience is relatively bigger, shown in Fig. 2.

Table 9. ANOVA of the products’ freedom degree

		Sum of squares	df	Mean square	F	Sig.
Meet with internet trolls	Between groups	42.008	1	42.008	23.795	.000
	Within groups	208.317	118	1.765		
	Total	250.325	119			
Perception of filtering bad information	Between groups	14.008	1	14.008	10.023	.002
	Within groups	164.917	118	1.398		
	Total	178.925	119			

(4) The more the phenomenal users are, the higher the possibility of the negative social experience appearing is Fig. 3 shows that Weibo is more likely to produce a negative social experience than Wechat, which is related to the difference in concerning the phenomenal users, seen in the Table 10. In Weibo, users pay more attention to the famous persons than in Wechat, from which we can conclude that the number of phenomenal users may be higher than in Wechat.

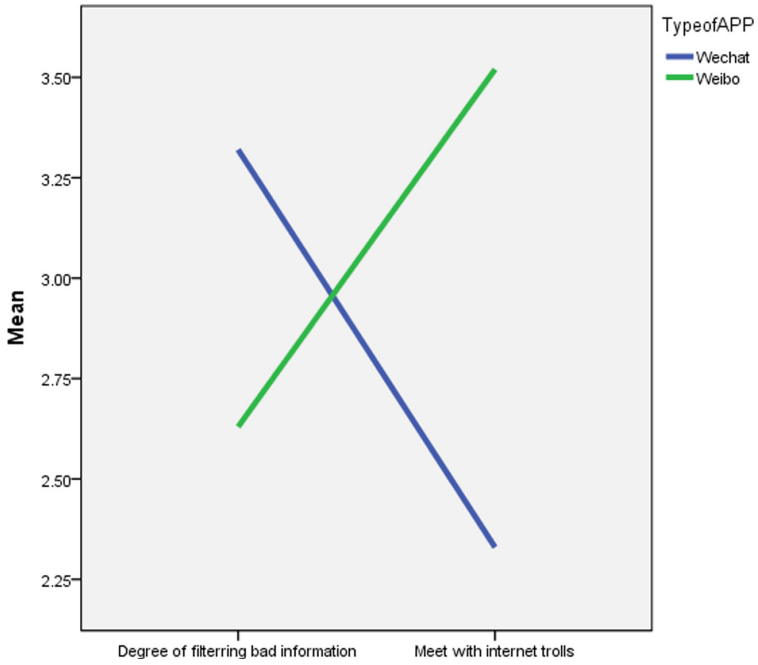


Fig. 2. Comparison of the means of products' freedom degree

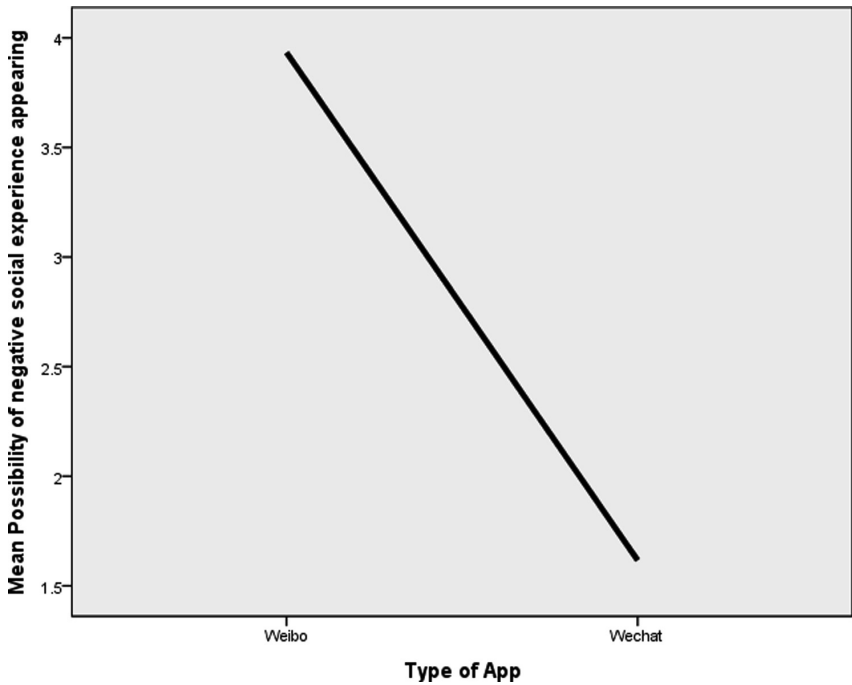


Fig. 3. Comparison of the possibility of the negative social experience

Table 10. Correlation analysis between influencers and the negative social experience

		Possibility of negative social experience appearing	Concern influencers
Possibility of negative social experience appearing	Pearson correlation	1	.370**
	Sig. (2-tailed)		.000
	N	120	120
Concern influencers	Pearson correlation	.370**	1
	Sig. (2-tailed)	.000	
	N	120	120

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

In addition, we also found that there was an important difference between Weibo and Wechat in “What is your perception of the info’s propagation speed in Weibo and Wechat?” and “What is your opinion about the degree of concerning the same info in Weibo and Wechat”, seen in Table 11.

Table 11. ANOVA of the info’s propagation speed and the degree of concerning the same Info

		Sum of squares	df	Mean square	F	Sig.
Perception of propagation speed of info	Between groups	23.408	1	23.408	18.127	.000
	Within groups	152.383	118	1.291		
	Total	175.792	119			
Degree of concerning the same info	Between groups	13.333	1	13.333	10.077	.002
	Within groups	156.133	118	1.323		

5 Summary

Based on the survey and analysis of the two mainstream mobile social network products in China, this study found that the positioning of the product, the scope of the audience, the degree of the information freedom, the product’s usability, the number of phenomenal users were the key to attributes and effectiveness of a product’s social experience.

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