A Comparative Study on Discourse and Dissemination Effect of Official WeChat in Universities

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Abstract: The official WeChat account in universities is an important channel for information dissemination and image building of colleges and universities, carrying the responsibilities of education, publicity and public opinion guidance. A comparative analysis is made on the reports from the official WeChat accounts of two universities with different dissemination effect by the form of corpus analysis. The official WeChat account of University B takes serving teachers and students as its main responsibility, and constructs the discourse image of a service-oriented and education-oriented university; while the official WeChat account of University A also pays attention to ideological education and services for teachers and students. The number of ideological education reports ranks the first and the external publicity reports are its characteristics, thus constructing the discourse image of educational, reputation-oriented and service-oriented university. In terms of dissemination effect, the count of reports reading from the official WeChat account of University A is affected by both discourse content and discourse form; the count of reports reading from University B is influenced by discourse content and discourse subject. Finally, the paper puts forward some suggestions on improving the dissemination effect of official WeChat account in universities.

1. Introduction

University official WeChat accounts, established and managed by the publicity department of university, are WeChat public accounts recognized by universities. According to the "National Ranking of WeChat Official Accounts of Ordinary Universities" published by the China Youth Daily, as of January 2018, there were a total of 589 university official WeChat accounts in China, distributed in 29 provinces and municipalities (with no statistical data for Qinghai and Tibet). However, only 28% of them had a WCI (WeChat Index) score higher than 800, indicating that universities have different levels of attention and operational management for their official WeChat accounts, resulting in significant variations in their dissemination effects [1]. On August 9, 2022, the China Youth Daily published the "Top 100 Official WeChat Accounts of Chinese Universities for the 2021-2022 Academic Year," as well as the "Top 100 Official WeChat Accounts of Higher Vocational Colleges." University B's official WeChat account ranked seventh nationwide, while

University A's official WeChat account did not make the list. According to information from the Qingbo Big Data website, the WeChat Index (WCI) for University A's official WeChat account was 515.64, while University B's official WeChat account had a WCI of 929.59, indicating a difference of approximately double in terms of WeChat Index [2].

2. Research Design

Shi Xu proposed a framework for the study of cultural discourse: starting from the concept of social events as verbal communication activities, researchers focus on the following categories: (1) Who is (not) speaking? (2) What was (not) said and how was it said? (3) What medium was used? (4) For what purpose, and what kind of impact was produced? (5) What kind of cultural relationship exists? (6) What kind of historical relationship exists? [3] Drawing on Shi Xu's framework for cultural discourse research [4], this study mainly focuses on the following questions:

(1) What themes of WeChat content were launched by the official WeChat accounts of the two universities?

(2) Who is speaking in the WeChat content launched by the official WeChat accounts of the two universities?

(3) In what form of discourse are the WeChat contents pushed by the official WeChat accounts of the two universities?

(4) What kind of school image has been constructed by the official WeChat accounts of the two universities? What are their dissemination effects?

The corpus for this study is derived from the official WeChat accounts of two representative domestic higher vocational colleges, covering the period of the first semester from 2021 to 2022. The research corpus consists of 143 WeChat reports from University A's official WeChat account from September 3, 2021, to January 14, 2022, [5] and 61 WeChat reports from University B's official WeChat account from September 1, 2021, to January 24, 2022 [6].

3. Corpus Analysis

3.1 Discourse Contents

Ideological Education	Campus News	Campus Life	External Promotion	Campus Culture
60	43	21	16	3
42%	30%	14.7%	11.2%	2.1%

Table 1: Discourse Contents (University a)

According to Table 1, the top-ranked discourse theme for University A's official WeChat account is ideological education, covering topics such as historical event retrospectives and "Four Histories" lectures in hometown, accounting for 42% of the total. Campus news ranks second, including recruitment information, good news, and conference announcements, accounting for 30%. Campus life ranks third, encompassing campus street interviews and campus radio, accounting for 14.7%. External publicity reports rank fourth, including introductions to various colleges and recommendations for academic journals, accounting for 11.2%. Campus culture ranks fifth, featuring artistic performances and festival greetings, accounting for 2.1%.

According to Table 2, the top-ranked discourse content for University B's official WeChat account is campus information, including various notifications and campus news, accounting for 36.1%. Campus life ranks second, with reports closely related to student life, such as "Tomorrow is the Winter Solstice, let's have tangyuan and make dumplings!" accounting for 31.1%. Campus culture ranks third, including posts on campus's fight against the pandemic, the official WeChat's

fifth-anniversary park event, and college competitions, accounting for 18%. Ideological education reports rank fourth, including exhibitions of learning achievements and expressions of love for the country, accounting for 14.8%.

Campus News	Campus Life	Campus Culture	Ideological Education
22	19	11	9
36.1%	31.1%	18%	14.8%

Table 2: Discourse Contents (University B)

3.2 Discourse Subjects

University A's official WeChat account can be categorized into seven types of discourse subjects: school institution discourse, expert and scholar discourse, student discourse, teacher discourse, school leaders/government officials' discourse, teacher/student discourse, and discourse on historical events. The specific breakdown is shown in the following Table 3.

Table 3: Discourse Subjects (University A)

University	Experts and Scholars	Students	Teachers	University Leaders/Government Officials	Teacher/Student	Historical Events
50	32	28	11	10	8	4
35%	22.4%	19.6%	7.7%	7%	5.6%	2.8%

In terms of discourse subjects, University A's official WeChat account ranks the highest in tweets with the school as the discourse subject, primarily covering external publicity and campus life reports, accounting for 35%. Tweets with experts and scholars as the subject rank second, mainly including conference information, accounting for 22.4%. Tweets with students as the discourse subject rank third, involving student campus interviews and "Four Histories" lectures in hometown, accounting for 19.6%. Tweets with teachers as the discourse subject rank fourth, including news of teacher awards and teacher interviews, accounting for 7.7%. Tweets with both school leaders and government officials as the dual subject rank fifth, mainly comprising various conference speeches, accounting for 7%. Tweets with both teachers and students as the dual subject rank sixth, covering campus information and ideological education, accounting for 5.6%. Finally, tweets with historical events as the discourse subject rank seventh, mostly related to important holiday commemorations, accounting for 2.8%.

Table 4: Discourse Subjects (University B)

University	Students	Official WeChat Account	Teachers	Teacher/Student
34	19	4	3	1
55.7%	31.1%	6.6%	4.9%	1.6%

According to Table 4, the tweets from University B's official WeChat account rank the highest with the school as the reporting subject, covering various notices, voting selections, and campus introductions, accounting for 55.7%. Tweets with students as the discourse subject rank second, including efforts in combating the epidemic, student interviews, and more, accounting for 31.1%. Tweets with the official WeChat account as the discourse subject rank third, mainly involving notifications about the WeChat account's transformation and anniversary celebration, accounting for 6.6%. Tweets with teachers as the discourse subject rank fourth, including Teacher's Day commendations, counselor introductions, and more, accounting for 4.9%. Tweets with both teachers and students as the dual subject rank fifth, accounting for 1.6%.

3.3 Discourse Forms

Based on Zhu Yongsheng's criteria for multimodal discourse, the tweets from the two universities' official WeChat accounts can be categorized into single-modal reports consisting of pure text and multimodal reports combining "text + image/video/audio." [7] The specific breakdown is shown in the following Table 5.

Image	Video	Text	Audio
78	55	9	1
54.5%	38.5%	6.3%	0.7%

Table 5:	Discourse	Forms ((University A)
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As shown in Table 5, regarding the discourse forms, University A's official WeChat account prioritizes image-based reports, accounting for 54.5%. Video-based reports rank second, comprising 38.5% of the total. Text-based reports rank third at 6.3%, while audio-based reports only account for 0.7%.

Table 6: Discourse Forms (University B)

Image	Video	Text
51	9	1
83.6%	14.8%	1.6%

As shown in Table 6, in terms of discourse forms, University B's official WeChat account also emphasizes image-based reports, comprising 83.6% of the total. Video-based reports rank second, accounting for 14.8%, while text-based reports rank third at 1.6%.

4. Construction of Discourse Images in Two Universities

In summary, University A's official WeChat account constructs an educational-oriented university image with a patriotic sentiment through significant historical event reviews and student-centered articles such as "My Story of Explaining the Four Histories in My Hometown." The account also plays a pioneering role in promoting vocational undergraduate education through its emphasis on professional education-related articles in external publicity. These types of reports contribute to the establishment of a reputable university image. Additionally, University A's official WeChat account constructs a service-oriented university image through a total of 64 articles focusing on campus information and campus life, accounting for 44.7% of the total. On the other hand, University B's official WeChat account is committed to serving campus faculty and students, utilizing vivid and lively language and interactive articles. Reports focusing on campus information, campus life, and campus culture rank among the top three, accounting for a total of 85.2%. The discourse predominantly features the university and students as the main subjects, thus constructing a service-oriented university image. Although the proportion of reports related to ideological education in University B's official WeChat account is relatively small, due to their strong interactivity and close relevance to followers' lives, they have achieved favorable dissemination effects. Based on the above discourse analysis, it can be concluded that University A's official WeChat account strives to create an educational-oriented, reputable, and service-oriented university image. Meanwhile, University B's official WeChat account tends to establish a more youthful and service-oriented educational institution image.

5. Comparative Analysis of Dissemination Effects

Analysis of variance, also known as "variance analysis" or "F-test," was invented by R.A. Fisher. It is used to test the significance of differences in means among two or more samples. Three-factor variance analysis is a statistical method used to determine whether the means of three or more populations are equal under the influence of three factors.[8] In this study, discourse themes, discourse subjects, and discourse forms were used as independent variables, while the number of readings served as the dependent variable. A three-factor mixed experimental design was employed to investigate whether these independent variables affect the number of readings of WeChat articles and whether there are different forms of interaction effects among these three variables. Firstly, an analysis was conducted on University A's official WeChat account articles using the number of readings as the dependent variable. The results are illustrated in the following Table 7:

Inter-subject Effects Test						
Dependent Variable: Reading Count						
Source	Type III Sum of Squares	Degrees of Freedom	Mean Square	F	Significance	
Adjusted Model	152086720.153a	13	11698978.47	5.273	<.001	
Intercept	88163067.74	1	88163067.74	39.74	<.001	
Discourse Content	32668286.19	5	6533657.239	2.945	0.015	
Discourse Form	908916.574	3	302972.191	0.137	0.938	
Discourse Content * Discourse Form	56631633.59	5	11326326.72	5.105	<.001	
Error	286202171.1	129	2218621.482			
Total	1007524240	143				
Adjusted Total	438288891.3	142				
a R-squared = .347 (Adjusted R-squared = .281)					

Table 7: Analysis of Influencing Factors on Reading Count of a University

Based on the three-factor analysis of variance, it is found that the significance (p-value) of the discourse content is 0.015, which is less than 0.05, indicating statistical significance. Therefore, it can be concluded that the discourse content has the greatest influence on the reading count of A University's official WeChat account. The other two factors have little to no effect. Additionally, there is a significant correlation between the discourse topic and discourse form, with a p-value less than 0.05. Hence, the reading count of A University's official WeChat account is jointly influenced by both the discourse content and discourse form.

Analyzing the tweets from B University's official WeChat account with the reading count as the dependent variable, the results are shown in the following Table 8.

Total Variance Explanation	/	/	/	/	/	/	/
/	Component	Initial Eigenvaluesa	/	/	Sum of Extracted Loadings Squared	/	/
/	/	Total	Variance Percentage	Cumulative Percentage %	Total	Variance Percentage	Cumulative Percentage %
Original	Discourse Content	1.159	38.628	38.628	1.159	38.628	38.628
/	Discourse Subject	1.022	34.081	72.709	1.022	34.081	72.709
	Discourse Form	0.819	27.291	100	0.819	27.291	100
Rescaling	Discourse Content	1.159	38.628	38.628	1.159	38.628	38.628
/	Discourse Subject	1.022	34.081	72.709	1.022	34.081	72.709
/	Discourse Form	0.819	27.291	100	0.819	27.291	100

Table 8: Analysis of Influencing Factors on Reading Count of B University

When analyzing the covariance matrix, the initial eigenvalues of the original solution and the rescaled solution are the same. According to the table of principal variance explanation, the discourse content accounts for 38.628% of the variance, and the discourse subject accounts for

34.081% of the variance. Both of them have initial eigenvalues greater than 1, indicating statistical significance. Therefore, it can be concluded that both the discourse content and the discourse subject have an impact on the reading count.

In summary, the reading count of A University's official WeChat account is jointly influenced by the discourse content and discourse form. Similarly, the reading count of B University's official WeChat account is influenced by both the discourse content and the discourse subject. Combining the analysis of WeChat article data from these two universities, it is observed that articles related to students' campus life have higher reading counts. The language used exhibits a tendency towards code-switching and internet language, such as a mixture of Chinese and English, and the use of the "@" symbol. In terms of dissemination influence, articles in the form of videos rank first for both universities, aligning with the trend of new media development, where multimodal forms of expression are more popular. The discourse subject variable influences the reading count of B University's official WeChat account. Articles with students, the university, and the official WeChat account as the discourse subjects rank in the top three in terms of reading count. The increasing number of reports with students and the university as the discourse subjects vividly and dynamically construct a service-oriented institutional image.

6. Conclusion

In this study, the official WeChat account of University B, one of the top 100 official WeChat account of Chinese universities, and University A, which is not on the list, are selected as research objects. Although the number of reports of University A is larger, its communication influence needs to be further strengthened. According to the data analysis, the official WeChat account of University B takes serving teachers and students as its main responsibility and constructs the discourse image of a service-oriented and education-oriented university. The official WeChat account of University A also pays attention to ideological education and services for teachers and students. The number of ideological education reports ranks the first and its characteristics are external publicity reports. Thus, it constructs the educational, reputation-oriented and service-oriented discourse image.

University B's official WeChat account has a lively and interactive language, and has a cartoon mascot of the school, which shapes the original official WeChat into an interesting "person", often interacts with fans with humorous language, and has developed a series of related peripheral products. This kind of friendly publicity method shortens the psychological distance with students, improves the followers' favorable rating on the official WeChat of the school, and shows the young and energetic school image. University A's official WeChat account pays special attention to ideological education reports, which top the list. Such similar reports are mostly one-way propaganda with experts, scholars and teachers as discourse subjects, and have a certain distance from the audience. Most of them rank in the bottom ten of the number of reports reading and likes, which to a certain extent reduces the communication influence of the official WeChat account.

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