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Research Article

Changes of Class Opinion Leaders under the Mode of Fujian-Taiwan Cooperation in Running Schools Based on the Perspective of IoT Intelligent Analysis

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Based on the perspective of IoT intelligent analysis of the 2017 grade advertising class of Fujian-Taiwan cooperation School of Communication College of Fujian Normal University before and after going to Taiwan, this paper studies the impact of Fujian-Taiwan cooperation on the class network by comparing the advertising professional classes that do not accept the Fujian-Taiwan cooperation. From the overall network density of the class, the use of WeChat promotes the information flow of the whole network; Fujian-Taiwan cooperation in running schools significantly improves the class cohesion of Fujian-Taiwan classes; the cohesion of professional classes in the school-based department without the cooperation between Fujian and Taiwan has not been improved. From the perspective of centrality analysis and structural holes: the experimental group and the control group before going to Taiwan have the characteristics of partial female and class committee, and the excellent academic performance is not the necessary condition for the opinion leaders of convention number; the characteristics of the opinion leaders of the control group in the two periods before and after going to Taiwan have not changed a lot, with girls and class committee as the main characteristics; after going to Taiwan, the characteristics of opinion leaders in the experimental group changed greatly, with more boys, more excellent students, and less importance of class committee.

1. Introduction

Fujian-Taiwan cooperation in running schools is a "model" of educational system reform created by Fujian, which has unique geographical advantages. In 2009, Fujian Province launched the "school enterprise" and "3 + 1" cooperation program between Fujian and Taiwan. Among them, the "3 + 1" training mode was listed as the pilot project of national education system reform in 2011 and was selected as a typical case of national education reform and innovation in 2013 and won the Innovation Award. In 2010, Fujian Strait Tourism College Affiliated to Fujian Normal University Tourism College took the lead in implementing Fujian-Taiwan cooperation. Fujian Normal University became the pioneer of Fujian-Taiwan cooperation and accumulated rich experience in running schools.

In accordance with the Regulations on People's Relations between Taiwan and the Mainland, Taiwan's education authorities formulated on February 26, 2004, the key points for the examination of cooperation between schools at all levels and schools in Mainland China or for written agreements, which examined schools on both sides of the Taiwan Strait and reached Alliance or written agreement, so as to achieve the goal of "active opening and effective management." There were 185 agreements signed between 50 schools in Taiwan and 104 schools in Mainland China in 2004. By 2017, a total of 353 schools in Taiwan and 2265 schools in Mainland China signed 15157 letters of cooperation [1].

At the end of 2008, Taiwan revised the measures for licensing professionals from Mainland China to engage in professional activities in Taiwan, relaxing the period for

mainland students to study in Taiwan from 2 to 4 months to 6 months, and the longest period allowed by Taiwan's education authorities is one year. In 2010, there were 5316 people studying in Taiwan, 11227 in 2011, 15590 in 2012, 2233 in 2013, 27030 in 2014, 34114 in 2015, 32648 in 2016, and 25824 in 2017 [2].

In 2011, Taiwan's education authorities formed the "joint enrollment committee for universities and colleges to recruit students from Mainland China" (land-based recruitment), which launched enrollment brochures, publicity, enrollment, and enrollment. The number of undergraduate, master, and doctoral students enrolled over the years are: 1265 in 2011 (1017 for bachelor's degree, 220 for master's degree, and 28 for doctor's degree), 1328 in 2012 (999 for bachelor's degree, 299 for master's degree, and 30 for doctor's degree), 1865 (1234 for bachelor's degree, 528 for master's degree, and 103 for doctor's degree) in 2013, 2653 (1804 for bachelor's degree, 676 for master's degree, and 173 for doctor's degree) in 2014, and for 2015, there were 3119 (2024 bachelor's degree, 866 master's degree, and 229 doctor's degree), 2750 in 2016 (1693 bachelor's degree, 806 master's degree, and 251 doctor's degree), 3107 (1906 bachelor's degree, 907 master's degree, and 294 doctor's degree) in 2017, and 2703 people (1578 bachelor's degree, 996 master's degree, and 329 doctor's degree) in 2018 [3].

At present, the "3 + 1" project of Fujian Taiwan cooperation in running schools requires the introduction of professional courses from Taiwan universities to account for more than one-third of all courses, and the number of professional core courses taught by Taiwan teachers accounts for more than one-quarter of all courses. The first, second, and fourth grades of the project need to have curriculum introduction and teaching by Taiwan teachers. Students can not only go to Taiwan for one year in the third grade as the introduction of teaching resources of the project.

In a word, with the continuous maturity of Fujian-Taiwan cooperative education mode, the development of cooperative education mode is also deepening. The main performances are as follows: the number of colleges and universities establishing cooperation alliance between the two sides is increasing; the number of students studying in Taiwan who study in Taiwan increases with the extension of cooperation; and the number of students who go to Taiwan to receive higher education such as bachelor's degree, master's degree, and doctor's degree increases year by year. In recent years, Fujian and Taiwan's cooperative colleges and universities and cooperative Taiwan funded enterprises have jointly formulated professional talent training plans, jointly established teaching teams, and jointly carried out the construction of majors, courses, and teaching materials, which have achieved remarkable results. Students actively participated in various practical activities, which not only achieved good social response but also enhanced the understanding and friendship between compatriots on both sides of the strait.

As an extension of the "1992 Consensus," the mainland's policy of going to Taiwan is based on cross-strait relations. What Cai Yingwen's government has done since taking office has led to tension in cross-strait relations and undoubtedly affected the general trend of mainland students studying in

Taiwan. At the same time, Taiwan's long-standing restrictions and even "discrimination" on mainland students are also the deep-seated reasons for keeping mainland students away from Taiwan.

2. Literature Review

There are a lot of works on the cross-strait relations from the political and cultural aspects, but there are few works on education. In 2016, Lin and Huang published the book *Research on the educational relationship between Fujian and Taiwan* in the new era. The book analyzes the educational exchange and cooperation between Fujian and Taiwan from the perspectives of historical origin, exchange status, cooperation mode, and experience analysis, showing the efforts and contributions made by both sides of the straits in the construction of education in the new era to promote and deepen the peaceful development of cross-strait relations [4].

On the contrary, many of Mainland students' books were published in Taiwan, for example, Yang's *Taiwan dream of mainland students* [5], Jia's *The first year of Mainland students* [6], Liu's *Asia's good child: a mainland student's vision of Taiwan*, and Hu's *Taiwan, you can better* [7, 8]. Through the analysis of Mainland students' study and life experience in Taiwan, these works discuss the unique experience of Taiwan in the eyes of cross-border students studying in Taiwan.

At present, the related papers in HowNet are mainly studied from three aspects.

The first is the research on the mode of Fujian-Taiwan cooperation in running schools. For example, Qian discussed five modes of Fujian-Taiwan cooperation in running schools: "school enterprise" tripartite cooperation mode, "piecewise docking" cotraining mode, "student exchange" cooperation and exchange mode, "platter type" cooperative teaching mode, and "joint training" mode [9].

Second, the management of Fujian-Taiwan Cooperative Teaching: for example, Cai and Dong research on teaching management of Fujian-Taiwan University cooperation in running a school. Through the teaching analysis of Fujian-Taiwan cooperation in running a school of digital creativity College of Xiamen University of technology, this paper discusses the current situation of Fujian-Taiwan Cooperative Teaching Management, the characteristics of teaching management, as well as the existing problems and countermeasures [10–13].

Third, research on the work of Fujian-Taiwan cooperation counselors: for example, Lin et al. suggested that counselors should provide and create a platform to give full play to students' own advantages in practical work; overcome their own shortcomings and establish a learning organization system; actively guide students to seize opportunities, overcome environmental threats, and meet challenges [14].

At present, the relevant research of Taiwan CNKI Database mainly focuses on the following three aspects.

The first is the research on the attitude of Taiwan society towards cooperative education. For example, Song in his master's thesis "difference analysis of media stance on

Mainland students' policy reports and comments on studying in Taiwan," through the method of content analysis, analyzed the policy reports and comment texts of three newspapers of China times, Lianhe daily and freedom times from 2008 to 2011, and studied from three angles of how to say, what to say, and policy analysis, and the results are obvious. The results show that there are significant differences in the technology of policy reports and comments among the three newspapers; there are significant differences in the substantive content of policy reports and comments; the different positions of newspapers lead to differences in the output of reports and comments, which have certain relevance [15].

Second, Mainland students' life cognition in Taiwan: for example, Chen and Yu discussed the relationship between social support and life coping style of Lu students in Taiwan, taking Private University of science and technology as an example. The results showed that the degree of emotional support was the highest, while the instrumental support was the least; in terms of life coping style, the most commonly used method of life coping style was the most popular. The social support and life coping style of the research object showed a significantly low positive correlation. Mainland students got more resources from others and the stronger social support, the more he would take various coping styles to face the pressure [16–20].

The third is Mainland students' cognitive research on learning in Taiwan. According to Lin's research on the satisfaction of mainland students' exchange study in Taiwan, a case study of Taiwan University and Yishou University, Lu students' satisfaction with Taiwan's academic environment, life, political media, and the overall structure is relatively high; the family income is low; there is no overseas study experience; and Mainland students, who are extroverted, are more satisfied with the exchange study in Taiwan, while Mainland students from science and engineering, biology, and agriculture all suggest that Mainland students go to Taiwan for exchange study [21].

To sum up, we find that the relevant research in Mainland China focuses on school running mode, teaching management, and counselor work, which is significantly different from that in Taiwan. Taiwan pays more attention to the policy of Mainland students and his study and life adaptation in Taiwan, which reflects Taiwan's humanistic concern for Mainland students. Most of them have not formally entered the society, but they are studying in foreign countries for various reasons, so they are more likely to have psychological disorders. However, Mainland students' study and life in Taiwan are even more inseparable from such organizations as classes. To study the network changes of communication within the organization based on classes can effectively reveal the changes and causes of Fujian-Taiwan class students in Taiwan.

3. Research Design

3.1. Research Hypothesis. In 1948, Lazaesfeld, together with Berelson and others, compiled the results of the Erie investigation into the book *People's Choice*, and put forward the concept of "two-step flow theory." They found that opinion leaders play an important role in influencing others' attitudes in interpersonal communication [22]. Generally speaking, whether or not to be a social opinion leader can be measured from three aspects: political status, economic status, and cultural status. Correspondingly, the opinion leaders of Fujian and Taiwan classes are mainly measured from three aspects: class cadres, well-off economy, and excellent learning [23].

According to social embeddedness theory, one part of personal centered social network is autonomous; the other part is external. This kind of relationship contour takes into account the special cultural, institutional value and other social environment interaction mode. Therefore, the behavior of actors is both autonomous and embedded in the interactive network, which is limited by the social background [24]. In social network analysis, we can see the process of two-way reconciliation between interpersonal relationship and social network structure. On the macrolevel, individuals are brought into the network structure and changed by the influence of social structure and social groups; on the micro level, individuals interact with the society dynamically under the influence of some opinion leaders in the network.

Therefore, this study puts forward the following four hypotheses:

H_1. In the process of Fujian-Taiwan cooperation in running schools, class opinion leaders are likely to change due to the influence of the change of social situation before and after Mainland students' arrival in Taiwan

H_2. Mainland students' characteristics of class opinion leaders are likely to focus on serving as class cadres

H_3. After Mainland students' arrival in Taiwan, class opinion leaders are likely to focus on learning excellence

H_4. In unfamiliar areas under the environmental pressure, the gender role of men in the class began to show

3.2. Research Object. The communication school of Fujian Normal University mainly adopts the "3 + 1" cooperative mode of running a school. The junior of the University goes to Taiwan (Shixin University) to study for one year. This study takes two classes of 2017 grade advertising major in Communication College of Fujian Normal University as the research object: Fujian-Taiwan class (43 students, 9 boys and 34 girls) and advertising professional class (48 students, 11 boys and 37 girls). The number and sex ratio of the two classes are similar, and the ratio of male and female is similar. In the study, the Fujian-Taiwan advertising class students were taken as the experimental group and the advertising majors as the control group. In the two periods before and after going to Taiwan (September 2019 to June 2020 to study in Taiwan, the survey time was June 2019 before going to Taiwan and June 2020 after going to Taiwan), compared with the opinion leaders of advertising professional classes, whether the opinion leaders of Fujian-Taiwan advertising class have changed and the reasons.

Due to the popularity of mobile phones, this study distinguishes opinion leaders in the real world (close friends and close friends) and opinion leaders in virtual world (WeChat friends, friends' praise and comments, and group

chat). Among them, close friends refer to the "intimate friends" who can talk about everything in their study and life, while close friends refer to those who have a certain good feeling and sometimes study, eat, and have activities together. Five students who do not repeat each other are selected in the questionnaire.

3.3. Research Method. Experimental method is applied here. Experimental method is a controlled observation activity. German scholar Atlander believes that the experimental method is "repeated observation under controlled conditions, in which one or more independent variables are controlled, so that the established hypothesis (i.e., the determined causal relationship) may be tested in different situations" [25]. The subjects involved in the experimental process were called test units or subjects. These subjects were divided into two groups. The experimental group received experimental stimulation, while the control group or control group did not receive stimulation [26].

Social network analysis is used to describe and measure the relationship between participants, as well as various tangible or intangible things flowing through these relationships, such as information and resources. There are many types of social network analysis. In this paper, the whole network density, centrality analysis, and structural holes are selected to discuss from the perspective of relationship orientation and location orientation. Centrality analysis mainly includes centrality, closeness, betweenness, and eigenvector centrality. UCINET 6.0 software is mainly used.

3.4. Index Description

3.4.1. Overall Network Density. Density is a quantitative expression of the overall distribution of interpersonal relationships in a network. It refers to the ratio of the actual number of connections between participants and the maximum number of possible connections. The value is between 0 and 1. The greater the ratio, the greater the network density. It shows the closeness of the relationship between the members of the community. The more connections between members of a given size group, the greater the density of the network. The density index can be used to study the communication frequency of two kinds of interpersonal networks in the real and virtual world. The density of friendship network reflects the cohesion of the class. The greater the density, the greater the impact on individuals.

3.4.2. Centrality Analysis

(1) Degree Centrality. It is a relatively simple index. The degree centrality of actors can be divided into two categories: absolute centrality and relative centrality [27]. Absolute centrality is the number of points directly connected to this point, and relative centrality is the standardized form of absolute centrality. If there is a direct connection between a point and multiple points in the network, the point has a high centrality. Centrality of a point measures the degree to which an individual or node is in the center of the network, reflecting the importance of the point in the network. The centrality analysis of this paper points out the degree

centrality of a point. The higher the degree centrality of a point, it means that it is associated with more participants in the network and has a higher influence in the group.

(2) Approaching Centrality. It is a measure of being out of the control of others. Friedman measures "close centrality" according to the "distance" between points. If the "distance" between a point and all other points in the network is very short, then the overall centrality of the point is relatively high, which can be called "near centrality." In other words, the actor farthest away from the central point is the weakest in terms of information resources, power, reputation, and influence. The greater the value of centrality, the longer the distance, and the less the core point of the network.

(3) Middle Centrality. It is an index to describe the individual centrality of a participant and to measure the degree to which the actor controls resources. The extent to which an actor is between the other two actors can be considered to be in an important position if he is on the path (the shortest path) of many communication networks. This person can influence the group by controlling or misinterpreting the transmission of information. Felman believes that if a participant is in the middle of many pairs of participants, his degree is usually lower. Intermediate centrality measures the extent to which the point controls the interaction between others, and its value ranges from 0 to 1 [28]. If the intermediate centrality of a point is 0, then the point is at the edge of the network and cannot control any participants; if the intermediate centrality of the point is 1, the point is in the center of the network, has great power, and can control other actors 100%.

(4) Centrality of Eigenvectors. The importance of a node depends not only on the number of neighbors but also on the importance of its neighbors. The centrality of eigenvectors considers that the nodes connected with important nodes are more important. In other words, nodes with a small number of influential contacts are more psychologically motivated than nodes with a large number of mediocre contacts.

3.4.3. Structural Holes. The location of structural hole is the position of intermediary, which can control the flow of information. Through the measurement of structural hole, we can know the communication and gathering ability of the actors in the position. Burt uses structural holes to represent nonredundant connections. If there is a direct relationship between two contacts, the cohesion and redundancy of actors will increase [29, 30]. This kind of structure has strong information and control advantages. There are four indexes of structural hole index: effective size, efficiency, constraint, and hierarchy, among which the third index is the most important.

4. Data Results and Analysis

4.1. The Overall Network Density before and after Going to Taiwan. Through UCINET 6.0, the overall network density

data of the experimental group and the control group were analyzed (Table 1).

First of all, the use of WeChat promotes the information flow of the whole network. In the experimental group or the control group, the network density of virtual world is higher than that of the real world. Taking the experimental group as an example, the network density of virtual world is mostly higher than that of real world. WeChat friends (0.511) and like (0.403) are greater than close friends (0.074) and relatively close friends (0.140). The network density of comment (0.114) and WeChat group (0.117) is slightly less than that of close friends (0.140), but in terms of clustering coefficient, the network density of comment network (0.678) and WeChat group network (0.549) is higher than that of intimate (0.355) and relatively intimate (0.362). The control group also had a similar situation.

Secondly, Fujian-Taiwan cooperation in running schools has significantly improved the class cohesion of Fujian and Taiwan classes. After the experimental group went to Taiwan, the indicators of the real world (close friends and close friends) and virtual world (WeChat friends, friends' praise and comments, and group chat) were significantly higher than those before going to Taiwan. Among them, close friends (0.246) and WeChat friends (0.833) after going to Taiwan are much higher than those of close friends (0.140) and WeChat friends (0.511) before going to Taiwan.

Finally, the cohesion of the professional classes without the cooperation between Fujian and Taiwan has not been improved. In the control group, there were no significant changes in the indicators before and after the arrival in Taiwan. On the contrary, the network density of close friends (0.091 > 0.084), likes (0.415 > 0.162), and comments (0.173 > 0.074) also decreased significantly. This may be related to the reasons for the relatively loose management of universities in Mainland China. The students in mainland universities are relatively free, their communication activities are relatively wide, and their class consciousness is not very high.

4.2. Comprehensive Index Analysis of Experimental Group before and after Going to Taiwan

4.2.1. Comprehensive Index Analysis of the Experimental Group before Going to the Stage. From the perspective of centrality analysis and the relationship orientation and position orientation of structural holes, the number of the top five students in each index of the experimental group before going to the stage was selected (Table 2). According to the observation of the five indicators, the students' serial numbers (convention numbers) appear in the five indicators before going to Taiwan. In the real world, the convention numbers of close friends are 22 and 38, 43, 34, and 24 in the real world. In the virtual world, the convention numbers of WeChat friends are 18, 35, 34, 36, and 25, and the convention numbers of comments are 43, 34, and 24. On the 24th, the group chat convention numbers are 34, 28, 36, 33, and 38. We find that the number of the "like" convention of the virtual world and the close friends in the real world before going to Taiwan completely overlap, indicating that

the "like" comparison in the virtual world completely reflects the situation of the close friends in the real world. However, the variables of other real world and virtual world are very different, and the opinion leaders of different types and spaces have also changed greatly. Figures 1–5 show the visual and intuitive results of the social network analysis.

4.2.2. Comprehensive Index Analysis of the Experimental Group after Going to Taiwan. After the experimental group went to Taiwan, the number of the top five students in each index was selected (Table 3). According to the observation of the five indicators, the number of students (convention number) in the five indicators all appeared in the five indicators. In the real world, the convention number of close friends is 43, 26, and 30, and the convention number of close friends is 2, 7, 24, 25, and 43. In the virtual world, WeChat friend's public agreement number is 16 and 20, and no one praises the convention number, while the comment convention number is 24, 23, 5, and 16. Group chat convention numbers are 18, 28, and 33. We find that the variables of the real world and the virtual world are very different after they go to Taiwan, and the opinion leaders of different types and spaces have also changed greatly. Figures 6–10 show the visual and intuitive results of the social network analysis.

4.3. Comprehensive Index Analysis of Two Time Periods in Control Group. Through the analysis of Amos software, the modified structural equation model is obtained, as shown in Figure 2.

4.3.1. Comprehensive Index Analysis of Control Group before Going to Taiwan. From the perspective of centrality analysis and the relationship orientation and position orientation of structural holes, the control group selected the number of the top five students in each index before going to the stage (Table 4). According to the observation of the five indicators, the number of students (convention number) appears in the five indicators before going to Taiwan. In the real world, the convention number of close friends is no one, and the convention number of close friends is no. 21 and no. 35. In the virtual world, the convention number of WeChat friends is no. 11, no. 18, no. 4, and no. 40, no. 46 and no. 48, no. 46, no. 48, and no. 4, and group chat convention no. is 11, 39, 22, and 1. We find that before going to Taiwan, the variables of the real world and the virtual world are very different, and the opinion leaders of different types and spaces have also changed greatly.

4.3.2. Comprehensive Index Analysis of Control Group after Going to Taiwan. After the control group went to Taiwan, the number of the top five students in the coefficient was selected (Table 5). From the observation of the five indicators, the students' serial numbers (convention number) which appear in the five indicators all appear in the five indicators. After arriving in Taiwan, the convention number of close friends is no one in the real world, and the convention number of close friends is no. 21, no. 20, no. 35, and no. 40, while in the virtual world, the convention number of WeChat friends is no. 11, no. 18, and no. 4, no. 47 and no. 37, no. 47, no. 13, and no. 39, respectively. The convention

Table 1: The overall network density before and after going to Taiwan.

Class	Survey time	The real world									The virtual world								
		Close friends		Relatively close friends		WeChat friends		Give the thumbs-up		Comment		WeChat group	
		Density	Clustering coefficient	Density	Clustering coefficient	Density	Clustering coefficient	Density	Clustering coefficient	Density	Clustering coefficient	Density	Clustering coefficient
Experience group	2018.6	0.074	0.355	0.140	0.362	0.511	0.662	0.403	1.037	0.114	0.678	0.117	0.549
	2019.6	0.077	0.345	0.246	0.466	0.833	0.860	0.810	1.658	0.129	0.333	0.172	0.575
Control group	2018.6	0.041	0.266	0.091	0.225	0.538	0.635	0.415	0.874	0.173	0.438	0.025	0.266
	2019.6	0.046	0.266	0.084	0.233	0.595	0.674	0.162	0.485	0.074	0.149	0.028	0.301

TABLE 2: Comprehensive index of experimental group before going to Taiwan.

| Index	The real world			The virtual world		
	Close friends	Relatively close friends	WeChat friends	Give the thumbs-up	Comment	WeChat group
Degree	43.40.22.28.38	43.38.34.24.33	18.35.34.36.25	43.34.38.24.33	23.42.36.24.30	34.28.36.33.38
Closeness	43.22.38.40.13	43.34.38.24.36	18.35.34.36.25	43.34.38.24.33	23.42.36.24.30	34.28.36.33.38
Betweenness	43.22.38.40.13	43.34.38.24.36	18.35.34.36.25	43.34.38.24.33	36.24.23.42.5	34.28.33.36.38
Eigenvector	40.22.28.38.19	43.38.34.24.33	18.35.34.36.25	43.38.34.24.33	23.42.36.24.30	34.28.36.33.38
Constraint	26.43.8.22.38	20.34.43.36.24	34.18.25.35.36	20.34.43.36.24	22.28.23.38.24	/
Convention no.	22.38	43.34.24	18.35.34.36.25	43.34.24	23.24	34.28.36.33.38
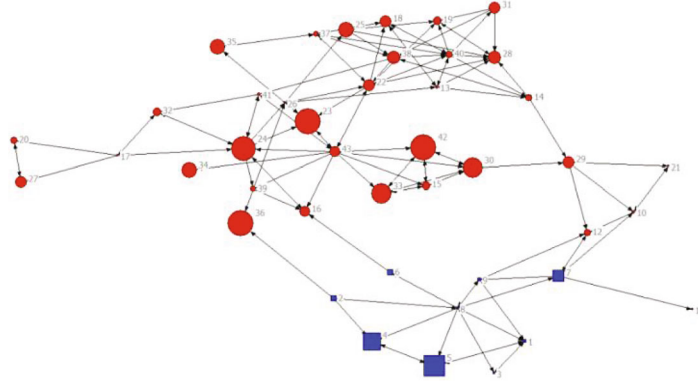
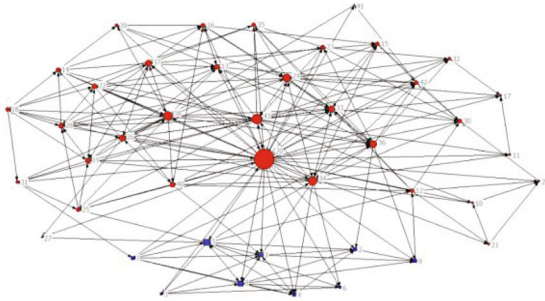FIGURE 1: Social network analysis of close friends.

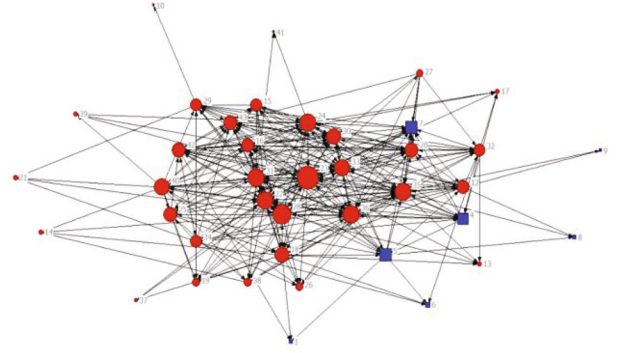FIGURE 2: Social network analysis of relatively close friends.

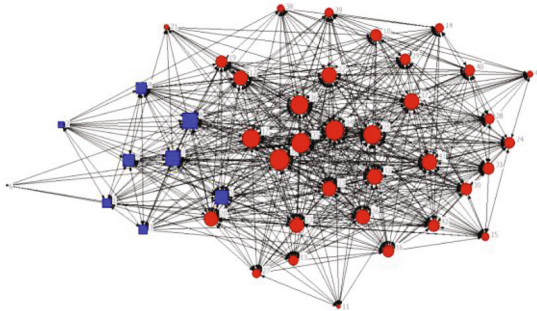FIGURE 4: Social network analysis of give the thumbs-up.

FIGURE 3: Social network analysis of WeChat friends.

numbers are 11, 20, 32, and 39. We find that the variables of the real world and the virtual world are very different after they go to Taiwan, and the opinion leaders of different types and spaces have also changed greatly.

There are two main sources of personality mask: the guidance of social requirements and expectations, and personal social goals and aspirations. Therefore, people will play different roles that meet social expectations, such as good students and good role models. Once your behavior deviates, others will correct you according to role expectations. Therefore, in real society, mainland students are often under various masks, and many real "I" are suppressed. Because WeChat has been given meaning space for students to work in the mainland, many real expressions are difficult to
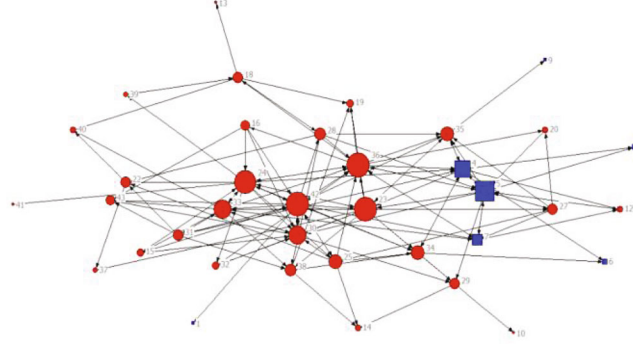
FIGURE 5: Social network analysis of comment.

TABLE 3: Comprehensive index of experimental group after going to Taiwan.

| Index	The real world			The virtual world		
	Close friends	Relatively close friends	WeChat friends	Give the thumbs-up	Comment	WeChat group
Degree	43.30.5.26.28	2.7.24.25.43	16.18.20.36.43	24.32.23.16.38	24.23.5.16.35	18.26.28.33.19
Closeness	43.26.30.5.16	2.7.24.25.43	16.18.20.36.43	24.16.32.23.20	24.23.5.16.35	18.33.28.38.5
Betweenness	43.30.26.5.16	2.7.24.25.43	16.18.20.36.43	24.32.16.23.38	24.5.23.16.35	18.26.28.33.19
Eigenvector	43.5.30.26.8	2.7.24.25.43	16.18.20.36.43	24.23.16.32.20	24.23.5.16.35	18.33.28.38.5
Constraint	43.26.8.30.37	24.2.7.25.43	16.20.33.9.12	38.42.40.5.13	24.23.5.16.38	/
Convention no.	43.26.30	2.7.24.25.43	16.20	None	24.23.5.16	18.28.33
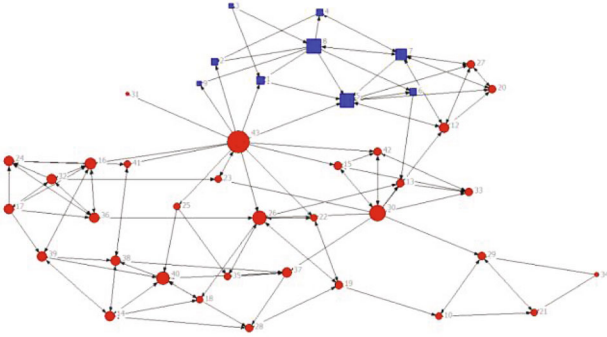
FIGURE 6: Social network analysis of close friends.

promote on WeChat. Many mainland students will say "you can add my WeChat, but you can't add my Microblog." Due to the existence of personality mask, it is understandable that the opinion leaders in the real world and the virtual world in Mainland Colleges and universities are quite different.

4.4. Comparative Analysis of Opinion Leaders of between Experimental Group and Control Group. Table 6 shows that the class committee refers to the monitor, study committee, or life committee member, and excellent performance refers to the top 10 in the last semester and has won the school award or national award. There are obvious differences and similarities between the experimental group and the control

group before and after going to Taiwan, mainly in the following three points:

First, both the experimental group and the control group were female and dominated by the class committee during the period before they went to Taiwan. Whether the academic performance was excellent or not was not a necessary condition for the opinion leaders of the convention. This may be due to the mainland students after a long period of pressure in middle school suddenly relax in Colleges and universities, to social and other aspects of multidirectional development. The majority of female students in normal colleges and universities are female. Under the pressure of Yin Sheng Yang, male students are more shy. This also explains that the opinion leaders of convention no. before going to Taiwan are mainly women.

Second, the characteristics of opinion leaders of the convention no. of the control group did not change much in the two periods before and after going to Taiwan. Both of them were mainly characterized by female students and class committee, indicating that the main atmosphere of mainland universities was still focused on the election of class committee. This may be more conducive to join the party and find a job with the experience of the class committee, which is a reflection of the current college students' utilitarian thinking of seeking benefits and avoiding disadvantages.

Thirdly, the characteristics of opinion leaders in the experimental group changed a lot after they went to Taiwan: more boys, more excellent students, and less importance of class committee, which indicated that the structure of class network had changed greatly in the new environment. Due
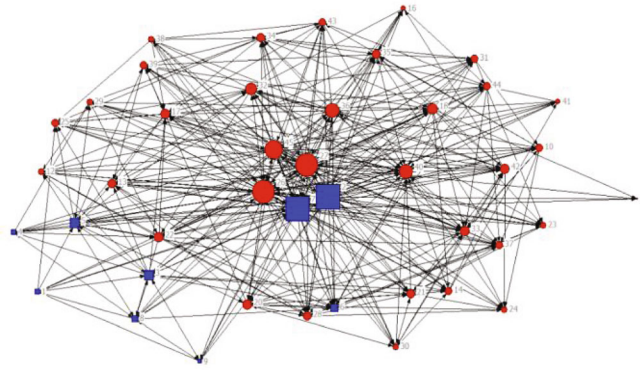
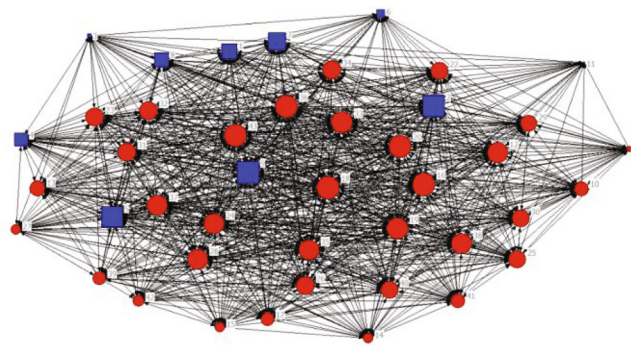Figure 7: Social network analysis of relatively close friends.

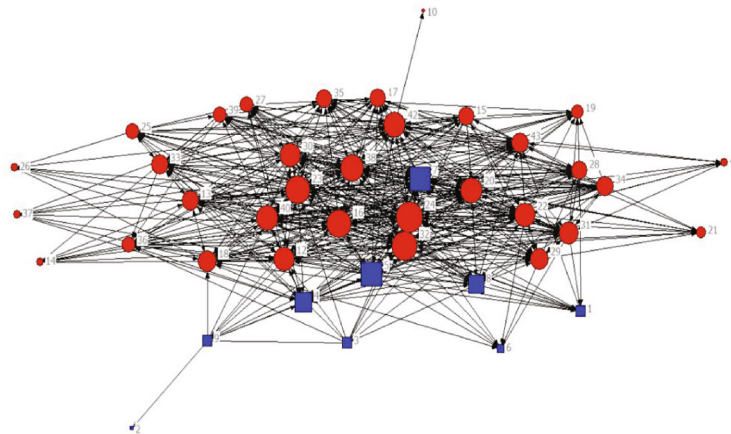Figure 8: Social network analysis of WeChat friends.

Figure 9: Social network analysis of give the thumbs-up.

to the consideration of political factors, the study and life of Fujian-Taiwan classes in Taiwan's Shixin University are isolated to a certain extent. The Shixin guild hall is located in a remote place, and all of them are Mainland students' dormitories. The classroom learning is also a whole class of Mainland students. Few Taiwanese students come to take Mainland students' courses. Such an environment has greatly stimulated the cohesion of Fujian and Taiwan classes in isolated situations.

5. Summary

The cultures on both sides of the strait share the same root and origin. After some cultural baptism, the traditional
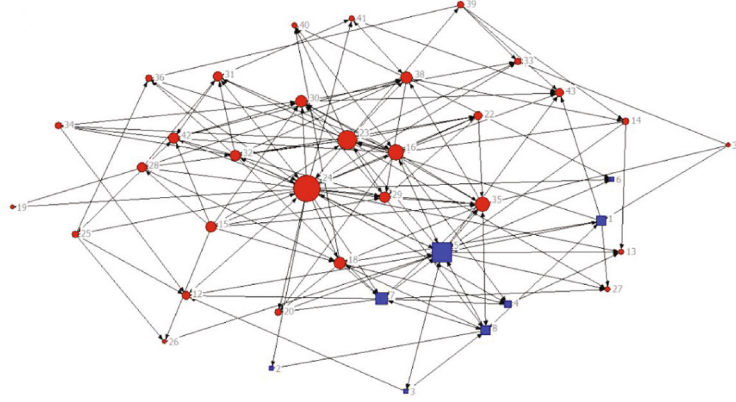
FIGURE 10: Social network analysis of comment.

TABLE 4: Comprehensive index of control group before going to Taiwan.

Index	The real world			The virtual world		
	Close friends	Relatively close friends	WeChat friends	Give the thumbs-up	Comment	WeChat group
Degree	17.44.10.19.16	21.38.35.25.20	11.18.4.16.40	46.48.38.1.40	46.48.10.4.32	11.39.32.22.1
Closeness	17.44.15.19.10	21.25.20.48.35	11.18.4.16.40	48.1.40.46.38	46.48.10.32.4	11.39.32.22.1
Betweenness	44.17.16.15.10	21.25.35.20.48	11.18.4.16.40	46.38.32.48.40	46.48.4.32.10	11.22.39.1.31
Eigenvector	17.10.20.19.18	21.20.48.35.28	11.18.4.16.40	38.48.1.46.32	46.10.48.32.4	11.39.32.22.1
Constraint	4.18.11.22.40	35.21.25.48.40	4.18.11.22.40	46.36.48.22.1	36.46.48.4.2	/
Convention no.	None	21.35	11.18.4.40	46.48	46.48.4	11.39.22.1

TABLE 5: Comprehensive index of control group after going to Taiwan.

Index	The real world			The virtual world		
	Close friends	Relatively close friends	WeChat friends	Give the thumbs-up	Comment	WeChat group
Degree	11.44.13.5.6	21.20.35.40.28	11.18.42.4.16	47.42.37.4.46	47.13.39.4.12	11.20.32.22.39
Closeness	11.44.4.8.5	21.20.35.40.28	11.18.42.4.16	47.42.4.37.46	47.39.4.13.15	11.20.32.39.44
Betweenness	11.44.4.8.13	35.21.20.40.19	11.18.42.4.16	47.42.37.4.46	47.13.39.4.12	11.22.20.32.39
Eigenvector	11.13.5.6.4	21.20.35.28.40	11.18.42.4.16	42.47.4.46.37	47.39.4.13.35	11.20.32.39.44
Constraint	17.30.44.16.28	35.21.20.40.4	18.4.11.33.40	12.47.56.39.37	47.13.39.37.12	/
Convention no.	None	21.20.35.40	11.18.4	47.37	47.13.39	11.20.32.39

culture of the mainland is different from that of Taiwan. Taiwan has inherited some lifestyles of Chinese culture, especially in sacrificial culture. However, in terms of the complexity of interpersonal communication, the mainland has completely won. Because Mainland students came from different subculture environment, Mainland students may encounter many problems in the adaptation of culture and environment. Although there is no language communication difficulty between Taiwan and the mainland, due to the policy arrangement, the students from Fujian-Taiwan class who go to Taiwan for exchange all live in the Shixin guild hall in Xinbei city. Most of the students are still arranged to go out to class, eat, and live with the former mainland students. Daily life is affected by the cultural impact from school commuting, eating, and dining, which has a significant impact

on the class network structure. In daily life during the exchange period in Taiwan, the function of WeChat group used by Fujian-Taiwan class exchange students is completely different from their daily life in Mainland China. Due to the remoteness of living, Taiwan also lacks convenient Internet ordering channels, such as the mainland Hungry and Meituan Takeout, and the WeChat group meal ordering function (only when a certain number of people can deliver food) is more significant. In this isolated environment, boys' desire for gender protection was stimulated, which led to the surge of male students in the convention opinion leaders after they went to Taiwan.

The relaxed and free cultural environment and the abundant resources of school enterprise cooperation make the teaching of Taiwan's Shixin University more emphasized

TABLE 6: Comparative analysis of opinion leaders of convention no. between experimental group and control group.

		Experience group		Control group	
		Before going to Taiwan	After going to Taiwan	Before going to Taiwan	After going to Taiwan
The real world	Close friends	22 (female, class committee, outgoing). 38 (female)	43 (female, excellent performance, outgoing). 26 (male). 30 (male)	/	/
	Relatively close friends	43 (female, excellent performance, outgoing). 34 (female). 24 (female, outgoing)	2 (male). 7 (male). 24 (female, excellent performance, outgoing). 25 (female). 43 (female, excellent performance, outgoing)	21 (female, class committee). 35 (female, class committee, outgoing)	21 (female, class committee). 20 (female, class committee). 35 (female, class committee, outgoing). 40 (female)
	WeChat friends	18 (female). 35 (female). 34 (female). 36 (female, class committee). 25 (female)	16 (female, class committee, excellent performance, outgoing). 2 (male)	11 (female, class committee, outgoing). 18 (female, class committee). 4 (female, class committee, excellent performance, outgoing). 40 (female)	11 (female, class committee, outgoing). 18 (female, class committee). 4 (female, class committee, excellent performance, outgoing)
	Give the thumbs-up	43 (female, excellent performance, outgoing). 34 (female). 24 (female, outgoing).	/	46 (female). 48 (female)	47 (female). 37 (female)
The virtual world	Comment	23 (female). 24 (female, outgoing)	24 (female, excellent performance, outgoing). 23 (female). 5 (male). 16 (female, class committee, excellent performance, outgoing)	46 (female). 48 (female). 4 (female, class committee, excellent performance, outgoing)	47 (female). 13 (female). 39 (female)
	WeChat group	34 (female, excellent performance). 28 (female, class committee). 36 (female, class committee). 33 (female, class committee). 38 (female)	18 (female, excellent performance). 28 (male, class committee). 33 (female, class committee, excellent performance)	11 (female, class committee, outgoing). 39 (female). 22 (female). 1 (female)	11 (female, class committee, outgoing). 20 (female, class committee). 32 (female, class committee). 39 (female)

on practical training as a whole. Therefore, the curriculum and teaching practice of Fujian-Taiwan class jointly trained under the mode of Fujian-Taiwan cooperation are presented in the form of report and group cooperation after class. In the classroom, teachers attach equal importance to students' theory and practical ability and try to keep the classroom in line with the current situation of the industry. It has greatly stimulated the learning interest of Fujian-Taiwan class students. In their spare time, due to the pressure of academic study, Fujian-Taiwan class students will spend a lot more time than mainland students in getting along with group students and team cooperation to complete the group homework. The students with outstanding adaptability can better complete the course group work, which can attract more students to form a group to complete the homework together, and highlight the affinity and leadership characteristics of opinion leaders in the class network. In terms of teacher-student relationship, it fully demonstrates the cultural characteristics of Taiwanese hospitality. In addition to the mode of teaching and learning, the relationship between teachers and students in Fujian-Taiwan classes is as close as friends or family members.

After returning to the mainland, many Mainland students face the problem of readjustment. You can choose courses freely in Taiwan, which are all courses you are interested in, but you must learn professional courses you do not like when you come back to the mainland. It is very free in Taiwan. The dormitory also provides private space. When you come back, you have to face your roommates you do not like. There is no privacy at all. Therefore, there will be a gap in one's heart, and it needs to adapt for at least half a year. Compared with the active universities in Taiwan, mainland universities are more regular in both classroom practice activities and extracurricular organization activities due to the current responsible listening and punishment system. This further proves the change of the overall network of classes: the cohesion of Fujian-Taiwan classes is significantly higher than that of the mainland universities which have not gone to Taiwan for exchange. Therefore, in terms of curriculum, it is suggested that Mainland Colleges and universities should add and design the practice expansion part related to the curriculum, which not only enriches teaching practice but also improves students' practical ability. After class, mainland universities need to encourage students to participate in class activities, and teachers should take the initiative to establish a good personal relationship with students, through active class atmosphere and teacher-student relationship, to achieve the interactive effect complementary to the learning atmosphere.

At last, we found that although the use habits of social software on both sides of the strait are different, the mainland uses WeChat, and Taiwan uses line. The mainland uses QQ; Taiwan uses Facebook and Instagram. The mainland uses Microblog, and Taiwan uses Twitter. However, with the increasingly frequent exchanges between students from the mainland and Taiwan, the number of Taiwanese students using WeChat is also increasing. In short, making friends, having characteristics, and being difficult to replace can make a software survive. With the continuous exchanges between students on both sides of the strait, mainland social software, including Microblog and WeChat, can enter the Taiwan market.

Data Availability

Conflicts of Interest

Acknowledgments

References

[1] H. Huang, *Education Annual Report of the Republic of China-International and Cross-Strait Educational Exchanges*, Educational Resources and Publishing Center, Taipei, 2017.

[2] X. F. Zhang, *Education Annual Report of the Republic of China-Major Events in Education*, Educational Resources and Publishing Center, Taipei, 2019.

[3] "Joint enrollment committee of universities and colleges in mainland China: press release on joint enrollment of mainland students by universities and colleges," 2018, https://rusen.stust.edu.tw/cpx/member.html.

[4] X. F. Lin and X. X. Huang, *Research on the Relationship Between Fujian and Taiwan Education*, Fujian Education Press, Fujian, 2016.

[5] J. Y. Yang, *Taiwan Dream of Mainland Students*, Chinese culture foundation, Taipei, 2012.

[6] S. L. Jia, T. Lin, and J. X. Ye, *The first year of Mainland Students*, Xiuwei Information Technology Co., Ltd, Taipei, 2013.

[7] E. X. Liu, *Good Children of Asia: Taiwan from the Perspective of a Mainland Student*, Jiuyun Culture Press, Taipei, 2013.

[8] J. F. Hu, *Taiwan Is Not My Home: Mainland Students' Identity Shock in Taiwan*, Independent Writers Press, Taipei, 2014.

[9] X. Y. Qian, "Exploration on the mode of cooperation in running schools between Fujian and Taiwan," *Journal of Hunan Taxation College*, vol. 6, pp. 64–66, 2014.

[10] S. S. Cai and L. P. Dong, "Research on teaching management of Fujian-Taiwan University cooperation," *Journal of Ningbo Polytechnic*, vol. 1, pp. 61–64, 2016.

[11] H. Cheng, M. Shojafar, M. Alazab, R. Tafazolli, and Y. Liu, "PPVF: privacy-preserving protocol for vehicle feedback in cloud-assisted VANET," *IEEE Transactions on Intelligent Transportation Systems*, pp. 1–13, 2021.

[12] Z. Lv, D. Chen, R. Lou, and H. Song, "Industrial security solution for virtual reality," *IEEE Internet of Things Journal*, vol. 8, no. 8, pp. 6273–6281, 2021.

[13] Z. Lv, D. Chen, and Q. Wang, "Diversified technologies in internet of vehicles under intelligent edge computing," *IEEE*

Transactions on Intelligent Transportation Systems, vol. 22, no. 4, pp. 2048–2059, 2021.

[14] Y. P. Lin, H. Peng, X. M. Zheng, C. Y. Jiang, and Y. Huang, "Discussion on the work of college counselors under the model of Fujian-Taiwan cooperation in running schools," *Journal of Wuyi University*, vol. 31, no. 3, pp. 106–109, 2012.

[15] J. W. Song, *Analysis of the differences Between Media Opinions and Reports on Mainland Students' Policy of Studying in Taiwan*, Master's thesis of Taiwan University, Taipei, 2013.

[16] Y. R. Chen and Y. J. Yu, "A preliminary study on the social support and life coping style of Lu students in Taiwan – taking the university of science and technology as an example," *School Administration*, vol. 7, pp. 65–84, 2014.

[17] Z. Lv, L. Qiao, and H. Song, "Analysis of the security of internet of multimedia things," *ACM Transactions on Multimedia Computing Communications and Applications*, vol. 16, no. 3s, pp. 1–16, 2021.

[18] Z. Lv, L. Qiao, and I. You, "6G-enabled network in box for internet of connected vehicles," *IEEE Transactions on Intelligent Transportation Systems*, vol. 22, no. 8, pp. 5275–5282, 2020.

[19] Z. Lv and W. Xiu, "Interaction of edge-cloud computing based on SDN and NFV for next generation IoT," *IEEE Internet of Things Journal*, vol. 7, no. 7, pp. 5706–5712, 2020.

[20] J. Chen, Y. Liu, Y. Xiang, and K. Sood, "RPPTD: robust privacy-preserving truth discovery scheme," *IEEE Systems Journal*, pp. 1–8, 2021.

[21] J. Z. Lin, "A study on the satisfaction of mainland students in exchange study in Taiwan: a case study of Taiwan University and Yishou University," Master's thesis of Taiwan University, Taipei, 2011.

[22] P. F. Lazarsfield, B. Berelson, and H. Goldert, *The Choice of the People, Translated by Tang Xi*, China Renmin University Press, Beijing, 2012.

[23] Z. Lv, L. Qiao, M. S. Hossain, and B. J. Choi, "Analysis of using blockchain to protect the privacy of drone big data," *IEEE Network*, vol. 35, no. 1, pp. 44–49, 2021.

[24] M. S. Granovetter, "The strength of weak ties," *American Journal of Sociology*, vol. 78, pp. 1360–1380, 1973.

[25] [Germany] Atland, "Empirical social research methods," Central Literature Publishing House, Beijing, 1995.

[26] Y. Chen, *Introduction to Research Methods of Mass Communication*, China Renmin University Press, Beijing, 2007.

[27] J. Liu, *Handout on Holistic Network Analysis*, Gezhi publishing house, Shanghai, 2009.

[28] L. C. Freeman, "Centrality in social networks conceptual clarification," *Social Networks*, vol. 1, no. 3, pp. 215–239, 1978.

[29] R. S. Burt, J. E. Jannotta, and J. T. Mahoney, "Personality correlates of structural holes," *Social Networks*, vol. 20, pp. 63–87, 1998.

[30] Y. Wang, R. Zou, F. Liu, L. Zhang, and Q. Liu, "A review of wind speed and wind power forecasting with deep neural networks," *Applied Energy*, vol. 304, article 117766, 2021.