Empirical Study on the Causes of College Students' Entrepreneurial Team Conflict

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Abstract. In order to explore the causes of college students' entrepreneurial team conflict, this paper makes an empirical analysis of the factors influencing the task conflict and relationship conflict of the entrepreneurial team from three perspectives: demographic characteristics of team members, team structure characteristics and cognitive characteristics of team members. Through the test of multiple regression method, it is concluded that the heterogeneity of educational background, the heterogeneity of the entrepreneurial time, the degree of complementarity of team members and time size all have a positive impact on the task conflict of entrepreneurial teams, and the heterogeneity of education background, degree of complementarity of team members, team size and cognitive difference among team members all have positive influence on entrepreneurial team relationship conflict.

Literature Review and Research Hypothesis

The Impact of Demographic Characteristics of Entrepreneurial Teams on Team Conflict. Looking back on the past few years' research, the main ideas of team theory can be broadly summed up into two major theoretical schools: cognitive resource diversification theory and similarity attraction theory. As the name implies, the main idea of the school of similarity attraction theory is that team members often choose teams that fit their own demographic characteristics. When someone becomes a member of a team, he will still analyze and compare his demographic characteristics with those of other members of the team. When the differences between the two are small, team members will be more satisfied, however, when the differences become larger, team members may feel uncomfortable and team conflicts will arise. From the psychological research, it is found that some scholars believe that gender differences lead to differences in cognitive ability between men and women. Therefore, this paper proposes hypothesis 1:

H1a：The higher the gender heterogeneity of the entrepreneurial team, the more likely it is to lead to task conflict.

H1b： The higher the gender heterogeneity of the entrepreneurial team, the more likely it is to lead to relationship conflict.

The level of education is a narrow summary of the level of cognitive level. From a certain point of view, the higher the educational background, the higher the cognitive level, and the lower the educational background, the weaker the cognitive level.

In a team, there is a gap between academic qualifications, so there are cognitive differences among team members. In the past research, it has been pointed out that in team activities, the larger the gap, the more likely it is to cause conflict. Therefore, this paper proposes hypothesis 2:

H2a: The higher the heterogeneity of entrepreneurship team's academic qualifications, the more likely it is to lead to task conflict.

H2b: The higher the heterogeneity of entrepreneurial team, the more likely it is to lead to relationship conflict.

In many cases, learning in school only plays an ethical role, and real skills play a role in society. In Ningbo's college entrepreneurship team, the entrepreneurial time for top team members is different. Some of them have just entered the initial stage, while others have been in the entrepreneurship industry for many years. Some scholars believe that the length of entrepreneurship

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has a certain impact on team conflict, because time can make the members to fit in with each other, and can witness the possibility of the existence of the team. In general, the longer a team has been in business, the less conflict there is and the more ways to deal with it. Therefore, this paper proposes hypothesis 3:

H3a: The higher the heterogeneity of entrepreneurship time, the more likely it is to lead to task conflict.

H3b:The higher the heterogeneity of entrepreneurship time, the more likely it is to lead to relationship conflict.

The Impact of the Structural Characteristics of Entrepreneurial Teams on Team Conflict.

Some studies have found that the team with large team size is far less efficient and ambient than those with small team size. Because of the flexible advantage of small-scale teams, small-scale teams are easier to communicate directly. Team members can have a strong sense of existence, strong self-perception, and each member's self-perception is good. Therefore, this paper proposes hypothesis 4:

H4a: The higher the heterogeneity of entrepreneurial team size, the more likely it is to lead to task conflict.

H4b： The higher the heterogeneity of entrepreneurial team size, the more likely it is to lead to relationship conflict.

Team complementarity is the lubricant in team cooperation to complete tasks. When two people complete tasks, because of the complementary role, they can often achieve the "1 + 1 > 2" effect. Therefore, we believe that team performance is linked to the complementarity of team members. The higher the complementarity among team members, the less likely it is to have conflict. Therefore, this paper proposes hypothesis 5:

H5a: The higher the heterogeneity of team complementarity, the more likely it is to lead to task conflict.

H5b: The higher the heterogeneity of team complementarity, the more likely it is to lead to relationship conflict.

The Impact of Cognitive Characteristics of Entrepreneurial Teams on Team Conflict.

Scholar Miller's research found that the cognitive diversity of team members is related to the quality of team decision-making, and this influence will have a negative impact on team commitment, thus affecting the mutual trust among team members. Therefore, this chapter proposes the following research hypothesis 6:

H6a: The higher the degree of cognitive difference between entrepreneurial teams, the more likely it is to lead to task conflict.

H6b: The higher the degree of cognitive difference between entrepreneurial teams, the more likely it is to lead to relationship conflict.

Research Design

Data.

In this paper, Ningbo University, Ningbo University of Finance and Economics, Ningbo Institute of Technology and other universities are taken as the research object. Through the questionnaire, the situation and satisfaction of college students in Ningbo in the stage of entrepreneurship were investigated. The questions included basic personal and team information(including size), and meanwhile, the conflict data of each management team and team members, and demographic variables(including gender, education background, entrepreneurial time, etc) were obtained. A total of 308 questionnaires were distributed, and the recovery rate was 100%.

Table 1 Descriptive statistical tables of basic information

Variables	Type	Number of people	Percentage%	Cumulative percentage %
Gender	Male	152	49.4	49.4
	Female	156	50.6	100.0
Grade	Freshman	49	15.9	15.9
	Sophomore	100	32.5	48.4
	Junior	87	28.2	76.6
	Senior	26	8.4	85.1
	Postgraduate	9	2.9	88.0
	Past graduates	37	12.0	100.0
Entrepreneurial time	Freshman	51	16.6	16.6
	Sophomore	67	21.8	38.4
	Junior	48	15.6	54.0
	Senior	20	6.5	60.5
	Postgraduate	2	0.6	61.1
	After graduation	120	38.9	100.0
Team size	1-3	100	32.5	32.5
	4-6	134	43.5	76.0
	7-10	34	11.0	87.0
	More than 10	40	13.0	100.0

Variables.

The explanatory variables are entrepreneurial team conflict, which can be divided into task conflict TC and relationship conflict RC.

The explanatory variables are divided into three levels: demographic characteristics, team structure and team cognition. Demographic characteristics include gender, educational background, profession and entrepreneurial time of team members. Gender(GENDER) is the standard deviation coefficient of the number of male members and female members in team members. Firstly, female members are assigned 1 and male members are assigned 2, and then the standard deviation coefficient is calculated, that is, the standard deviation divided by mean. Educational background(EDU) is the degree of difference in the educational level of entrepreneurship team members. The investigators are mainly from the universities in Ningbo, so the educational level in the questionnaire is divided into six levels: freshman, sophomore, junior, senior, fresh graduates and postgraduates. According to these six levels, the educational level of each team member is assigned 1-6, and then the standard coefficient of each team member's education level is calculated. The entrepreneurial time(TIME) is the standard deviation coefficient of the entrepreneurial time of members of the team. Team structure variables include complementarity degree and team size. Complementarity degree (TCOMP) is the professional complementarity degree of entrepreneurship team members. According to the questionnaire in this paper, the variables are divided into four levels: engineering, science, art and humanities, with values of 1-4 respectively. Then, the mean values are calculated. Team size (TSIZE) is the total number of entrepreneurship management team members. Team cognitive variable is cognitive difference (THETE), which refers to the difference in the way of thinking among entrepreneurship team members.

Table 2 Variable definition table

Variable type	Variable name	Variable symbol	Meaning
Team conflict	Task conflict	TC	The calculated task conflict degree in entrepreneurial team based on documentation
	Relational conflict	RC	The relationship conflict degree in entrepreneurial team measured by questionnaire
Demographic characteristics	Gender	GENDER	Gender differences in entrepreneurial management teams
	Educational background	EDU	Degree of educational difference of entrepreneurial management team
	Entrepreneurial time	TIME	Degree of time difference in entrepreneurial time of entrepreneurship management team
Team structure	Degree of complementarity	TCOMP	Complementary degree of professional knowledge of entrepreneurial team members
	Team size	TSIZE	Number of entrepreneurship management team members
Team cognition	Cognitive differences	THETE	Different ways of thinking and solving problems among entrepreneurship team members

Empirical Results and Analysis

Empirical Analysis on the Impact of Demographic Characteristics of Entrepreneurial Teams on Team Conflict.

Firstly, this paper makes an empirical analysis of the impact of three demographic characteristics of entrepreneurial teams on team conflict, and examines how different demographic characteristics affect team conflict by means of multiple regression. Firstly, the influence of demographic characteristics of team members on team task conflict is analyzed. The regression model is as follows:

$$TC=a1+a2GENDER+e \quad (3\text{-}1)$$

$$TC=a1+a2EDU+e \quad (3\text{-}2)$$

$$TC=a1+a2TIME+e \quad (3\text{-}3)$$

$$TC=a1+a2GENDER+a3EDU+a4TIME+e \quad (3\text{-}4)$$

Firstly, the influence of demographic characteristics of a single team on team conflict is analyzed. The three explanatory variables are gender difference GENDER, education difference EDU and entrepreneurial time TIME. The three demographic characteristics of a team are put into the regression model at the same time, and the common influence mechanism is tested.

The regression results are shown in table 3.

Table 3 Regression results of demographic characteristics of entrepreneurial teams on team task conflict

	-1	-2	-3	-4
GENDER	0.0351			0.0352
	0.0245			0.0316
EDU		0.0764		0.0752
		0.0367		0.0297
TIME			0.0146	0.0175
			0.0549	0.5782
R^2	0.3243	0.2671	0.1943	0.4696
F-value concomitant probability	0.0034	0.0057	0.0063	0.0121

From the regression results in Table 3, it can be seen that the fitting degree of the regression results R2 is about 20% and F value is remarkable at 1%, which indicates that the overall fitting of the equation is better. In regression (1), the coefficient of gender differences GENDER among entrepreneurship team members is 0.0351, indicating that gender differences are positively correlated with task conflict, and the Pro value is 0.0245, with statistical significance. In regression (2), the difference EDU coefficient in educational level of entrepreneurship team members is 0.0764, and the Pro value is 0.0367, indicating that there is a significant positive correlation between educational level heterogeneity and task conflict. In regression (3), the entrepreneurial time heterogeneity TIME coefficient of the entrepreneurial team members is 0.0146, and the Pro value is 0.0549, indicating that there is a significant positive correlation between entrepreneurial time heterogeneity and task conflict. In regression (4), the heterogeneous variables of entrepreneurial team members in three dimensions are put into the model for regression at the same time. It can be seen from the results that the symbols and significance of the four variables have significant changes.

In the following, the impact of demographic characteristics of entrepreneurship team members on team relationship conflict is analyzed. The regression model is shown in 3-5 to 3-8：

RC=a1+a2GENDER+e （3-5）

RC=a1+a2EDU+e （3-6）

RC=a1+a2TIME+e （3-7）

RC=a1+a2GENDER+a3EDU+a4TIME+e （3-8）

From 3-5 to 3-7, the impact of demographic characteristics of each individual team on team relationship conflict is analyzed, which are three explanatory variables: gender difference GENDER, education difference EDU and time difference TIME. In 3-8, the demographic characteristics of three teams are put into the regression model at the same time, and the common influence mechanism is tested. The regression results are shown in Table 4. From the regression results in the table, it can be seen that the fitting degree R2 is about 20% in the regression results, and the F value is remarkable at the level of 1%, which shows that the overall fitting of the equation is better. In regression (5), the gender difference GENDER coefficient of among entrepreneurial team members is -0.0585, indicating that the gender difference is negatively correlated with relationship conflict. The Pro value is 0.7119, and the Pro value is more than 0.05. There is no statistical significance. In

regression (6), the entrepreneurial team members' education level difference EDU coefficient is 0.0688, and the Pro value is 0.0312, indicating that there is a significant positive correlation between heterogeneity of education level and relationship conflict. In regression (7), the heterogeneity of entrepreneurial time TIME coefficient of entrepreneurial team members is 0.1391, and the Pro value is 0.0004, indicating that there is a significant positive correlation between entrepreneurial time heterogeneity and relationship conflict. In regression (8), the heterogeneous variables of entrepreneurial team members in three dimensions are put into the model for regression at the same time. It can be seen from the results that the symbols and significance of the four variables have significant changes.

Table 4 The regression results of demographic characteristics of entrepreneurship team on team relationship conflict

	-5	-6	-7	-8
GENDER	-0.058			-0.139
	0.711			0.376
EDU		0.068		0.079
		0.031		0.029
TIME			0.139	0.159
			0.000	0.000
R2	0.044	0.33	0.403	0.469
F-value concomitant probability	0.0024	0	0.0001	0.0021

Empirical Analysis of the Impact of the Structural Characteristics of Entrepreneurial Teams on Team Conflict.

In this section, the impact of entrepreneurial team structure characteristics on team task conflict and relationship conflict is analyzed. Regression models are shown in 3-9 to 3-12. (3-9) to (3-10) analyze the impact of each individual team structure characteristics on team task conflict, and (3-11) to (3-12) analyze the impact of each individual team structure characteristics on team relationship conflict. Team structure is the explanatory variables of team member complementarity TCOMP and team size TSIZE, respectively.

TC=a1+a2TCOMP+e （3-9）

TC=a1+a2TSIZE+e （3-10）

RC=a1+a2TCOMP+e （3-11）

RC=a1+a2TSIZE+e （3-12）

Table 5 The regression results of structure characteristics of entrepreneurial teams on team task conflict

	TC	
	（9）	（10）
TCOMP	0.0962	
	0.0185	
TSIZE		0.2529
		0.0013
R2	0.2469	0.3317
F-value concomitant probability	0.0018	0.0013

Table 6 The regression results of structural characteristics of entrepreneurial teams on team relationship conflict

	RC	
	（11）	（12）
TCOMP	0.0236	
	0.7497	
TSIZE		0.2323
		0.0037
R2	0.1823	0.2715
F-value concomitant probability	0.0074	0.0037

From the results of four regression equations of entrepreneurial structure characteristics on team conflict in the two tables, it is shown that the fitting degree R2 is about 20% in the regression results, and the F value is significant at 1%, indicating that the overall fitting of equations is better. In regression (9), the entrepreneurial team members' complementarity degree TCOMP coefficient is 0.0962, indicating that the difference of complementarity degree of team members is positively correlated with task conflict, and the Pro value is 0.0185, which is statistically significant. In regression (10), the entrepreneurial team size TSIZE coefficient is 0.2529, and the Pro value is 0.0013, indicating that there is a significant positive correlation between the heterogeneity of entrepreneurial team size and task conflict. In regression (11), the entrepreneurial team members' complementarity degree TCOMP coefficient is 0.0236, and the Pro value is 0.7497, indicating that there is no significant positive correlation between the difference of complementarity degree of team members and relationship conflict. In regression (12), the entrepreneurial team size TSIZE coefficient is 0.2323 and the Pro value is 0.0037, which indicates that there is a significant positive correlation between the complementarity degree difference and relationship conflict.

Empirical Analysis on the Impact of Cognitive Characteristics of Entrepreneurial Team Members on Team Conflict.

In this section, the impact of entrepreneurial team cognitive characteristics on team task conflict and relationship conflict is analyzed. Regression models are shown in (3-13) and (3-14), respectively analyzing the impact of team cognitive differences on team task conflict and relationship conflict, respectively

TC=a1+a2THETE+e （3-13）

RC=a1+a2THETE+e （3-14）

Table 7 The regression results of cognitive characteristics of entrepreneurial team members to team relationship conflict

	TC	RC
	（13）	（14）
THETE	0.0720	0.2815
	0.0244	0.0253
R2	0.2907	0.4420
F-value concomitant probability	0.0024	0.0065

From the results of the above two regression equations, it can be seen that the goodness of fit R2 is above 40% and 20% respectively, and the F value is remarkable at the level of 1%, indicating that the overall fitting of the equation is better. In regression (13), the entrepreneurial team's cognitive difference degree THETE coefficient is 0.0720, and the Pro value is 0.0244, reaching the statistical

significance level. There is a significant correlation between cognitive differences and task conflict in entrepreneurial teams. In regression (14), the entrepreneurial team's cognitive difference degree THETE coefficient is 0.2815, and the Pro value is 0.0253, showing that there is a significant correlation between the degree of cognitive difference of entrepreneurial team and relationship conflict.

Conclusions

This paper makes an empirical analysis of the factors influencing the task conflict and relationship conflict of entrepreneurial team from three perspectives: demographic characteristics of team members, team structure characteristics and cognitive characteristics of team members.:

Firstly, some demographic characteristics of team have an impact on team conflict, among which, the heterogeneity of gender, educational background and entrepreneurial time has a positive impact on entrepreneurial team task conflict. The higher the heterogeneity of gender, educational background and entrepreneurial time, the more serious the team task conflict is. Gender heterogeneity of entrepreneurship team members is negatively correlated with relationship conflict. Gender differences can effectively reduce team relationship conflict, while education backgroud heterogeneity has a positive impact on relationship conflict. The entrepreneurial time heterogeneity has no significant effect on relationship conflict.

Secondly, in the characteristics of team structure, the degree of team members' complementarity and team size are positively correlated with task conflict and relationship conflict in team conflict, while the degree of team complementarity is positively correlated with the degree of relationship, which shows that the complementarity between team members can effectively reduce the probability of team relationship conflict.

Thirdly, the cognitive differences among team members have a significant positive impact on relationship conflict, that is, the greater the differences of team members' opinions on things, the more likely it is to lead to relationship conflict.

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