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GENDER DIFFERENCES AMONG COLLEGE STUDENTS' SENSE OF BELONGING AND LEARNING MOTIVATION

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ABSTRACT

With the deepening knowledge and development of the research on college students' Sense of belonging, the research on college students' Sense of belonging has become an important topic in the academic field. Objective: This study intended to investigate the relationship between college students' sense of belonging and learning motivation. It aims to provide research materials for contemporary college students in their academic development, to provide reference for further research, and to provide a basis for solving problems such as college students in their academic difficulties. Method: The study employed cross sectional survey design and simple random sampling to recruit 336 participants. Out of them, 303 participants returned the questionnaires fully completed on all the scales. Descriptive statistics, t-test, correlations, and ANOVA were carried out to analyze the data. Result: The findings suggest that there were differences in college students' sense of belonging and learning motivation on different demographic variables, such as gender and grade among the major attributes. There was a significant positive correlation between college students' sense of belonging and learning motivation. Conclusion: There were differences in school belonging and learning motivation among college students with different demographic variables.

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Keywords: College students; sense of belonging; Learning motivation, Gender Differences, China

INTRODUCTION

College students are a dynamic and highly valued group. Society, families, and schools place high hopes on college students and hope that they will grow up and become talents. However, in reality, after entering the University, some students cannot find a sense of existence and belonging in the new environment, and feel lonely in the face of strange teachers and classmates. Some students still retain the learning

methods of high school and cannot adapt to university learning. Learning is in a passive state and the learning pressure is too high to breathe. This series of problems have an important impact on Students' sense of belonging, interest in students' learning, learning motivation and other factors. One of the main tasks for university students is the arduous and fruitful learning process. Facing the same academic dilemma, not all students perform poorly. On the contrary, some students can be braver, achieve better results, or do not suffer significant damage, because they have good internal quality and external resources. Learning is the primary task of a student and the key factor of students' development. Whether they can master the necessary learning methods and form good learning habits has an important impact on the academic development of students. Given this background, this study mainly discussed the relationship between learning motivation and sense of belonging, which belong to the same learning field for providing reference for the research and intervention of university Students' learning difficulties, and play a key role for teachers and parents to promote students to form good learning habits and improve their academic performance.

There is no clear definition of school sense of belonging. One view is that the school sense of belonging refers to the students feeling respected and comfortable in school, and they are valued and recognized by classmates or more generally in school (Anderman L. H, 2003; Bernadette S, Yar C. & Patricia E. 2005). In addition, some scholars believe that students' sense of belonging and commitment to the school in ideology, psychology and emotion is a school sense of belonging that can measure students' willingness to take responsibility and participate in student activities. Other researchers have defined the school's sense of belonging from students' consciousness, emotional experience and corresponding behavior. According to the above analysis, researchers mainly define the school sense of belonging through students' feelings and behaviors.

Learning motivation is an internal process or psychological state that urges individuals to engage in learning activities supported by them and encourages individual learning activities to develop towards specific goals. The essence of learning motivation is learning needs, which may be the result of the influence of teachers and families have on students, or the result of their interest, curiosity about unknown

problems, recognition from others and society, proving their strength and finding a good job after graduation (Wang, 2005).

LITERATURE REVIEW

Da DanDan (2015) found that many factors have an impact on College Students' sense of school belonging. Du Haoqiang (2010) believes that students' accommodation environment- the external and internal environment- of the school and the popularity of the school all affect students' sense of belonging to the school. The innovative and lively campus culture and humanistic care can significantly and positively predict the sense of belonging of the school. In addition to the influence of school soft power such as school reputation and school culture, the identity of students is also very important. There is a positive link between students' self-importance and the school's sense of belonging, which can greatly predict the school's sense of belonging (Huang Huihua, 2014; Huang Yanqiong, 2019). Interpersonal relationship also affects the school's sense of belonging. Domestic studies show that there is a significant positive correlation between College Students' sense of belonging and the good degree of interpersonal relationship between students (Liu JinTing, 2017; Kang Yating, 2018).

The learning mechanism has three main functions: first, it can activate and induce people to engage in certain activities; Second, it points out the function of motivation driven people to consciously push their actions to specific goals; Third, strengthen or maintain the function that can make people's behavior unchanged. These three functions of stimulating learning can effectively make people interested in learning and active learning.

Learning motivation can be divided into internal motivation and external motivation, which is based on the dynamic root of individual learning. Encourage students to study actively due to their internal needs, such as desire for knowledge, interest in education, desire for students' knowledge or desire for knowledge (Ali, Talha & Saeed, 2011; Sendogan & Iksan, 2012); The external motivation of learning is caused by personal external factors (Deci & Ryan, 1985), for example, students are scolded by their parents for their poor academic performance. For such students, their learning motivation is caused by some factors other than learning activities. Internal learning motivation can have a positive impact on learning, which is what we call the

internal motivation of students' learning. More and more studies show that even external learning motivation may be transformed into internal learning motivation. The key lies in the individual's acceptance of external learning motivation.

In recent years, learning motivation has become an important part of psychological research. Many scientists have made great progress in the study of teaching motivation, and more and more progress has been made in the study of teaching motivation. Chinese scholars Cui Jinggui & Chen Xuan (2019) have found that there are great differences in students' learning motivation, self-confidence, adaptation, communication with others, parents' emotional enthusiasm, career choice and educational motivation of different majors and grades. By analyzing its learning motivation, it can also be related to students' activities, survival and development, understanding and improvement, test pressure, responsibility, goal, success motivation, parents' expectations and so on. In addition, more and more researchers have explored and studied various factors affecting learning motivation from a subjective and objective point of view.

Through combing the literature, it is found that although the school sense of belonging is greatly related to learning, this connection is only an indirect connection, which can only function through the intermediary of students' investment. School belonging contributes to the development and formation of students' investment and their studies can effectively improve their academic performance. At the same time, some researchers believe that there is a direct effect between school belonging and learning. Learning motivation is an important factor of academic success. When individual learning motivation is strong, the sense of academic achievement is also high, and the probability of academic burnout is low (Ryan & Deci, 2017).

According to Maslow's hierarchy of needs theory, the necessity of belonging is one of the basic needs of human beings. If there is no sense of belonging, we can't feel the sense of existence. If students have a high sense of belonging, they will enhance their centripetal force, consciously safeguard the integrity of the school and be proud of the respect obtained by the school.

The influence of University on students is largely determined by students' participation. Motivation is a direct force that promotes individual behavior. Different motives lead to different behaviors and

show different results. Learning motivation can encourage them to learn. The higher their motivation and encouragement to be independent, the more students can actively participate in the learning process. Motivation gives strength that stimulates an individual to achieve certain goals and to remain engaged in a task. Motivation is the key factor that gives students' strength to achieve something, energize students' action and focus towards a higher goal including learning (Ormrod, 2000; Pintrich & Maehr, 2004) and it is a predictor of students' achievement (Beal & Stevens, 2007; Zhu & Leung, 2011).

The problems of college students have triggered the questions like: Does students' sense of belonging to the school affect their academic performance? What is the relationship between students' school belonging and learning motivation. Therefore, the researchers hope to make a contribution to improving the understanding of college students' academic achievement by studying these variable aspects of students. This study aims to understand the current situation of College Students' school belonging and learning motivation, and reveal the relationship between the two, so as to provide reference for the study of College Students' school learning status and make some contributions to improving college students' academic achievement.

Furthermore, these factors affect each other and play an important role in university students' learning and life. This study can fill the theoretical gap in college students' sense of school belonging and learning motivation and enrich the research on the correlation between these variables and promote college students' better study and life.

RESEARCH METHOD

The current research was based on cross sectional survey design and simple random sampling was employed to recruit study participants. Descriptive statistics, t-test, correlations, and ANOVA were carried out to analyze the data.

RESEARCH PARTICIPANTS

336 male and female College students from different higher institutions from Sichuan, China were selected through random sampling, and 303 valid questionnaires were recovered, with an effective recovery rate of 90.18%. The specific distribution of samples is shown in Table 1 below:

TABLE-1
STATISTICS OF BASIC INFORMATION OF SUBJECTS

	Category	Number	Percentage (%)
Gender	Male	153	50.5%
	Female	150	49.5%
Grade	Freshmen	71	23.4%
	Sophomore	76	25.1%
	Junior	70	23.1%
	Senior	86	28.4%
Major	Humanities	97	32.0%
	Science and Engineering	121	39.9%
	Art and sports	59	19.5%
	other	26	8.6%

According to table 1, in terms of gender, the number of male and female students is close, and there are a few more male students than female; In terms of grades, the number of senior students is the largest, accounting for 28.4% of the total; In terms of professional attributes, science and engineering students account for the highest proportion, reaching 39.9%.

RESEARCH TOOLS

School Belonging Scale: This study adopts the school belonging scale (PSSM Chinese version) translated and revised by Chinese Scholars. It includes two dimensions: school belonging and resistance. There are 18 items in total, and there are 10 and 8 questions in the two dimensions respectively. This scale is a 6-point Likert scale. In the statistical data, the reverse questions are recoded. The higher score on the scale means the stronger sense of belonging to the school. The internal consistency coefficient of 0.873 indicates good internal reliability.

Learning Motivation Scale: This study adopts the learning motivation scale compiled by the original Amabile et.al., (1994). The scale is composed of two subscales of intrinsic (internal) motivation and extrinsic (external) motivation. The Chinese version translated and revised by Chi Liping and Xin Ziqiang (2006) was used in the current study. There are 30 questions in total, 14 items in the intrinsic motivation subscale, and the others are the items of the extrinsic

motivation subscale. The scale has good reliability. It is scored by 4 points, and the internal consistency coefficient of the total scale is 0.75.

Procedure: The researchers after getting the informed consent distributed the questionnaires among the study participants and informed them about the purpose of the study. Through careful analysis the recovered questionnaires were sorted out and after collecting and sorting the questionnaire data, 33 invalid questionnaires which were not answered carefully were excluded from the final data, and remaining 303 valid questionnaire data was then imported into spss22.0 software for data analysis and sorting.

Research Results: Descriptive data statistical analysis was conducted on the variables and their dimensions in this study. The specific data results are shown in Table 2.

TABLE-2
DESCRIPTIVE STATISTICS OF COLLEGE STUDENTS' SENSE OF SCHOOL BELONGING AND LEARNING MOTIVATION

Variable	Factor	Minimum Value	Maximum Value	Mean	SD
School Sense of Belonging	Sense of belonging	10	50	35.57	5.189
	Sense of resistance	1	25	14.82	3.931
	School belonging	19	75	50.40	6.770
Learning Motivation	Intrinsic motivation	15	35	26.65	3.225
	Extrinsic motivation	21	41	32.37	3.519
	learning motivation	37	74	58.41	5.697

Through the results in Table 2, we can clearly see the overall situation of College Students' sense of school belonging and learning motivation. The overall mean of school belonging is 50.40, slightly lower than the theoretical median of the scale, indicating that college students' school belonging is at the lower middle level as a whole, and all dimensions are worth scoring. The higher dimension is the sense of belonging factor, and the lower dimension is the sense of resistance

factor; the overall average of learning motivation is 58.41, slightly lower than the theoretical median of the scale, indicating that the overall learning motivation of college students is at the lower middle level, and all dimensions are worth scoring. The higher dimension is the external motivation factor, and the lower dimension is the internal motivation factor.

The independent sample t-test is used to analyze the differences of gender on various factors of school belonging and learning motivation. The results are shown in Table 3.

TABLE-3
GENDER DIFFERENCE TEST OF EACH VARIABLE

	Male M± SD (n=153)	Female M± SD n=150)	*t*	*p*
School belonging	50.58± 6.59	50.21± 6.97	0.468	0.640
Sense of belonging factor	35.70± 5.34	35.45± 5.05	0.419	0.675
Resistance factor	14.86± 3.36	14.77± 4.45	0.212	0.832
learning motivation	59.39± 5.36	57.41± 5.86	3.052	0.002
Intrinsic motivation	27.00±2.94	26.29± 3.45	1.910	0.057
Extrinsic motivation	33.12± 3.35	31.61± 3.43	3.803	0.000

It can be seen from table 3 that there is no significant difference between college students of different genders in school belonging and various factors, and the scores of men and women are relatively average. There was a significant difference in extrinsic motivation between sexes (P < 0.001), and the score of boys was significantly higher than that of girls; There were significant differences in learning motivation between sexes (P < 0.01), and the scores of boys were higher than those of girls; There was no significant difference between men and women in internal motivation, and the scores of men and women were average.

One way ANOVA was used to analyze the differences between grades on school belonging and learning motivation. The results are shown in Table 4.

TABLE-4
ANOVA FORDIFFERENCE ON EACH VARIABLE
ACCORDING TO GRADE

	Freshmen M±SD(n=71)	Sophomore M±SD (n=76)	Junior M±SD (n=70)	Senior M±SD(n=86)	F	*p*
School belonging	50.10±6.036	51.21±6.364	50.34±6.803	49.98±7.657	0.767	O.514
Sense of belonging factor	35.72±5.297	35.91±4.081	36.10±4.629	34.73±6.269	0.667	0.573
Resistance factor	14.38±3.244	15.32±4.027	14.24±4.088	15.20±4.189	0.768	0.514
learning motivation	59.00±4.675	58.99±4.675	58.29±5.28	57.49±6.524	1.260	O.288
Intrinsic motivation	26.90±2.531	26.88±2.889	26.53±3.650	26.33±3.649	0.585	0.625
Extrinsic motivation	32.70±3.128	32.92±3.058	32.44±3.729	31.56±3.919	2.404	0.068

It can be seen from table 4 that there is no significant difference in school belonging and various factors among college students of different grades, and the scores of each grade are relatively average. There is no significant difference in learning motivation, intrinsic motivation factors and extrinsic motivation factors among different grades, and the scores of each grade are relatively average.
Pearson correlation analysis method is used to test the correlation between College Students' school belonging and learning motivation and each factor. The results are shown in Table 5.

TABLE-5
CORRELATION BETWEEN SCHOOL SENSE OF BELONGING AND
LEARNING MOTIVATION

	1	2	3	4	5	6
1 sense of belonging factor	1					
2 resistance factor	0.084	1				
3. School belonging	0.820**	0.639**	1			
4 intrinsic motivation	0.373**	0.038	0.308**	1		
5 extrinsic motivation	0.243**	-0.006	0.186**	0.573**	1	
6 learning motivation	0.313**	0.025	0.256**	0.860**	0.873**	1

Note: ** stands for *p<0.01* ；

There is a significant positive correlation between school belonging and learning motivation, indicating that the stronger the school belonging, the stronger the learning motivation. In terms of the impact of school belonging factors on learning motivation, there is a

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significant positive correlation between belonging factors and learning motivation, but there is no significant correlation between resistance factors. In terms of the factors of learning motivation on the sense of belonging to school, both internal motivation factors and external motivation factors have a significant positive correlation with learning motivation.

ANALYSIS AND DISCUSSION

Through the descriptive statistical analysis of the data, we can clearly see the overall situation of College Students' school belonging and learning motivation. The overall sense of belonging of college students is at the lower middle level, and the score of the sense of belonging factor is higher than that of the resistance factor, indicating that college students now rely more on the school than the resistance. Generally speaking, the sense of belonging is not very strong, which may be because they are dissatisfied with their own school level and are unwilling to accept their own school, or the university has loose and free management of students, So that students' sense of belonging is not strong. The overall learning motivation of college students is at the lower middle level, and the score of external motivation factor is higher than that of internal motivation factor. It can be seen that college students' learning motivation mainly comes from external factors, and the level of motivation is low, which is not conducive to academic development. They can improve their learning interest by changing external motivation into internal motivation, so as to improve their learning motivation.

According to the research results, there is no gender difference in college students' sense of school belonging; In terms of learning motivation, there are significant differences in the total score of learning motivation and extrinsic motivation between different genders, and the scores of boys are higher than those of girls. These findings also get support from the findings of Mubeen, Saeed, and Arif, (2013) who found females as more intrinsically motivated and males as more extrinsically motivated.

According to the research results, in terms of school belonging and learning motivation, college students of different grades have no significant difference in various factors, and their scores are relatively average, which is not completely consistent with the research results of

Bai Hongyan (2019), and the differences may be related to the development of information and the background of the times.

Learning motivation is an important factor of College Students' sense of belonging to school, and there is a significant positive correlation between them, that is, the stronger the students' learning motivation, the stronger the students' sense of belonging to school. With the enhancement of learning motivation, academic achievements have made achievements, enhanced the sense of pride and belonging in the school, and cultivated the common sense of honor with the school, so that the sense of belonging in the school is gradually enhanced.

CONCLUSION

Through the analysis and Research on College Students' sense of school belonging and learning motivation, the main conclusions obtained are: The sense of belonging of college students is in the lower middle level; The overall academic resilience of college students is above the middle level; The overall learning motivation of college students is at the lower middle level. There is a significant positive correlation between College Students' school belonging and learning motivation. School belonging has a positive predictive effect on learning motivation.

IMPLICATIONS, LIMITATIONS& RECOMMENDATIONS

Theoretically the current research findings suggest that there is a significant correlation among school belonging and learning motivation. These factors affect each other and play an important role in college students' learning and life. This study can fill the theoretical gap in college students' sense of school belonging and learning motivation as well as provides expanded basic data for relevant theoretical research. The practical significance of the current study is conducive to college teachers to pay attention to college students' learning in time; promote college students to belongingness to school and integration into school, help college students from the habit of scientific learning, and improve college students' internal and external learning motivation, so as to improve college students' academic level.

Like all other researches, current research has some limitation. The study participants only belonged to one province of China, due to the uneven local economic development level and education level, it is

hard to generalize the results to college students in different regions and it is an avenue worth exploring. This study only uses the questionnaire survey method which lacks the mediation scheme and cause and effect relationship. Future research should adopt a variety of methods to make the research conclusions more convincing.

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