

EXPLORING THE CORRELATION BETWEEN SELF-IDENTITY AND LEARNING ENGAGEMENT AT "S" SECONDARY VOCATIONAL SCHOOL IN JINAN, SHANDONG PROVINCE, CHINA

Shanshan Meng^{1*}

I-Hua Chen²

¹ Master Candidate of Educational Administration, Stamford International University, Thailand

² Lecturer, Stamford International University, Thailand

* **Corresponding Author, E-mail:** 2206230008@students.stamford.edu

Abstract: This study aimed to investigate the current status of self-identity and learning engagement among students in S Secondary Vocational School and explored the correlation between these two variables. The results showed that both self-identity and learning engagement of S Secondary Vocational School students were at a medium level. Significant differences were found in self-identity and learning engagement among students based on gender, age, professional category, and only-child status. Furthermore, a significant positive correlation was observed between self-identity and learning engagement among S Secondary Vocational School students.

Keywords: Vocational School Students, Self-Identity, Learning Engagement

Introduction

The Implementation Plan for the Reform of the National Polytechnic Education (2019) issued by the State Council of China points out that vocational education and general education are two different types of education with equal importance. The General Office of the CPC Central Committee and the General Office of the State Council issued the Opinions on Deepening the Reform of Modern Vocational Education System Construction (2023) proposed to deepen the supply-side structural reform of vocational education, adhere to people-centered and ability-oriented approaches, and promote the coordinated development and integration of vocational and general education. Learning engagement, as a bridge connecting micro-subjects and macro-quality, has gradually become a research focus (Zhang, 2019).

Chen, Guo & Hu (2015) pointed out that learning engagement reflected students' learning status and academic performance and was one of the important indicators to measure education quality. Therefore, learning engagement not only reflected an individual's academic performance, but also presented the overall education quality to some extent. Therefore, exploring the factors affecting the

learning engagement of vocational school students was an urgent issue to be solved in contemporary secondary vocational education.

Schaufeli (2002) first proposed the concept of learning engagement. He regarded learning engagement as a kind of sustained, passionate psychological state manifested in learning activities. Fredricks (2005) defined learning engagement in another way. Learning engagement should include cognitive engagement, emotional engagement and behavioral engagement. On the basis of Erikson's theory, Marcia (1966) established the research paradigm of self-identity status, making prominent contributions to the empirical research field of self-identity. The main task of adolescence is to establish self-identity. If adolescents establish good self-identity at this stage, they will have a clear development direction and clear self-concept and self-evaluation and can live and study well. Otherwise, they will fall into a state of role confusion (Xu, 2018). Zhang (2015) pointed out that secondary vocational students are at a critical period for accumulating knowledge and shaping personality. Good self-identity can maintain meaningful behaviors, marking the degree of individual socialization development and personality integrity. As an important individual characteristic, the level of self-identity development can help students better engage in learning (Wang, 2012). Therefore, taking self-identity as an independent variable affecting learning engagement is very important to improve the psychological health of secondary vocational students.

Research Objectives

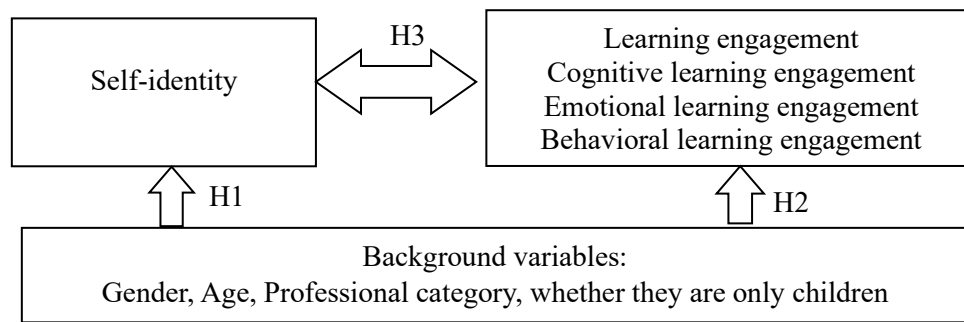
(1) Understand the current situation of learning engagement of students in S Secondary Vocational school (including three dimensions of cognitive learning engagement, emotional learning engagement and behavioral learning engagement).

(2) Understand the current situation of self-identity of students in S Secondary Vocational school.

(3) Analyze the differences in learning engagement of students in S Secondary Vocational school under different background variables such as gender, age, professional category, and whether they are only children?

(4) Analyze the differences in self-identity of students in S Secondary Vocational school under different background variables such as gender, age, professional category, and whether they are the only children?

(5) Explore the relationship between the two variables of self-identity and learning engagement of students in S Secondary Vocational school.



Picture 1: Research Conceptual Framework

Literature Review

Learning engagement related research

The concepts related to learning engagement have been studied since the 1930s, there has been no clear definition of learning engagement due to differences in research backgrounds, objects, and methods (Liu, 2018). Chen (2009) pointed out that Tyler first proposed the concept of "task time" in the 1930s. Through analysis of students' learning characteristics, he pointed out that the more time students spend on learning engagement, the more knowledge they gain. Pace (1982) proposed the concept of "effort quality". He believed that focusing only on the length of time students spend engaging in learning is not enough, but the degree of student engagement should also be emphasized, that is, the coexistence and development of quality and quantity. Kuh (2001) proposed the concept of student engagement. He believed that the degree of student participation is crucial to the educational quality of a university. Research on the influencing factors of the learning engagement variable mostly reflects external factors and individual characteristics (Zhang, 2021). Yuan (2019) pointed out that the school atmosphere is positively correlated with learning engagement. If adolescents feel that their school is a stable, harmonious and positive environment, they can devote themselves to learning more securely. Li (2018) selected 1 school from 4 model high schools in Zhengzhou, Kaifeng, Xu chang and Ping dingshan respectively, and conducted a questionnaire survey on 1300 high school students by cluster sampling to examine the influence mechanism of parental parenting styles on adolescents' learning engagement. The results showed that positive and negative parenting styles are positively and negatively correlated with high school students' learning engagement respectively. Regarding the measurement of learning engagement, Fang et al. (2008) translated the UWES-S scale and verified the three-factor model of learning engagement. Ni & Wu (2011) pointed out that the "American National Survey of Student Engagement" reflects and evaluates the teaching quality of universities based on the extent to which students engage in various effective learning activities. The measurement tool of NSSE is the "National Survey of Student Engagement", which obtains information about students' participation in projects and activities during their university studies from three aspects: institutional

practices and requirements, student behaviors, and student satisfaction with the school. The measurement of learning engagement questionnaire adopted in this study uses the "University Student Learning Engagement Questionnaire" suitable for Chinese university students, which is a three-factor model composed of behavioral learning engagement, cognitive learning engagement and emotional learning engagement, with a total of 20 items and good reliability and validity (Liao, 2011).

Self-identity related research

Sigmund Freud first proposed the concept of identity. He believed that identity is the process in which children first internalize the qualities of their parents and teachers to shape their own personality, and the process in which individuals move towards the requirements of the community emotionally and psychologically by establishing an emotional community (Dong, 2018). Sun (2009) proposed in his research that the sense of self-identity includes an individual's thinking about himself, such as the understanding of "who am I", and the individual's recognition and distinction between himself and others in the social environment. Self-identity is one of the basic needs of the individual, and the most important stage of self-identity development is adolescence (Flotskaya et al. 2019).

The Self-Identity Scale was developed by Ochse and Plug based on Erikson's theory (Erikson, 1998). Zhang (2000) discussed issues related to self-identity and introduced several research results at home and abroad on the status of self-identity, including Marcia's research and Kato's research. It also introduced the self-assessment scale of self-identity formation degree, with a total of 12 items. Beyers & Luyckx (2016) proposed the Identity Commitment Scale, with a total of 3 dimensions and 15 items. The available items were specifically clarified to make them clearer and more concise, forming 78 original items covering three dimensions of cognition, attitude and behavior, and encompassing content in self-concept, self-evaluation and self-regulation. Among them, there are 44 positive items and 34 negative items. In China, Li & Lou (2009) tested the reliability and validity of the Self-Identity Scale in adolescent student groups. The Self-Identity Scale (SIS), the Chinese version of the Eysenck Personality Questionnaire Revised Short Scale (EPQ-RSC), and the General Health Questionnaire (GHQ-20) were used to test high school and college students. It is concluded that the scale has good reliability and validity indicators and can be used as a scale to measure adolescents' sense of self-identity. This study uses Li's Self-Identity Scale to study the self-identity of secondary vocational students.

Research on the relationship between self-identity and learning engagement

Research on the Relationship between two variables of Self-identity and Learning Engagement, Jia (2021) took 843 students from F School in Fuyang City, Anhui Province as research objects. Through questionnaires on learning engagement and self-identity, it revealed the current characteristics of learning engagement, and then explored the relationship between learning engagement and self-identity, to provide theoretical and practical references for improving the learning engagement level of secondary vocational students. The results show that self-identity and learning engagement are

significantly positively correlated. From the function of self-identity, the higher the students' self-identity scores, the more active they will be in learning. After students have a clear understanding and planning of their current situation and future, they will engage better in learning. Therefore, students can only improve the degree of learning engagement by approving themselves from the heart and having a clear positioning of themselves. In order to understand the development status of self-identity of higher vocational students and explore the relationship between self-identity and career maturity and learning engagement, Wang (2012) conducted a survey and statistical analysis of 429 higher vocational students. The results show that the development level of self-identity of higher vocational students has an important impact on career maturity and learning engagement. Du (2022) took 569 high school students from a developed coastal area as research objects and pointed out that establishing a good self-identity can enable individuals to have a clear vision for the future, thereby enhancing individuals' learning engagement.

Methodology

The respondents of this study are students from S Secondary Vocational school in Jinan City, Shandong Province, China. This group is the parent population. There were 3,000 students in S Secondary Vocational school. According to the Morgan Table, the required sample size was 341. The number of samples covered students from all majors and grades in S Secondary Vocational school. This study adopted convenience sampling. By contacting the head teachers of various professional categories, questionnaires were distributed to participating students in S Secondary Vocational school in Jinan City, Shandong Province, China. 350 questionnaires were distributed, and after sorting out and eliminating problematic questionnaires, 333 valid questionnaires were identified, with an effective recovery rate of over 95%, meeting the standard for subsequent statistical analysis. Make use of the convenience of work to communicate with the teachers at S secondary vocational school and assist in completing the questionnaire survey. The formal questionnaire will be issued in September 2023, and the class group will be distributed by the homeroom teacher at Jinan S Secondary Vocational School, and the instructions and precautions for filling in the questionnaire will be released. After the survey, the questionnaire data was downloaded, sorted in Excel, and imported into SPSS 25.0 to complete the statistics of the data. The α coefficients of internal consistency of learning engagement, behavioral learning engagement, cognitive learning engagement and emotional learning engagement in the original questionnaire used in this paper are all greater than 0.70.

Results

Demographic analysis of questionnaire respondents

In this study, a total of 333 questionnaires were collected from students of S Secondary

vocational School in Jinan City, and background variables such as gender, age, professional category and whether they were the only children were statistically analyzed. Among the gender variables, 184 were male, accounting for 55.3%, while 149 were female, accounting for 44.7%. The number of male students participating in the survey was slightly higher than that of female students. The overall sex ratio is similar. Among the age variables, 83 students were 15 years old, accounting for 24.9%; 88 were 16 years old, accounting for 26.4%; 90 were 17 years old, accounting for 27.0%; 72 were 18 years old, accounting for 21.6%; The age ratio of the overall students was similar. Among the variables of professional category, 87 people majored in commerce and trade, accounting for 26.1%, 85 people majored in engineering, accounting for 25.5%, 84 people majored in medicine, accounting for 25.2%, 77 people majored in preschool education, accounting for 23.1%, and the ratio of professional categories is similar. Among the only children variables, 119 are the only children, accounting for 35.7%, and 214 are not the only children, accounting for 64.3%. There are more students participating in the survey who are not the only children, which is related to the current family planning policy in Shandong Province, and the proportion is reasonable.

Descriptive statistics of learning engagement and self-identity of secondary vocational school students

1) Descriptive statistical analysis was used to investigate the overall level of learning engagement of students in S secondary vocational School in Jinan, Shandong Province, China. According to the analysis results in Table 1, the average score of students' learning engagement is at the upper middle level (M=3.41), and the average score of all dimensions is also at the middle level. The highest average score is emotional learning engagement (M=3.76), followed by cognitive learning engagement (M=3.35), and the lowest score is behavioral learning engagement (M=3.08). Therefore, it showed that the overall level of learning engagement of students in S Secondary Vocational school in Jinan City, Shandong Province was medium-high.

Table 1: Descriptive Statistics of Learning Engagement of Students in S Secondary Vocational school

	N	M	SD	Interpretation
Behavioral learning engagement	333	3.08	0.865	Medium
Cognitive learning engagement	333	3.35	0.910	Medium
Emotional learning engagement	333	3.76	0.866	Medium
Overall learning engagement	333	3.41	0.783	Medium

2) Descriptive statistical analysis was used to investigate the overall level of self-identity of students in S secondary vocational school in Jinan, Shandong Province, China. According to the analysis results in Table 2, the mean score of students' self-identity is at the medium level (M=2.81), which indicates that the overall level of students' self-identity in S secondary vocational school in Jinan, Shandong Province is average.

Table 2: Descriptive Statistics of Self-Identity of Students in S Secondary Vocational school

	N	M	SD	Interpretation
Self-identity	333	2.81	0.542	Medium

H1.1: There are significant differences in learning engagement of S Secondary Vocational school students with different genders.

It can be seen from the results in Table 3 that the Sig. were all less than 0.05, reaching a significant level, indicating that the hypothesis H1.1 was established. That is, there were significant differences in learning engagement of S Secondary Vocational school students of different genders. Female students had higher learning engagement than male students.

Table 3: Difference of Learning Engagement of S Secondary Vocational School Students with Different Genders

	Gender	Number of cases	Mean	Standard deviation	<i>T</i>	<i>Sig.</i>
Behavioral learning engagement	Male	184	2.92	0.741	-3.853	$p < 0.001$
	Female	149	3.29	0.962		
Cognitive learning engagement	Male	184	3.24	0.951	-2.559	0.011
	Female	149	3.49	0.839		
Emotional learning engagement	Male	184	3.42	0.960	-9.412	$p < 0.001$
	Female	149	4.18	0.472		
Learning engagement	Male	184	3.20	0.824	-5.770	$p < 0.001$
	Female	149	3.67	0.644		

H1.2: There are significant differences in learning engagement of S Secondary Vocational school students with different ages.

It can be seen from the results in Table 4 that the Sig. were all less than 0.05, reaching a significant level, indicating that the hypothesis H1.2 was established. That is, there were significant differences in learning engagement of S Secondary Vocational school students with different ages. For overall learning engagement, students aged 18 had higher learning engagement than students aged 17 years old. Students aged 17 had higher learning engagement than students aged 16 years old. Students aged 16 had higher learning engagement than students aged 15 years old.

H1.3: There are significant differences in learning engagement of S Secondary Vocational school students with different professional categories.

It can be seen from the results in Table 5 that the Sig. were less than 0.05, reaching a significant level, indicating that the hypothesis H1.3 was established. That is, there were significant differences in learning engagement of S Secondary Vocational school students with different professional categories. For overall, students in business majors had higher learning engagement than students in medical, engineering, and preschool education majors. Students in medical majors had higher learning engagement scores than students in engineering and preschool education majors. Students in

engineering majors had higher learning engagement than students in preschool education majors.

Table 4: Difference of Learning Engagement of S Secondary Vocational School Students with Different Ages

	Age	Number of cases	Mean	Standard deviation	<i>F</i>	<i>Sig.</i>
Behavioral learning engagement	15 years old	83	2.49	0.555	35.050	0.002
	16 years old	88	2.91	0.846		
	17 years old	90	3.35	0.834		
	18 years old	72	3.63	0.742		
Cognitive learning engagement	15 years old	83	2.96	0.784	16.069	0.002
	16 years old	88	3.11	0.969		
	17 years old	90	3.64	0.788		
	18 years old	72	3.73	0.858		
Emotional learning engagement	15 years old	83	3.44	0.825	13.358	$p < 0.001$
	16 years old	88	3.54	0.967		
	17 years old	90	3.96	0.755		
	18 years old	72	4.14	0.693		
Learning engagement	15 years old	83	2.99	0.583	25.299	$p < 0.001$
	16 years old	88	3.20	0.836		
	17 years old	90	3.67	0.706		
	18 years old	72	3.84	0.673		

Table 5: Difference of Learning Engagement of S Secondary Vocational School Students with Different Professional Categories

	Professional category	Number of cases	Mean	Standard deviation	<i>F</i>	<i>Sig.</i>
Behavioral learning engagement	Business major	87	3.25	0.714	3.822	0.002
	Engineering major	85	2.84	0.725		
	Medical major	84	3.18	0.873		
Cognitive learning engagement	Preschool education major	77	3.04	1.083	4.535	0.002
	Business major	87	3.57	0.690		
	Engineering major	85	3.12	0.960		
Emotional learning engagement	Medical major	84	3.46	0.839	10.158	$p < 0.001$
	Preschool education major	77	3.23	1.071		
	Business major	87	3.96	0.659		
Learning engagement	Engineering major	85	3.33	0.989	7.053	$p < 0.001$
	Medical major	84	3.89	0.698		
	Preschool education major	77	3.85	0.945		
	Business major	87	3.61	0.594		
	Engineering major	85	3.11	0.822		
	Medical major	84	3.52	0.682		
	Preschool education major	77	3.39	0.928		

H1.4: There are significant differences in learning engagement of S Secondary Vocational school students who are the only children or not.

It can be seen from the results in Table 6 that the Sig. were less than the standard 0.05, indicating that the hypothesis H1.4 was established. That is, there were significant differences in learning engagement of only child and non-only child students in S Secondary Vocational school. The only children had higher learning engagement than non-only child students.

Table 6: Difference Analysis of Learning Engagement between Only Child and Non-only Child Students in S Secondary Vocational School

	Only child or not	Number of cases	Mean	Standard deviation	<i>T</i>	<i>Sig.</i>
Behavioral learning engagement	Yes	119	3.25	0.962	2.507	0.013
	No	214	2.99	0.794		
Cognitive learning engagement	Yes	119	3.49	0.942	2.114	0.035
	No	214	3.27	0.884		
Emotional engagement	Yes	119	3.91	0.849	2.396	0.017
	No	214	3.68	0.866		
Learning engagement	Yes	119	3.56	0.812	2.671	0.008
	No	214	3.33	0.755		

H2.1: There are significant differences in self-identity of S Secondary Vocational school students with different genders.

It can be seen from the results in Table 7 that the Sig. value of the self-identity dimension of S Secondary Vocational school students was 0.949, greater than the standard 0.05. Therefore, hypothesis H2.1 did not hold.

Table 7: Difference Analysis of Self-Identity of S Secondary Vocational School Students with Different Genders

	Gender	Number of cases	Mean	Standard deviation	<i>T</i>	<i>Sig.</i>
Self-identity	Male	184	2.81	0.578	-0.064	0.949
	Female	149	2.82	0.496		

H2.2: There are significant differences in self-identity of S Secondary Vocational school students with different ages.

It can be seen from the results in Table 8 that the Sig. was less than 0.05, reaching a significant level, indicating that the hypothesis H2.2 was established. There were significant differences in self-identity of S Secondary Vocational school students with different ages. The self-identity of students aged 18 years old was higher than that of students aged 17, 15 and 16 years old.

H2.3: There are significant differences in self-identity of S Secondary Vocational school students with different professional categories.

It can be seen from the results in Table 9 that the Sig. was less than 0.05, reaching a significant level, indicating that the hypothesis H2.3 was established. For self-identity, students in business majors

had higher self-identity than students in engineering, medical, and preschool education majors.

Table 8: Difference Analysis of Self-Identity of S Secondary Vocational School Students with Different Ages

	Age	Number of cases	Mean	Standard deviation	<i>F</i>	<i>Sig.</i>
Self-identity	15 years old	83	2.53	0.652	17.414	$p < 0.001$
	16 years old	88	2.73	0.329		
	17 years old	90	2.96	0.456		
	18 years old	72	3.06	0.548		

Table 9: Difference Analysis of Self-Identity of S Secondary Vocational School Students with Different Professional Categories

	Professional category	Number of cases	Mean	Standard deviation	<i>F</i>	<i>Sig.</i>
Self-identity	Business major	87	3.03	0.428	7.991	$p < 0.001$
	Engineering major	85	2.68	0.560		
	Medical major	84	2.72	0.564		
	Preschool education major	77	2.82	0.543		

H2.4: There are significant differences in self-identity of only child and non-only child students in S Secondary Vocational school.

It can be seen from the results in Table 10 that the *Sig.* was less than the standard 0.05. Therefore, the hypothesis H2.4 was established. That is, there were significant differences in self-identity between only children and non-only child students in S Secondary Vocational school. The only children had higher self-identity than non-only children.

Table 10: Difference Analysis of Self-Identity between Only Child and Non-only Child Students in S Secondary Vocational School

	Only child or not	Number of cases	Mean	Standard deviation	<i>T</i>	<i>Sig.</i>
Self-identity	Yes	119	2.99	0.500	4.481	$p < 0.001$
	No	214	2.72	0.542		

Test Results of Research Hypothesis H3

It can be seen from the correlation analysis results in Table 11 that the correlation coefficients *r* between self-identity and overall learning engagement, behavioral learning engagement, cognitive learning engagement and emotional learning engagement of students in S Secondary Vocational school were 0.456, 0.432, 0.424, and 0.362 respectively, all reaching a significant level. There is a significant positive correlation between students' self-identity and learning engagement, and between self-identity

and learning engagement, that is, hypothesis H3 is also valid.

Table 11: Correlation Analysis of Self-Identity and Learning Engagement of Students in S Secondary Vocational School

	Behavioral learning engagement	Cognitive learning engagement	Emotional learning engagement	Learning engagement
Self-identity	0.432**	0.424**	0.362**	0.456**

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

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

Discussion

Current Situation of Self-Identity and Learning Engagement of Students in S Secondary Vocational school

According to the results of descriptive statistics, the overall level of learning engagement of students in S secondary vocational school is above average, which is basically consistent with the research of Chen (2019) and Du (2022).

Compared with previous studies, it is lower than that of PUGAU students. Among them, behavioral learning engagement, cognitive learning engagement and emotional learning engagement are also in the middle level, and the average value of cognitive learning engagement and emotional learning engagement is higher, which also indicates that most students have a relatively clear cognition of learning and can invest more emotions in learning, which may be related to the educational management mode of S secondary vocational School in Jinan, Shandong Province. The statistical results show that the learning engagement level of students in S Secondary Vocational school needs to be improved.

In the survey of the overall level of self-identity of students in S secondary vocational school, it is found that the self-identity of students in S secondary vocational school is at a medium level. This is in line with the fact that secondary vocational students who have been ignored and underestimated for a long time have incomplete personality building, resulting in a lack of clear understanding of themselves, insufficient self-awareness, relatively low self-esteem, and inability to handle interpersonal relations well. They also have a lack of clear understanding of their major and are confused and helpless in learning. Slowly make students form a negative psychological suggestion, classify themselves as the low learner, which leads to insufficient learning motivation level.

Differences in Self-Identity and Learning Engagement of S Secondary Vocational school Students with Different Background Variables

Compared with different gender differences, there are significant differences in self-identity and learning engagement among students from S vocational schools. This result is consistent with the conclusion from a study from Jing (2021). There are gender differences between the overall learning

engagement and dimensions of students in S Secondary Vocational school. The learning engagement of female students is higher than that of male students.

This is almost consistent with Chen (2019)'s research. Secondary vocational students are at the youth stage of life. Secondary vocational students are in the adolescent stage of life. From the character, the girl's character is relatively quiet and introverted, boys are lively and energetic, not limited. In terms of learning attitude, girls are more practical and serious, while boys are not focused enough on learning, and lack vitality and enthusiasm. There is no significant difference in gender in the self-identity of secondary vocational school students.

According to the comparison results of different age differences, there are significant differences in self-identity and learning engagement of students in S secondary vocational school. This is basically consistent with Du (2022).

This may be because the first year of secondary vocational students just came to school, and they are not very familiar with the environment and culture. This process requires them to be familiar with the surrounding environment, and they cannot devote themselves to study. Gradually, with the familiarity of the environment, they can coexist harmoniously with the classmates and teachers around them, and gradually have a sense of security and belonging in the school, they can devote their enthusiasm and energy to study.

According to the comparison results of different major categories, students in S secondary vocational school have significant differences in self-identity and learning engagement, among which there are differences in the overall learning engagement and all dimensions of major categories. In terms of learning engagement, business majors have higher learning engagement than students in medicine, engineering and preschool education, and medical students have higher learning engagement than students in engineering. Engineering is higher than preschool education. In terms of self-identity, the results of multiple comparisons show that business majors have the highest self-identity, followed by engineering, medicine and preschool education students.

The results show that there are significant differences in self-identity and learning engagement of students in S secondary vocational school. In terms of total and all dimensions of learning engagement, the results show that the learning engagement of only children is higher than that of non-only children. In terms of self-identity, through independence analysis, the results show that the self-identity of only children is higher than that of non-only children.

Relationship between Self-Identity and Learning Engagement of Students in S Secondary Vocational school

Pearson correlation analysis shows that there is a significant correlation between self-identity and learning engagement of students in S Secondary Vocational school, and there is a significant positive correlation between self-identity and learning engagement of students in S Secondary

Vocational school. This is basically consistent with Jia (2021)'s research results. That is, the higher the self-identity of secondary vocational students, the clearer their cognition of their current situation and future planning, the clearer they can recognize, understand and integrate themselves, and thus have the motivation to devote themselves to learning. On the contrary, the lower the self-identity, the lower the learning engagement.

Conclusions

Conclusion 1: The learning engagement of students in S Secondary Vocational school in Jinan City, Shandong Province was at a medium level.

Conclusion 2: The self-identity of students in S Secondary Vocational school in Jinan City, Shandong Province was at a medium level.

Conclusion 3: There were significant differences in learning engagement of S Secondary Vocational school students with different gender, ages, professional categories, and whether they were the only child or not.

Conclusion 4: There were significant differences in self-identity of S Secondary Vocational school students with different gender, ages, professional categories, and whether they were the only children or not.

Conclusion 5: There was a significant correlation between the two variables of self-identity and learning engagement of students in S Secondary Vocational school. There was a significant positive correlation between self-identity and learning engagement of students in S Secondary Vocational school.

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