

Learning Styles and Motivation of Chinese Senior High School Students on Japanese Language: Towards Personalized Teaching Strategies

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Abstract: *This study assessed the learning styles and learning motivation of Chinese senior high school students on Japanese language in the Institute of China, with an objective to propose the personalized teaching strategies. The researcher delimits the study to 140 students as samples, purposively selected from the institute. The researcher targeted all the 10 disciplines in the Institute. There were 14 students selected from each discipline, regardless of their age, sex and year level. Based on the statistical results of the gathered data as presented above, and the analysis on the assessment of the student - respondents on their learning styles and learning motivation, Concluded as follow: Learning motivation of student - respondents in terms of intrinsic goal orientation, extrinsic goal orientation, task value, control of learning beliefs, self - efficacy and test anxiety were assessed as very highly manifested. . Motivation provides the primary impetus to initiate learning foreign language and later the driving force to sustain the long and often tedious learning process". Individuals with the excellent abilities cannot reach long - term purposes, neither are good teaching and suitable curricula enough to guarantee students achievement without adequate motivation. On the other hand, high motivation can compensate for considerable limitation both in one's learning conditions and language aptitude. No significant differences in their assessment of learning motivation when their profile was taken as test factor. There is significant relationship between learning styles and learning motivation. Foregoing findings and conclusions considered, the researchers made corresponding recommendations.*

Keywords: Learning styles, Learning motivation, Chinese senior high school students, Personalized teaching strategies, Statistical results

1. Introduction

Learning motivation is a dynamic process in which individual students, guided by learning goals, encourage and guide themselves to choose their preferred learning behavior, and guide themselves to complete the set learning goals. To a great extent, students' learning motivation is a reflection of the reality of education. The Japanese education in China's senior high school is facing the difficulties of students' narrow learning, and the utilitarian problem of education and learning is more prominent. Learning motivation is a key to analyzing the plight of students learning Japanese in senior high school. That is, by investigating the nature and causes of the dominant types of students' learning motivation, we can deeply reflect on the relevant issues of education and cultural environment, promote the optimization of educational and cultural environment, and promote the reform and development of education and teaching.

This research is mainly from the perspective of culture, guided by "self determination theory", based on the methodology of constructivism, using the method of combining quantitative and qualitative research, using the research methods of questionnaire survey and interview survey, through the survey of senior high school students in different provinces of China, to study the motivation of senior high school students to learn Japanese. This paper systematically discusses the types and causes of motivation of Chinese senior high school students to learn Japanese, reveals the educational and cultural problems in the formation of the dominant types of their learning motivation, and further ponders over the educational conditions and basis for the formation of the internal learning motivation of

Chinese senior high school students to learn Japanese. The whole research includes six parts: the dominant types and nature of senior high school students' motivation to learn Japanese, the causes of senior high school students' instrumental learning motivation to learn Japanese, the cultural analysis of senior high school students' educational instrumentalization of learning Japanese, the psychological connotation and educational conditions of students' internal learning motivation, the educational orientation, conclusions and prospects of the formation of students' internal learning motivation.

2. Background of the Study

Foreign language is a compulsory course for Chinese students at the basic education stage, covering primary school, junior high school and senior high school. The curriculum and foreign language layout are uniformly planned by the state. In 1984, the Chinese government officially listed English as one of the required subjects for the college entrance examination. So far, most middle schools in China still teach English as a foreign language subject. Japanese, Russian, German, French, Spanish and other languages are called minor languages due to the small number of people studying in China.

In July 2018, the Japan Foundation for International Exchange released a survey report on the number of Japanese learners overseas. The results show that the total number of overseas Japanese learners has risen to 3,984,538, surpassing the previous record. According to the national and regional survey, China ranked first in the survey results. Among 136 countries and regions, the number of institutions

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engaged in Japanese language education in China rose by 7.5% year on year, an increase of 16045 in total. From the perspective of countries and regions, the number of Japanese learners in China increased by 26.5% year on year, reaching 1.046 million. Although Japanese is still known as a "Minority Languages" according to common habits, in fact, Japanese has become the second largest language after English in the number of learners in China (Gao Hedong, 2020).

At the same time, the number of Chinese students choosing Japanese as a foreign language subject in the college entrance examination has increased year by year. In 2016, more than 9600 people in China chose Japanese as a foreign language examination subject to participate in the college entrance examination, more than 48000 in 2019 and more than 240000 in 2021. The popularity of Japanese in the college entrance examination is increasing year by year, and it is favored by more and more examinees (Zhang Jinlong, Qin Xiacong, 2022).

The researcher of this study is currently working in an education and training institution in China. The training institution is open to all Chinese students who are willing to take Japanese language.

Since the Japanese language is included in China's college entrance examination the author is responsible for inviting students to take courses in the said institution. There are many problems and issues in the offering in Japanese language, this is the prime reason for the researcher why she wants to investigate the learning styles and the learning motivation of the students on the Japanese language. Since teacher domination is prevalent in Chinese education, there is a lack of sufficient studies about the learning styles and the association of these styles with learning motivation of students, hence the present study will be carried out to analyze this relationship of both variables. She believes that in a teacher - centered learning, the students cannot have greater autonomy and control over choices of the subject matter, learning methods and pace of study.

Furthermore, the researcher encourages the educators and educational leaders to take learning styles and learning motivation seriously as these can further develop the educational experiences of both the teachers and the learners.

The Theoretical Framework of the study are the following:

David Kolb and Experiential Learning. David Kolb's model of "experiential learning" stated that we learn continually, and, in the process, build particular strengths. Those strengths were said to give rise to personal preferences, which Kolb described in terms of four learning styles: Accommodating, Converging, Diverging, and Assimilating.

As Kolb saw it, Accommodators were "hands - on" types, keen to learn from real experience. Convergers were supposed to deal better with abstract ideas, but still liked to end up with concrete results. They

understood theories, but wanted to test them out in practice. Divergers tended to use personal experiences and practical ideas to formulate theories that they could apply more widely.

And Assimilators, according to Kolb, were most comfortable working with abstract concepts. They extended their understanding by developing new theories of their own. Kolb said that it was beneficial to know which type of learner you were, in order to "play to your strengths. " He also believed that educators and trainers could tailor their teaching methods to different people's learning styles.

Self - Determination Theory

Self - determination theory suggests that people are motivated to grow and change by three innate and universal psychological needs.

This theory suggests that people are able to become self - determined when their needs for competence, connection, and autonomy are fulfilled.

The concept of intrinsic motivation, or engaging in activities for the inherent rewards of the behavior itself, plays an important role in self - determination theory.

Self - determination theory grew out of the work of psychologists Edward Deci and Richard Ryan, who first introduced their ideas in their 1985 book *Self - Determination and Intrinsic Motivation in Human Behavior*. They developed a theory of motivation which suggested that people tend to be driven by a need to grow and gain fulfillment.

Two key assumptions of the theory:

The need for growth drives behavior. The first assumption of self - determination theory is that people are actively directed toward growth. Gaining mastery over challenges and taking in new experiences are essential for developing a cohesive sense of self.

Autonomous motivation is important. While people are often motivated to act by external rewards such as money, prizes, and acclaim (known as extrinsic motivation), self - determination theory focuses primarily on internal sources of motivation such as a need to gain knowledge or independence (known as intrinsic motivation).

3. Research Paradigm

This study assessed the learning styles and learning motivation of Chinese senior high school students on Japanese language in the Institute of China, with an objective to propose the personalized teaching strategies.

Specifically, it seeks answers to the following research questions:

1. What is the profile of the student respondents in terms of:
 - 1.1. Age
 - 1.2. Sex

1.3. Year level

2. What is the student respondents' assessment of their learning styles in terms of the following factors?

2.1. Converging

2.2. Diverging

2.3. Assimilating

2.4. Accommodating

3. Is there a significant difference in the student respondents' assessment of their learning styles when their profiles are taken as test factors?

4. What is the student respondents' assessment of their learning motivation in terms of the following factors?

4.1. Intrinsic Goal Orientation

4.2. Extrinsic Goal Orientation

4.3. Task Value

4.4. Control of Learning Beliefs

4.5. Self - Efficacy

4.6. Test Anxiety

5. Is there a significant difference in the student respondents' assessment of their learning motivation when their profiles are taken as test factors?

6. Is there a significant relationship between the student respondents' assessment of their learning styles and learning motivation?

7. What inputs can be proposed based on the findings of the study?

The following are the research hypotheses of the study:

- a) There is no significant difference in the student respondents' assessment of their learning styles when their profiles are taken as test factors.
- b) There is no significant difference in the student respondents' assessment of their learning motivation when their profiles are taken as test factors.
- c) There is no significant relationship between the student respondents' assessment of their learning styles and learning motivation.

Scope and delimitation of the Study

This study investigated the relationship between students' assessment of their learning styles and learning motivation of senior high school students in the Institute of China towards the implementation of personalized learning strategies.

The researcher delimit the study to 140 students as samples, purposively selected from the institute. The researcher targeted all the 10 disciplines in the Institute. There were 14 students selected from each discipline, regardless of their age, sex and year level.

This study is significant to the following people in different capacities:

School Administrators: The administrators will be

acquainted with the correlation between learning styles and learning of students. They will be guided to implement the necessary development programs pertaining to the mentioned constructs.

Teachers: They will be able to elucidate on the relationship between learning styles and learning motivation of students. As a consequence, the teachers will be able to design a more dynamic teaching strategy based on the students' learning styles and learning motivation.

School Counselors: The fundamental thrust of counseling for individual learning styles is eclectic or valuing individual differences. This research will come up with a strong ground for school counselors in choosing counseling approaches which will further magnify counselee learning and growth as a learner and as a person.

Parents: Knowing the learning styles and learning motivation of their children will help foster a positive and encouraging environment necessary for their children's effective learning.

Students: This study will reinforce the awareness of the students about the value of their learning styles and learning motivation that will help them increase their appreciation of education. They will also be assisted to adjust their preferences to learning and understanding of their teachers' teaching strategies.

Future Researchers: The literature review and the result of this study will give better perspectives to the researchers concerning the relationship of learning styles and learning motivation on the teaching and learning process.

This Researcher: This study will serve as her valuable contribution to the wealth of knowledge as this can serve as a reference for those undergoing research studies by the students particularly those enrolled in the graduate schools.

For better understanding the following **terms and phrases were operationally defined:**

Learning Style: A style of learning refers to an individual's preferred way to absorb, process, comprehend and retain information. This paper will focus on David Kolb's learning styles. Kolb's learning theory sets out four distinct learning styles namely: Converging, Diverging, Assimilating and Accommodating.

Converging (Abstract Conceptualization/Active Experimentation): This learning style highlights problem solving as an approach to learning. Individuals who prefer this learning style are able to make decisions and apply their ideas to new experiences.

Diverging (Concrete Experience/Reflective Observation): This learning style takes an original and creative approach. Rather than examining concrete experiences by the actions taken, individuals tend to assess them from various

perspectives. They value feelings and take an interest in others. Individuals who prefer this learning style tend to enjoy tasks such as brainstorming ideas and working collaboratively in groups.

Assimilating (Abstract Conceptualization or Reflective Observation): This learning style emphasizes reasoning. Individuals who demonstrate this learning style are able to review the facts and assess the experience as a whole. They tend to enjoy designing experiments and working on projects from start to completion.

Accommodating (Concrete Experience or Active Experimentation): This learning style is adaptable and intuitive. These individuals use trial and error to guide their experiences, preferring to discover the answers for themselves. They are able to alter their path based on the circumstance and generally have good people skills.

Learning Motivation: The success of learning depends on whether or not the learners are motivated. Motivation drives learners in reaching learning goals. Since modern education is compulsory, teachers cannot take learners' motivation for granted, and they have a responsibility to ensure learners are motivated to learn.

Intrinsic Goal Orientation: Intrinsic goal orientation concerns the degree to which the student perceives herself to be participating in a task for reasons such as challenge, curiosity, mastery. Having an intrinsic goal orientation towards an academic task indicates that the student's participation in the task is an end all to itself, rather than participation being a means to an end.

Extrinsic Goal Orientation: Extrinsic goal orientation complements intrinsic goal orientation, and concerns the degree to which the student perceives herself to be participating in a task for reasons such as grades, rewards, performance, evaluation by others, and competition. When one is high in extrinsic goal orientation, engaging in a learning task is the means to an end. The main concern the student has is related to issues that are not directly related to participating in the task itself (such as grades, rewards, comparing one's performance to that of others). Again, this refers to the general orientation to the course as a whole.

Task Value: Task value differs from goal orientation in that task value refers to the student's evaluation of the how interesting, how important, and how useful the task is ("What do I think of this task). Goal orientation refers to the reasons why; the student is participating in the task ("Why am I doing this?"). High task value should lead to more involvement in one's learning.

4. Methodology

A **survey method** is the preferred type of approach for this study. In this case, it can be beneficial to acknowledge the advantages of survey designs, through the use of the assessments of the different respondents on the learning

styles in terms Converging; Diverging; Assimilating; and Accommodating. Likewise, their learning motivation in terms of Intrinsic Goal Orientation; Extrinsic Goal Orientation; Task Value; Control of Learning Beliefs;; Self - Efficacy; and Test Anxiety.

Sample and Sampling Technique: The participants in this study are 140 students as samples, to be purposively selected from the institute. The researcher targeted all the 10 disciplines in the Institute. There were 14 students selected from each discipline, regardless of their age, sex and year level.

As part of the rigorous data collection, this researcher, with the help of his adviser, designed, and developed the **Research Instruments/Questionnaire**.

For the **Data Gathering Procedure**, firstly, the researcher adopted questionnaires validated by the experts in the field of education, psychology and school management. Then, a letter of request to the leader of China Institute was given by the researcher asking permission to conduct the study. Upon approval, the questionnaires were distributed to the student respondents for data collection.

For the **Statistical Analysis of Data**, in analyzing the gathered data, the following statistical treatments were used in the study at 0.05 level of significance using Statistical Package for Social Sciences or SPSS software:

1. Frequency Count and Percentage

This was used by the researcher in the analysis of the profile of the student respondents in terms of age, sex and year level.

2. Weighted Mean

This was used by the researcher to analyze the student respondents' assessment of their learning styles in terms of converging, diverging, assimilating and accommodating. Also, the student respondents also assessed the level of their learning motivation in terms of in terms of intrinsic goal orientation, extrinsic goal orientation, task value, control of beliefs, self - efficacy and test anxiety.

3. T - test /ANOVA

The t - test and/or Analysis of Variance or F - test was used by the researcher to determine if there is significant difference in the learning styles and learning motivation of the student respondents when their profiles are taken as factors.

The results were interpreted as follows:

Weight	Scale/Range	Description/Interpretation
4	3.25 - 4.00	Strongly Agree/ Very Highly Manifested
3	2.50 - 3.24	Agree/ Highly Manifested
2	1.75 - 2.49	Disagree/ Moderately Manifested
1	1.00 - 1.74	Strongly Disagree/ Not Manifested

4. Pearson's r Correlation Analysis

The researcher used Pearson's r correlation analysis to

determine the significant relationship between the learning styles and learning motivation of the student respondents.

Decision Criteria

The analysis of the hypothesis was carried out using the 0.05 level of significance. The null hypotheses were accepted if the computed significance value is greater than the set value at 0.05.

Ethical Consideration

In the conduct of the study, the researcher considered the following ethical considerations:

- 1) Respondents were briefed fully on the purpose of the conduct of the research.
- 2) It was made very clear to the respondents that participation is voluntary.
- 3) Data collection and analysis were described clearly to them so that they would know what they will be doing.
- 4) Respondents were given consent form for them to fill up.
- 5) Maintain the confidentiality of the information by protecting the anonymity of the respondents.
- 6) Employment status of the respondents is not affected.

5. Results and Analysis

Hereunder is the presentation of the results of the study, to wit:

1) The profile of the student respondents in terms of age, sex, and year level is presented on Table 1, 2, and 3.

Table 1: Summary of Values Showing the Frequency and Percentage Distribution of the Student - Respondents in terms of Age:

Age Bracket	Frequency	Percentage
15 - 16 yo.	55	39.29 %
17 - 18 yo.	75	53.57%
19 years old and above	10	7.14%
Total	140	100%

Table 1 above shows that majority of the student - respondents are aged 17 - 18 or 53.57% and these are students who are in grade 12 of senior high school. There are 55 or 39.29% of the students, who belong to age bracket 15 - 16 years old; who are in grade 11 of senior high school. The least in number are those students who are aged 19 years old and above. These students who had stopped and considered as irregular students of the school.

Table 2: Summary of Values Showing the Frequency and Percentage Distribution of the Respondents in terms of Sex

Sex	Frequency	Percentage
Female	82	58.57 %
Male	58	41.43 %
Total	140	100%

Results indicated that majority of the senior high school students are female which comprised 58.57% of the total number of student - respondents; while there are 58 or 41.43% male student - respondents.

Table 3: Summary of Values Showing the Frequency and Percentage Distribution of the Respondents in terms of Year Level

Year Level	Frequency	Percentage
Grade 11	75	53.57%
Grade 12	65	46.43 %
Total	140	100%

Table 3 above shows that there are almost equal numbers of respondents who are in senior high school. Majority are grade 11 with frequency of 75 or 53.57%; while grades 12 are 65 or 46.43% of the total student - respondents. This indicates that senior high students are active participants of the survey.

2) The assessment of the student - respondents of their learning styles are presented in Tables 4, 5, 6, and 7.

Table 4: Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Student - Respondents on their Learning Styles in Terms of Converging.

Indicators	Mean	Interpretation
I learn most by.....		
discovering, testing and trying new things.	3.80	Always
quick decision making.	3.85	Always
searching for one correct answer.	3.85	Always
independent work.	3.75	Always
reflecting on my own.	3.83	Always
Overall Rating	3.82	Very Highly Manifested

Legend:
 4 - 3.25 – 4.00 Always (A) /Very Highly Manifested (VHM)
 3 - 2.50 – 3.24 Often (O) /Highly Manifested (HM)
 2 - 1.75 – 2.49 Seldom (S) /Moderately Manifested (MM)
 1 - 1.00 – 1.74 Not at All (NA) /Not Manifested (NM)

The student - respondents assessed their learning styles in terms of converging as highly manifested as revealed in the overall rating of 3.82. The highest indicators are quick decision making, and searching for one correct answer which both obtained the highest mean scores of 3.85 with adjectival description of very highly manifested. These imply that student - respondents learn most by their quick decision making and thru searching for one correct answer. It is worthy to note that most of the indicators were assessed as very highly manifested which means that senior students are more attracted to technical tasks and problems; like to experiment with new ideas and to work with practical applications. The lowest indicator is independent work with mean score of 3.75. The researcher infers that students learn most if they are in group or with their peer.

Table 5: Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Student - Respondents on their Learning Styles in Terms of Diverging

Indicators	Mean	Interpretation
I learn most by.....		
looking into the big picture.	3.58	Always
relying on feelings.	3.60	Always
preferring personal interaction.	3.48	Always
group discussion.	3.77	Always
peer reviews.	3.85	Always
Overall Rating	3.65	Very Highly Manifested

Legend:

4 - 3.25 – 4.00 Always (A) /Very Highly Manifested (VHM))

3 - 2.50 – 3.24 Often (O) /Highly Manifested (HM)

2 - 1.75 – 2.49 Seldom (S) /Moderately Manifested (MM)

1 - 1.00 – 1.74 Not at All (NA) /Not Manifested (NM)

The student - respondents assessed their learning styles in terms of diverging as very highly manifested as indicated in the overall rating of 3.65; with the indicator “I learn most by peer reviews” which rated the highest mean score of 3.85 interpreted as always/very highly manifested. The lowest mean score of 3.48 was obtained by indicator, “I learn most by preferring personal interaction”. Other indicators were all assessed as very highly manifested. These imply that student - respondents learn most when they do review with their peers, and holding group discussion.

Table 6: Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Student - Respondents on their Learning Styles in Terms of Assimilating

Indicators	Mean	Interpretation
I learn most by.....		
using critical thinking.	3.65	Always
analyzing, organizing and sorting.	3.77	Always
evaluating pros and cons.	3.48	Always
listening to lectures.	3.63	Always
using logical and detailed thinking.	3.52	Always
Overall Rating	3.61	Very Highly Manifested

Legend:

4 - 3.25 – 4.00 Always (A) /Very Highly Manifested (VHM))

3 - 2.50 – 3.24 Often (O) /Highly Manifested (HM)

2 - 1.75 – 2.49 Seldom (S) /Moderately Manifested (MM)

1 - 1.00 – 1.74 Not at All (NA) /Not Manifested (NM)

The student - respondents assessed their learning styles in

Table 8: One - Way ANOVA Test for the Assessment of the Student - Respondents on their Learning Styles Factors of when Age is Taken as Test Factor

Variables	F	df1	df2	p	Decision	Conclusion
Converging	1.211	4	9.45	0.368	Accept Ho	With no significant difference
Diverging	0.062	4	10.51	0.0654	Accept Ho	With no significant difference
Assimilating	0.14	4	9.81	0.963	Accept Ho	With no significant difference
Accommodating	0.138	4	11.35	0.065	Accept Ho	With no significant difference

terms of assimilating as very highly manifested with overall rating of 3.61. The indicator “I learn most by analyzing, organizing and sorting” was rated the highest mean score of 3.77. Other indicators: I learn most by using critical thinking, listening to lectures, and using logical and detailed thinking were all assessed as very highly manifested. The lowest indicator, “I learn most by evaluating pros and cons” obtained mean score of 3.48. This implies that students sometimes do not evaluate the consequences of doing something before they make decisions.

The researcher infers that student - respondents learn most by analyzing, organizing, and sorting as revealed in the rating given in each of the indicators presented in the above table 6.

Table 7: Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Student - Respondents on their Learning Styles in Terms of Accommodating

Indicators	Mean	Interpretation
I learn most by.....		
problem solving.	3.73	Always
taking risks.	3.75	Always
exploring.	3.88	Always
synthesizing information.	3.88	Always
communicating concept to others.	3.70	Always
Overall Rating	3.79	Very Highly Manifested

Legend:

4 - 3.25 – 4.00 Always (A) /Very Highly Manifested (VHM))

3 - 2.50 – 3.24 Often (O) /Highly Manifested (HM)

2 - 1.75 – 2.49 Seldom (S) /Moderately Manifested (MM)

1 - 1.00 – 1.74 Not at All (NA) /Not Manifested (NM)

The student - respondents assessed their learning styles in terms of accommodating as very highly manifested based on the overall rating of 3.79. The indicators “I learn most by exploring and “synthesizing information” which obtained the highest mean score of 3.88 interpreted as “always/very highly manifested”. The indicator “I learn most by communicating concept to others” was assessed with the lowest mean score of 3.70.

3) The significant difference in the student respondents’ assessment of their learning styles when their profiles are taken as test factors is presented in Tables 8, 9, and 10.

At 0.05 level of significance, there were no significant differences in the assessment of the respondents on the variables of learning styles in terms of converging, diverging, assimilating and accommodating when their profile in terms

of Age was taken as test factor, as their respective P values of 0.368, 0.0654, 0.963, and 0.065, were all higher than the level of significance of 0.05 which resulted to the acceptance of the null hypotheses.

Table 9: One - Way ANOVA Test for the Assessment of the Student - Respondents on their Learning Styles when Sex is Taken as Test Factor

Independent Samples T - Test	Welch's t	df	p	Decision	Conclusion
	Statistic				
Converging	0.0164	34.4	0.987	Accept Ho	With no significant difference
Diverging	0.0621	36.6	0.951	Accept Ho	With no significant difference
Assimilating	- 1.3085	36.5	0.199	Accept Ho	With no significant difference
Accommodating	0.4525	34.4	0.654	Accept Ho	With no significant difference

At 0.05 level of significance, there were no significant differences in the assessment of the respondents on the variables of learning styles in terms of converging, diverging, assimilating and accommodating when their profile in terms of sex was taken as test factor, as their respective P values of 0.987, 0.951, 0.199, and 0.0654, were all higher than the

level of significance of 0.05 which resulted to the acceptance of the null hypotheses.

This implies that whether male or female their learning styles do not differ.

Table 10: One - Way ANOVA Test for the Assessment of the Student - Respondents on their Learning Styles Factors of when Year Level is taken as Test Factor

Independent Samples T - Test	Welch's t	df	p	Decision	Conclusion
	Statistic				
Converging	0.0164	34.4	0.787	Accept Ho	With no significant difference
Diverging	0.0621	36.6	0.411	Accept Ho	With no significant difference
Assimilating	- 1.3085	36.5	0.099	Accept Ho	With no significant difference
Accommodating	0.4525	34.4	0.065	Accept Ho	With no significant difference

At 0.05 level of significance, there were no significant differences in the assessment of the respondents on the variables of learning styles in terms of converging, diverging, assimilating and accommodating when their profile in terms of year level was taken as test factor, as their respective P values of 0.787, 0.411, 0.099, and 0.065, were all higher than the level of significance of 0.05 which resulted to the acceptance of the null hypotheses.

The student respondents' assessment of their learning motivation are presented in Tables 11, 12, 13, 14, 15, and 16.

Table 11 presents the summary of values showing the mean and verbal interpretation in the assessment of student - respondents on their learning motivation in terms of intrinsic goal orientation.

Table 11: Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Student - Respondents on their Learning Motivation in Terms of Intrinsic Goal Orientation

Indicators	Mean	Interpretation
In a class, I prefer course material that really challenges me so I can learn new things.	3.67	Always
In a class, I prefer course material that arouses my curiosity, even if it is difficult to learn.	3.48	Always
The most satisfying thing for me in this course is trying to understand the content as thoroughly as possible.	3.92	Always
When I have the opportunity in this class, I choose course assignments that I can learn from even if they don't guarantee a good grade.	3.63	Always
Overall Rating	3.68	Very Highly Manifested

Legend:

4 - 3.25 – 4.00 Always (A) /Very Highly Manifested (VHM))

3 - 2.50 – 3.24 Often (O) /Highly Manifested (HM)

2 - 1.75 – 2.49 Seldom (S) /Moderately Manifested (MM)

1 - 1.00 – 1.74 Not at All (NA) /Not Manifested (NM)

The student - respondents assessed their learning motivation in terms of intrinsic goal orientation as very highly manifested based on the overall rating of 3.68. The highest indicator, The most satisfying thing for me in this course is

trying to understand the content as thoroughly as possible was rated mean score of 3.92 interpreted as always or very highly manifested. This implies that students are interested to learn, they find satisfaction, and enjoyment in learning.

Other indicators were also assessed as very highly manifested. However, In a class, I prefer course material that arouses my curiosity, even if it is difficult to learn was rated

the lowest mean score of 3.48 interpreted as always/very highly manifested.

Table 12: Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Student - Respondents on their Learning Motivation in Terms of Extrinsic Goal Orientation

Indicators	Mean	Interpretation
Getting a good grade in this class is the most satisfying thing for me right now.	3.67	Always
The most important thing for me right now is improving my overall grade point average, so my main concern in this class is getting a good grade.	3.60	Always
If I can, I want to get better grades in this class than most of the other students.	3.42	Always
I want to do well in this class because it is important to show my ability to my family, friends, employer, or others.	3.67	Always
Overall Rating	3.59	Very Highly Manifested

Legend:

4 - 3.25 – 4.00 Always (A) /Very Highly Manifested (VHM))

3 - 2.50 – 3.24 Often (O) /Highly Manifested (HM)

2 - 1.75 – 2.49 Seldom (S) /Moderately Manifested (MM)

1 - 1.00 – 1.74 Not at All (NA) /Not Manifested (NM)

The student - respondents assessed their learning motivation in terms of extrinsic goal orientation as very highly manifested based on the overall rating of 3.59 interpreted as always/very highly manifested.

The highest indicator was “Getting a good grade in this class is the most satisfying thing for me right now and I want to do well in this class because it is important to show my ability to my family, friends, employer, or others with mean score of 3.67. On the other hand, If I can, I want to get better grades in this class than most of the other students was rated with the

lowest mean score of 3.42

This implies that student - respondents are motivated to learn or achieve not by personal interest or desire for growth, but from a desire to please others by meeting expectations set by parents, teachers, or factors like a desired grade.

Table 13 presents the summary of values showing the mean and verbal interpretation in the assessment of student - respondents on their learning motivation in terms of task value.

Table 13: Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Student - Respondents on their Learning Motivation in Terms of Task Value

Indicators	Mean	Interpretation
I like the subject matter of this course.	3.38	Always
It is important for me to learn the course material in this class.	3.60	Always
I am very interested in the content area of this course.	3.73	Always
I think the course material in this class is useful for me to learn.	3.73	Always
Overall Rating	3.61	Very Highly Manifested

Legend:

4 - 3.25 – 4.00 Always (A) /Very Highly Manifested (VHM))

3 - 2.50 – 3.24 Often (O) /Highly Manifested (HM)

2 - 1.75 – 2.49 Seldom (S) /Moderately Manifested (MM)

1 - 1.00 – 1.74 Not at All (NA) /Not Manifested (NM)

Table 13 above shows the assessment of the student - respondents on their learning motivation in terms of task value which resulted to overall rating of 3.61 with verbal interpretation of verbal highly manifested. This implies that students are motivated to engage in a specific task. The indicators, I am very interested in the content area of this course and I think the course material in this class is useful for me to learn yielded the highest mean score of 3.73 which imply that their learning motivation with regard to their course is very highly manifested.

The findings concur with The Expectancy - Value Model of Achievement Motivation (Wigfield et al., 2009) which proposes that achievement behavior is largely influenced by expectancies of success and subjective task values. Both constructs are subdivided into specific facets. Task values include intrinsic value (the enjoyment and interest that a person gains from a task), utility value (the usefulness of a task for the pursuit of other short - and long - term personal goals), and attainment value (the relevance of a task to a person’s sense of self, identity, and core personal values.

Table 15: Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Student - Respondents on their Learning Motivation in Terms of Self - Efficacy

Indicators	Mean	Verbal Interpretation
I believe I will receive an excellent grade in this class.	2.57	Often
I'm certain I can understand the most difficult material presented in the readings for this course.	3.84	Always
I'm confident I can understand the basic concepts taught in this course	3.52	Always
I expect to do well in this class.	3.88	Always
Overall Rating	3.45	Very Highly Manifested

Legend:

4 - 3.25 – 4.00 Always (A) /Very Highly Manifested (VHM))

3 - 2.50 – 3.24 Often (O) /Highly Manifested (HM)

2 - 1.75 – 2.49 Seldom (S) /Moderately Manifested (MM)

1 - 1.00 – 1.74 Not at All (NA) /Not Manifested (NM)

The student - respondents assessed their learning motivation in terms of self - efficacy as very highly manifested based on the overall rating of 3.45. The highest mean score of 3.88 was obtained by the indicator statement, I expect to do well in this class. However, I believe I will receive an excellent grade in this class was rated with the lowest mean score of

2.57 with verbal interpretation of often/highly manifested.

The findings imply that student - respondents believe in their own capacity to achieve, to do well in their class, understand the most difficult material, and learn basic concepts being taught in their class.

Table 16: Summary of Values Showing the Mean and Verbal Interpretation in the Assessment of the Student - Respondents on their Learning Motivation in Terms of Test Anxiety

Indicators	Mean	Verbal Interpretation
When I take a test I think about items on other parts of the test I can't answer.	3.84	Always
When I take tests I think of the consequences of failing.	3.86	Always
I have an uneasy, upset feeling when I take an exam.	3.85	Always
I feel my heart beating fast when I take an exam.	3.90	Always
Overall Rating	3.86	Very Highly Manifested

Legend:

4 - 3.25 – 4.00 Always (A) /Very Highly Manifested (VHM))

3 - 2.50 – 3.24 Often (O) /Highly Manifested (HM)

2 - 1.75 – 2.49 Seldom (S) /Moderately Manifested (MM)

1 - 1.00 – 1.74 Not at All (NA) /Not Manifested (NM)

The student - respondents assessed their learning motivation in terms of test anxiety as very highly manifested as indicted in the overall rating of 3.86.

consequences of failing and I have an uneasy, upset feeling when I take an exam which were assessed as always/very highly manifested with mean scores of 3.86 and 3.85 respectively. These are manifestations of their anxiety when taking tests.

The indicator I feel my heart beating fast when I take an exam rated the highest mean score of 3.90 with verbal interpretation of always/very highly manifested. This implies that students feel anxious whenever they are taking tests.

The researcher observed that student - respondents always manifest anxiety when taking their tests as revealed in the ratings given in each of the indicators presented in Table 16.

On the other hand, When I take a test I think about items on other parts of the test I can't answer was rated with the lowest mean score of 3.84 with verbal interpretation of always/very highly manifested. This implies that anxiety of the student - respondents them from taking or doing their best on their exam, which causes them to feel anxious all the time, or becomes extreme.

4) The significant difference in the student respondents' assessment of their learning motivation when their profiles are taken as test factors are presented in Tables 17, 18, and 19.

Table 17 presents the one - way ANOVA test on the significant difference in the assessment of the respondents on their learning motivation when age is taken as test factor.

Other indicators: When I take tests I think of the

Table 17: One - Way ANOVA Test for the Assessment of the Student – Respondents on their Learning Motivation when Age is Taken as Test Factor

Variables	df	Critical f value (2 tail)	Computed f	P Value	Decision	Conclusion
Intrinsic Goal Orientation	77	3.1505	1.245	.299	Accept Ho	With no significant difference
Extrinsic Goal Orientation	77	3.1505	.967	.413	Accept Ho	With no significant difference
Task Value	77	3.1505	.478	.699	Accept Ho	With no significant difference
Control of Learning Beliefs	77	3.1505	.681	.567	Accept Ho	With no significant difference
Self – Efficacy	77	3.1505	2.304	.084	Accept Ho	With no significant difference
Test Anxiety	77	3.1505	1.841	.147	Accept Ho	With no significant difference

Sig. - .05

At 0.05 level of significance, there were no significant differences in the assessment of the student - respondents on the variables of learning motivation when their profile in terms of Age was taken as test factor, as their respective P values of .299, .413, .699, .567, .084, and .147 were all higher than the level of significance of 0.05 which resulted to the acceptance of the null hypotheses.

The researcher observed that when age is taken as test factor their assessment on the variables namely: intrinsic goal orientation, extrinsic goal orientation, task value, control of

learning beliefs, self - efficacy and test anxiety showed no significant difference as presented in the preceding table.

As presented in Table 1 majority of the respondents belong to the same age bracket. The same age groups would have the same views on their learning motivation variables of being experienced in their respective classes. There are no significant differences in the experiences held by the same generational group, thus their assessment on the above factors do not differ.

Table 18: One - Way ANOVA Test for the Assessment of the Student - Respondents on their Learning Motivation when Sex is Taken as Test Factor

Variables	df	Critical t – value (2 tail)	Computed t	P Value	Decision	Conclusion
Intrinsic Goal Orientation	75	1.9921	- 1.216	.228	Accept Ho	With no significant difference
Extrinsic Goal Orientation	75	1.9921	- .887	.378	Accept Ho	With no significant difference
Task Value	74	1.9925	- .351	.727	Accept Ho	With no significant difference
Control of Learning Beliefs	75	1.9921	- 1.372	.174	Accept Ho	With no significant difference
Self – Efficacy	75	1.9921	.129	.898	Accept Ho	With no significant difference
Test Anxiety	79	1.9904	- 1.453	.150	Accept Ho	With no significant difference

At 0.05 level of significance, there were no significant differences in the assessment of the student - respondents on the variables of learning motivation when their profile in terms of sex was taken as test factor, as their respective P values of .228, .378, .727, .174, .898 and .150, were all higher than the level of significance of 0.05 which resulted to the acceptance of the null hypotheses.

The researcher observed that when sex is taken as test factor their assessment on the variables namely: intrinsic goal orientation, extrinsic goal orientation, task value, control of

learning beliefs, self - efficacy and test anxiety showed no significant difference as presented in the preceding table.

As presented in Table 2, there are almost equal number of male and female student - respondents. The two groups would have the same views on their learning motivation variables of being experienced in their respective classes. There are no significant differences in the experiences held by the same generational group, thus their assessment on the above factors do not differ.

Table 19: One - Way ANOVA Test for the Assessment of the Student - Respondents on their Learning Motivation when Year Level is Taken as Test Factor

Variables	df	Critical f – value (2 tail)	Computed f	P Value	Decision	Conclusion
Intrinsic Goal Orientation	74	3.1505	.972	.383	Accept Ho	With no significant difference
Extrinsic Goal Orientation	74	3.1505	.860	.427	Accept Ho	With no significant difference
Task Value	73	3.1505	.542	.584	Accept Ho	With no significant difference
Control of Learning Beliefs	74	3.1505	.617	.542	Accept Ho	With no significant difference
Self – Efficacy	74	3.1505	.277	.759	Accept Ho	With no significant difference
Test Anxiety	74	3.1505	.044	.957	Accept Ho	With no significant difference

6. The significant relationship between the student respondents’ assessment of their learning styles and learning motivation is presented in Table 20.

Table 20: Correlational Analysis on the Significant Relationship between Learning Styles and Learning Motivation of Student - Respondents.

Variables	Computed r	Degree of Relationship	P value	Interpretation
Learning Styles to Learning Motivation in terms of intrinsic goal orientation				
Converging	.767**	High positive correlation	.000	with significant correlation
Diverging	.706**	High positive correlation	.000	with significant correlation
Assimilating	.672**	Moderate positive correlation	.000	with significant correlation
Accommodating	.478**	low positive correlation	.000	With significant correlation
Learning Styles To Learning Motivation in terms of extrinsic goal orientation				
Converging	.330**	Low positive correlation	.000	with significant correlation
Diverging	.383**	Low positive correlation	.000	with significant correlation
Assimilating	.280**	Negligible positive correlation	.000	with significant correlation
4. Accommodating	.255*	negligible positive correlation	.021	With significant correlation
Learning Styles To Learning Motivation in terms of task value				
1. Converging	.216**	Negligible positive correlation	.005	with significant correlation
2. Diverging	.101	Negligible positive correlation	.190	with no significant correlation
3. Assimilating	.374**	Low positive correlation	.000	with significant correlation
4. Accommodating	.255*	negligible positive correlation	.021	With significant correlation
Learning Styles To Learning Motivation in terms of control of learning beliefs				
1. Converging	.673**	Moderate positive correlation	.000	with significant correlation
2. Diverging	.756**	High positive correlation	.000	with significant correlation
3. Assimilating	.527**	Moderate positive correlation	.000	with significant correlation
4. Accommodating	.241*	negligible positive correlation	.030	With significant correlation
Learning Styles To Learning Motivation in terms of self - efficacy				
1. Converging	.478**	low positive correlation	.000	With significant correlation
2. Diverging	.255*	negligible positive correlation	.021	With significant correlation
3. Assimilating	.347**	low positive correlation	.002	With significant correlation
4. Accommodating	.271*	negligible positive correlation	.017	with significant correlation
Learning Styles To Learning Motivation in terms of test anxiety				
1. Converging	.673**	Moderate positive correlation	.000	with significant correlation
2. Diverging	.756**	High positive correlation	.000	with significant correlation
3. Assimilating	.527**	Moderate positive correlation	.000	with significant correlation
4. Accommodating	.687**	moderate positive correlation	.000	With significant correlation

Table 20 above shows the summary of correlational analysis on the significant relationship between the learning styles and learning motivation of student - respondents which were summarized in Table 21.

Table 21: Summary of Correlational Analysis on the Significant Relationship between Learning Styles and Learning Motivation of Student - Respondents.

Variables	Computed r	Degree of Relationship	P value	Interpretation
Learning Styles TO Learning Motivation	.746**	High positive correlation	.000	with significant correlation

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

As presented in table 20 and Table 21 the p values on the variables of learning styles with regard to the variables of learning motivation were all less than the 0.01 level of significance which revealed that there is significant relationship between the learning styles and learning motivation of student - respondent which called for the rejection of the hypothesis.

6. Discussions

Based on the statistical results of the gathered data as presented above, and the analysis of the same, the following are the findings, conclusions and recommendations on the assessment of the student - respondents on their learning styles and learning motivation, to wit:

1) On the profile of the student - respondents

a) In terms of age

Majority of the student - respondents are aged 17 - 18 or 53.57% and these are students who are in grade 12 of senior high school. There are 55 or 39.29% of the students who belong to age bracket 15 - 16 years old; who are in grade 11 of senior high school. The least in number are those students who are aged 19 years old and above.

b) In terms of sex

Majority of the senior high school students are female which comprised 58.57% of the total number of student - respondents; while there are 58 or 41.43% male student - respondents.

c) In terms of year level

Majority are grade 11 with frequency of 75 or 53.57%; while grade 12 is 65 or 46.43% of the total student - respondents.

2) On the assessment of the student - respondents on their learning styles

- a) In terms of converging, assessment was very highly manifested as revealed in the overall rating of 3.82.
- b) In terms of diverging, assessment was very highly manifested as indicated in the overall rating of 3.65.
- c) In terms of assimilating, assessment was very highly manifested as indicated in the overall rating of 3.61.
- d) In terms of accommodating, assessment was very highly manifested based on the overall rating of 3.79.

3) On the significant difference in the assessment of the student respondents on their learning style when their profile is taken as test factor.

- a) When age was taken as test factor, no significant differences in their assessment.
- b) When sex was taken as test factor, no significant differences in their assessment.
- c) When year level was taken as test factor, no significant differences in their assessment.

4) On the assessment of the student - respondents on their learning motivation.

- a) In terms of intrinsic goal orientation, assessment was very highly manifested based on the overall rating of 3.68.
- b) In terms of extrinsic goal orientation, assessment was very highly manifested based on the overall rating of 3.59.
- c) In terms of task value, assessment was very highly manifested based on the overall rating of 3.61.
- d) In terms of control of learning beliefs, assessment was highly manifested based on the overall rating of 3.22.
- e) In terms of self - efficacy, assessment was very highly manifested based on the overall rating of 3.45.
- f) In terms of test anxiety, assessment was very highly manifested based on the overall rating of 3.86.

5) On the significant difference in the assessment of the student - respondents on their learning motivation.

- a) When age was taken as test factor, no significant differences in their assessment.
- b) When sex was taken as test factor, no significant differences in their assessment.
- c) When year level was taken as test factor, no significant differences in their assessment.

6) On the significant relationship between learning styles and learning motivation of student - respondents.

There is significant relationship between the variables of learning styles and learning motivation of the student - respondents.

7. Conclusions

The conclusions that can be drawn from the findings can be summarized as follows:

- 1) Exam - oriented education is more suitable for girls (LIU Jiang, WAN Jianghong, 2020), because most of the study respondents are between 17 - 18 years old; female; 11th grade.
- 2) Learning styles of student - respondents in terms of converging, diverging, assimilating, and accommodating were assessed as very highly manifested. The psychological basis of students' learning motivation is learning needs. What kind of learning needs do students have, and what kind of learning motivation they have.
- 3) No significant differences in their assessment of learning styles when their profile was taken as test factor. Learning motivation of student - respondents in terms of intrinsic goal orientation, extrinsic goal orientation, task value, control of learning beliefs, self - efficacy and test anxiety were assessed as very highly manifested. Motivation provides the primary impetus to initiate learning foreign language and later the driving force to sustain the long and often tedious learning process". Individuals with the excellent abilities cannot reach long - term purposes, neither are good teaching and suitable curricula enough to guarantee students achievement without adequate motivation. On the other hand, high motivation can compensate for considerable limitation both in one's learning conditions and language aptitude.
- 4) No significant differences in their assessment of learning motivation when their profile was taken as test factor.
- 5) There is significant relationship between learning styles and learning motivation. The relationship between learning styles and learning motivation is a topic that has been explored in educational research for many years. Despite ongoing debate and varying research findings in this field, some studies suggest that there may be a significant relationship between an individual's learning style and learning motivation. Some suggest that when instruction matches an individual's preferred learning style, they may be more motivated to engage with the material and thus learn more effectively.

8. Recommendations

Foregoing findings and conclusions considered, the following recommendations were proposed by the researcher, to wit:

- 1) Provides individual problem - solving exercises that encourage independent study.

With the continuous changes and development of education forms, the traditional "teacher - receiver" education model can no longer meet the needs of students in the new era. In the process of imparting knowledge, can teachers pay attention to cultivating students' independent learning abilities and establish children's independent learning ability? Confidence in learning and stimulating children's interest in learning has become important criteria for parents to measure their teaching level (Meng Fanhui, 2011). The teacher's responsibility is not only to teach students

knowledge, but the most important thing is to let student's master good learning methods.

2) Create study groups among students.

Group cooperative learning is a teaching activity that takes cooperative learning groups as the basic form, systematically uses the interaction between dynamic factors in teaching to promote students' learning, uses the group's performance as the evaluation criterion, and jointly achieves teaching goals.

3) Encourage students to share their feelings, listen to each other, give compliments, express gratitude and practice problem solving together.

Since Japanese is still one of the languages studied by a small number of people in China, the Chinese government currently does not invest enough Japanese teachers to support teaching in high schools. Most high schools employ Japanese teachers from social organizations to teach students. These teachers can often adopt a command - friendly, restrictive and tolerant teaching management model to provide more performance opportunities while traditional lectures and exercises; motivation methods often use reasoning, material rewards and praise, etc.

4) Distribute learning materials which will arouse the interest of students.

Interest is a powerful motivator. When students are genuinely interested in what they are learning, they are more likely to be engaged and eager to participate in the learning process. This motivation can lead to better attendance, more effort, and a higher level of commitment to learning. Interesting learning materials can create positive emotional connections to learning. This can lead to a more positive attitude towards education and a greater sense of satisfaction and well - being.

5) Praise students for job well done, and implement the educational activities and incentive rules with "self - esteem - equality" as the core. For the entire educational ecosystem, the real and lasting implementation of "life - oriented", self - esteem and equality is particularly urgent and important.

6) Schools should ensure that students' Japanese language learning experience is more meaningful, and they can learn deeper to fully understand it. Schools should create a school cultural environment with "good teaching without 'type'" as its core. School is an important position of education, and the school cultural environment has the most systematic and powerful influence on students. "Good' teaching" is not simply to provide the most basic teaching support such as standardized methods and appropriate teaching aids, but more importantly, to develop support, which at least includes discovering students' interests, stimulating students' potential, guiding students' inquiry process,

7) Empower students with simple strategies to reduce anxiety.

Reducing students' anxiety is critical to their physical and emotional development, as well as their academic success. Here are some strategies educators can consider to help students reduce the intensity of anxiety:

Create a supportive environment: Create a safe, nonjudgmental classroom or home environment where students feel comfortable expressing their feelings and concerns.

8) Replicate study involving other variables is recommended to future researchers.

For example, you can create a family cultural environment with the core of "nurturing children to become people". The family is the cell of society, and the family cultural environment has the most direct and profound impact on students. "Raising children" here is not simply providing basic feeding support such as material needs and ensuring physical safety, but more importantly, nurturing support, including at least paying attention to their interests, their mental health, their learning process, and their learning difficulties, pay attention to their learning ideals, pay attention to their social interactions, etc. 'Adult' here is not simply to set the standards for them as "people" and force them to achieve the success of the so - called "dragon", but more importantly, to provide respect and support so that they can become their true selves and become Self, at least includes respecting their existence as human beings, respecting their emotions, respecting their opinions, respecting their choices, respecting their interests, etc.

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