

**Research Report**

# **Determinant Factors on Preferred Learning Styles of Chinese Students in School of Business, Wintec**

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# Introduction

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- Phenomenon:
  - Some lecturers said that the first semester learning outcomes of many Chinese students are not very well. In the second semester they feel better, and most of them are excellent since the third semester .
- Some scholars, who did some researches about the learning styles of Asian students, found that the learning styles of CHC(Confusion Heritage Cultures) students are different from the western students.
- Chinese students are an important part in classes at Wintec. And more and more Chinese students will come in the future. It is helpful for lecturers and the new students to research Chinese students' learning styles.
- It is essential to discover the preferences of Chinese students in business school.

# Methodology

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- Observe the situations at Wintec
- Checking some literatures
- Research design
- Focus group meeting
- Questionnaire
- Analysis of data
- Report

# Focus group meeting Findings

NO.	major				length of time			college exp.	job exp.	gender		age		
	language	management	marketing	Accounting	<1	1--2	>2			male	female	<20	21--24	>25
1		1	1*		1			0	0	1		1		
2	1				1			0	0	1			1	
3				1	1			1	1		1		1	
4				1		1		1	1	1			1	
5				1		1		1	1		1		1	
6			1			1		1	1		1		1	
7			1		1			1	0	1			1	
8		1			1			1	0		1		1	
9		1			1			1	0	1			1	
10		1*	1				1	1	1	1				1
tote	1	3	3	3	6	3	1	8	5	6	4	1	8	1
	10%	30%	30%	30%	60%	30%	10%	80%	50%	60%	40%	10%	80%	10%

## Question: Which aspects in your learning at Wintec are different from in China?

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- Assessment: there are three assessments in wintec (test, assignment, and exam)
- Group work: training students' cooperating spirit.
- Research and discover by yourself (Self-study time)
- Teachers are equal to students, more interaction
- Difficult to graduate from Wintec
- Assignment

## Question: What are your preferences of learning style at Wintec?

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- Group presentation(work): good for oral speaking and cooperating spirit
- Research: includes assignment, pre-reading, report etc.
- Preview: reading material, background infor. Professional words

## Question: What are the related factors to your preferences of learning at Wintec?

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- Language
- Learning habit; Learning methods; Learning experiences
- Ability to manage time
- Attitude of learning; Self-discipline; Family conditions
- Personality; Thinking pattern; Confidence of learning
- Interests



Question: Could you please rank the importance of your preference about the learning styles above?

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- >1 year
  - Research, preview
  - Communication, group work, research
- <1 year
  - Preview
  - communication

Question: Could you please rank the importance of your preference about the affective factors above to your learning styles?

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- >1 year
  - Time management
  - Self-discipline
- <1 year
  - Learning attitude
  - interests

# Question: What are the problems in your learning experiences at Wintec?

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- >1 year students: No
- <1 year students:
  - Language
  - Attitude
  - Don't know how to do assignment

# Questionnaire

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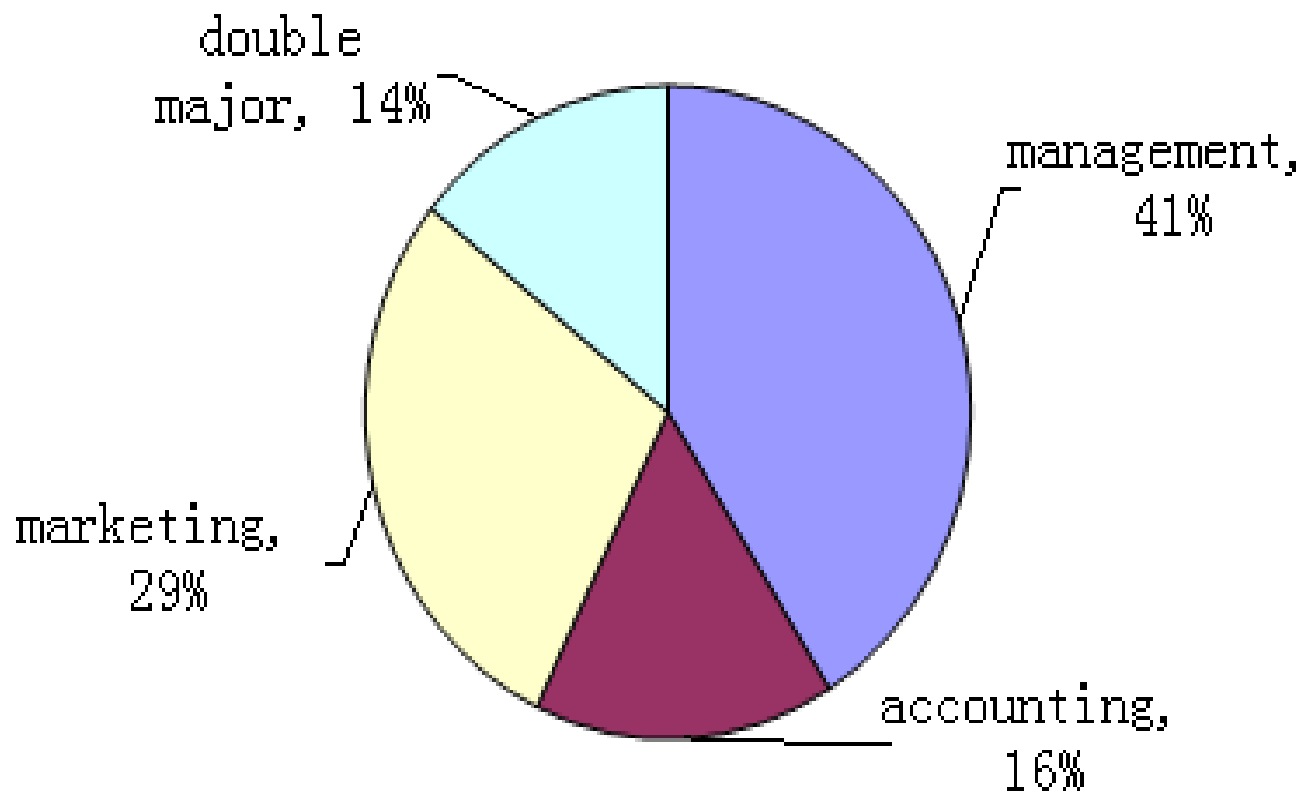
- Purpose
  - to confirm the preferences as well as the causing factors of learning styles found in focus group meeting
- Questions to be proved
  - preferences: group assignment; research; preview
  - factors: Language problem; ability to manage time; past learning experiences; Attitude/Self-discipline; Confidence of learning; interest.
- Collected 64 questionnaires totally. And 56 questionnaires are valid.

# Questionnaire Findings

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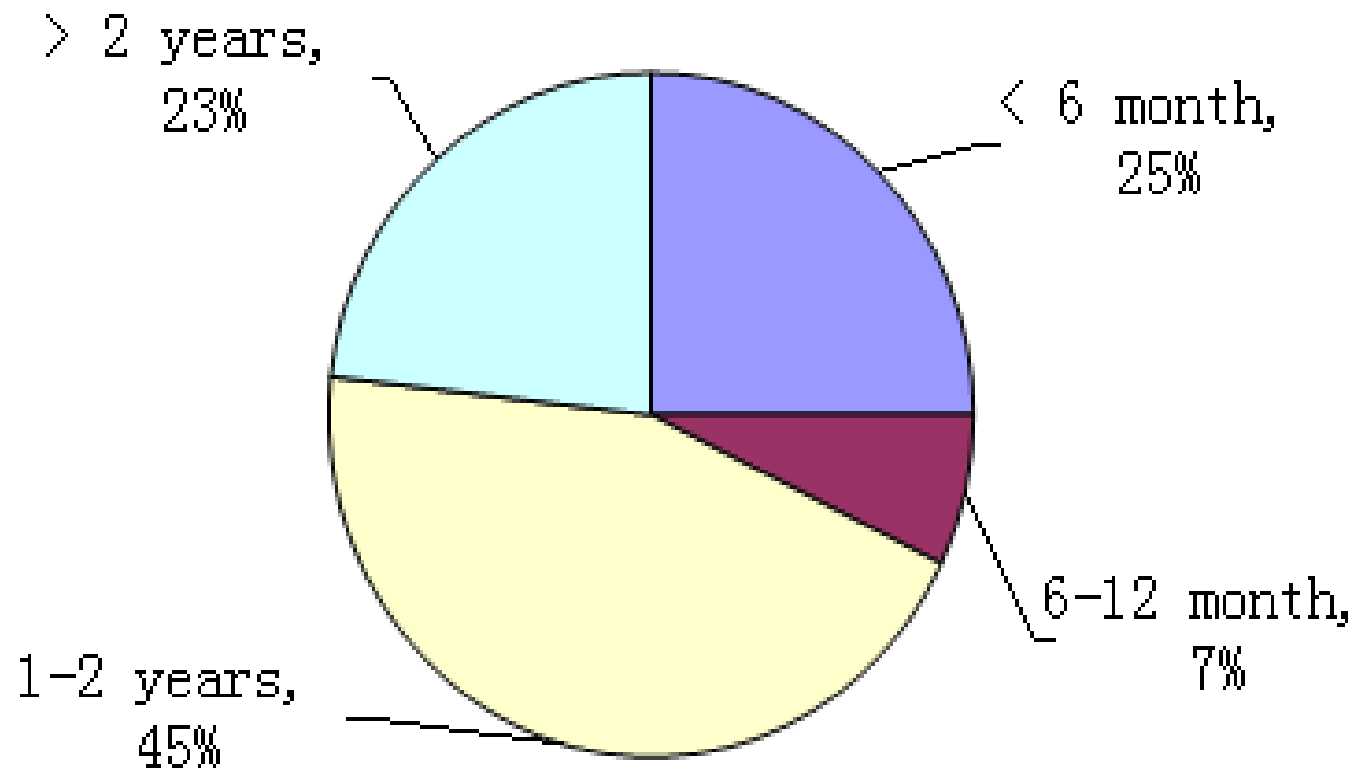
- Basis information of participants
  - major
  - The length of time in NZ
  - Learning experiences in China
  - Work experiences in NZ
  - Gender
  - Age
- Preferances of learning
- The factors of affecting preferances

# Major



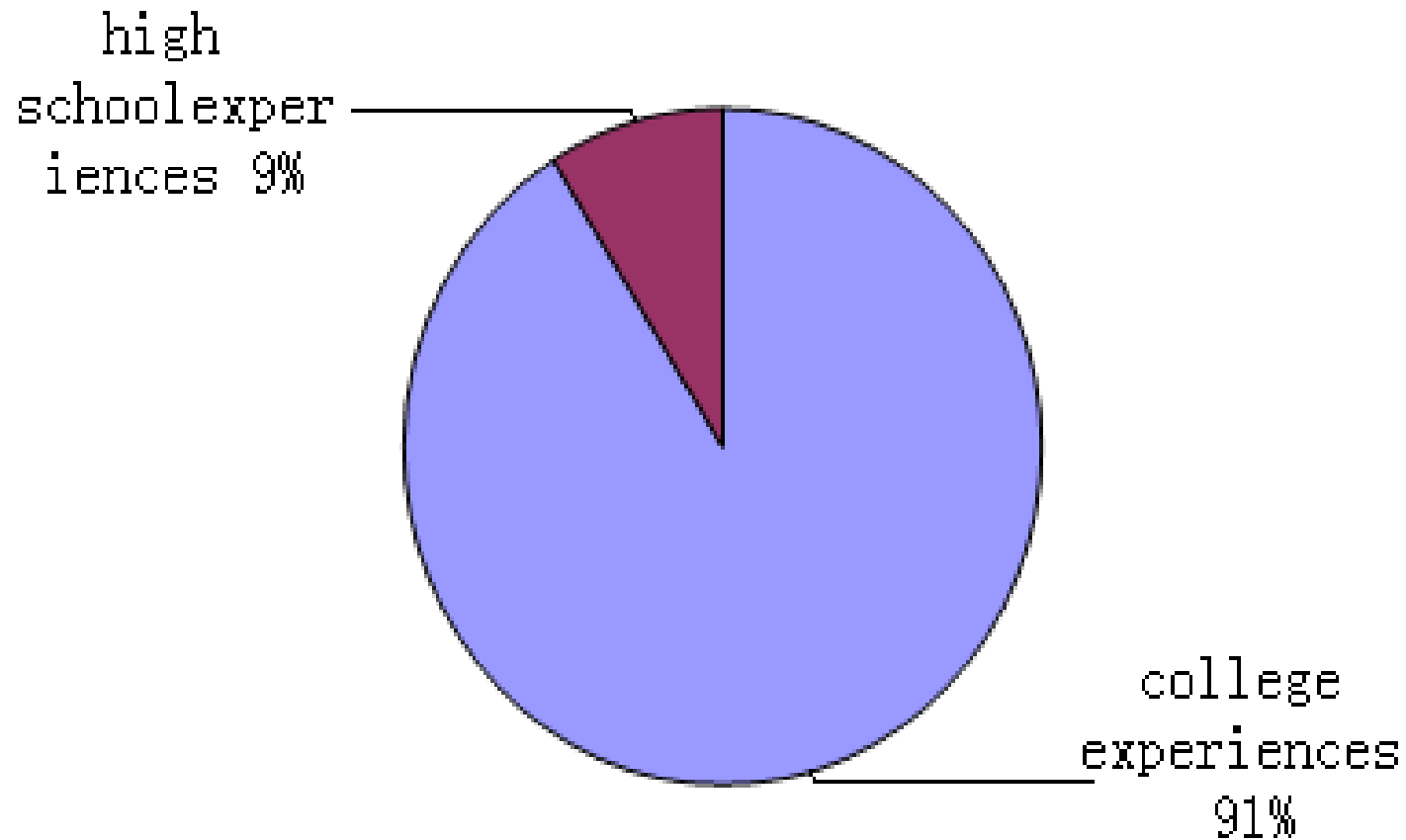
# The length of time in NZ

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# Learning experiences

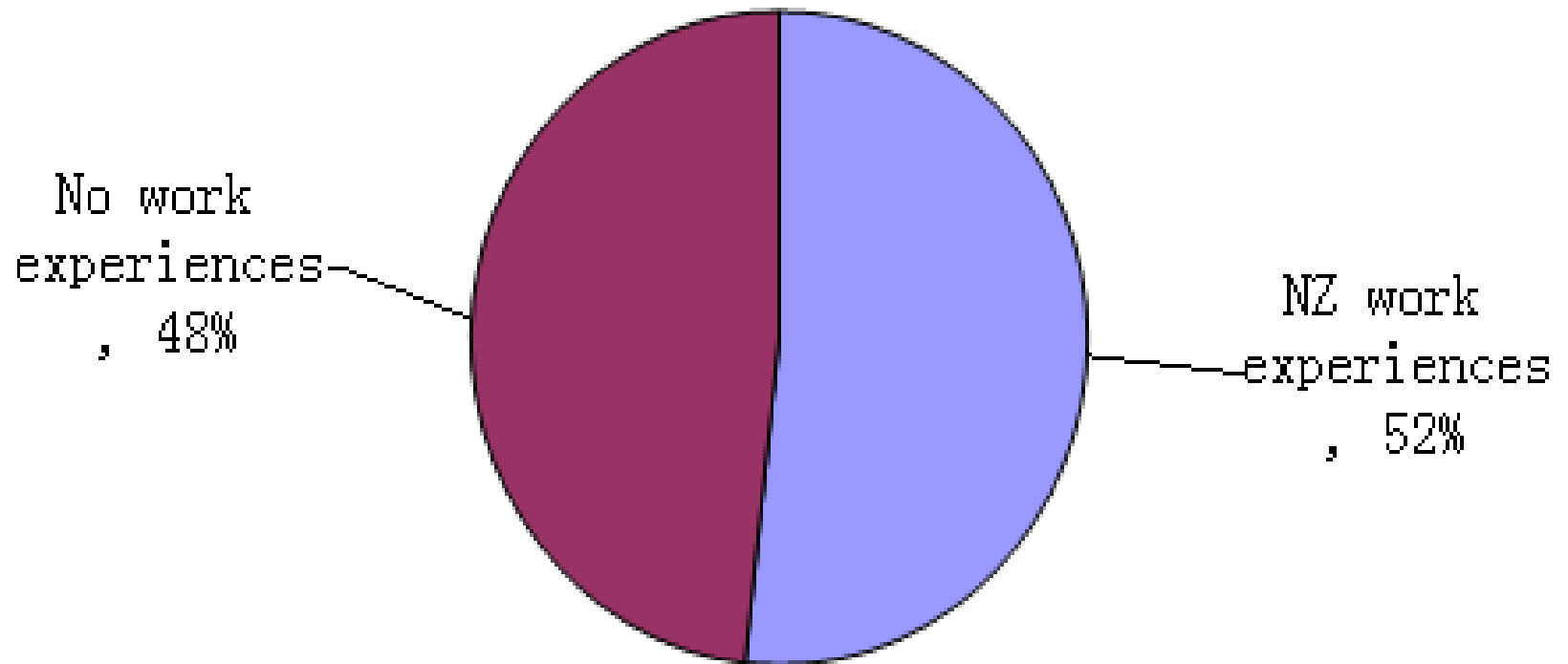
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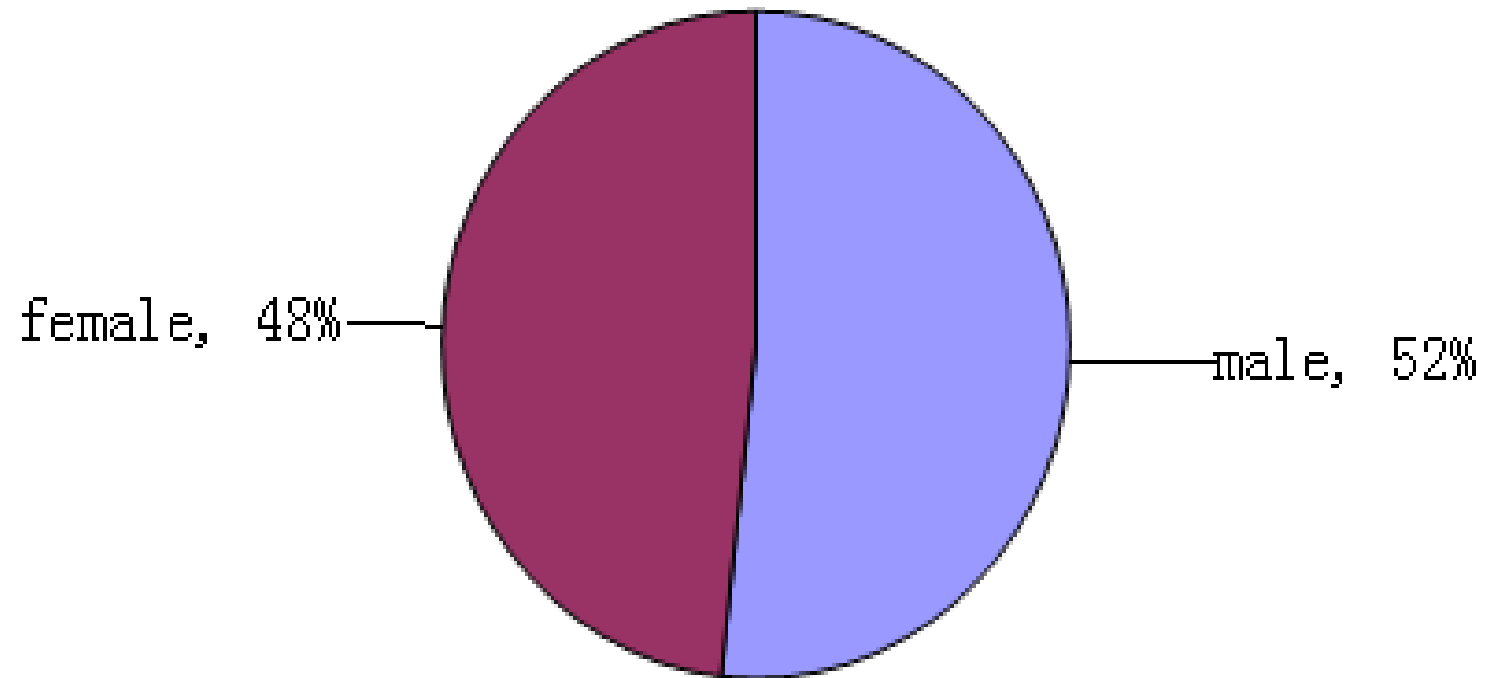
# Work experiences in NZ

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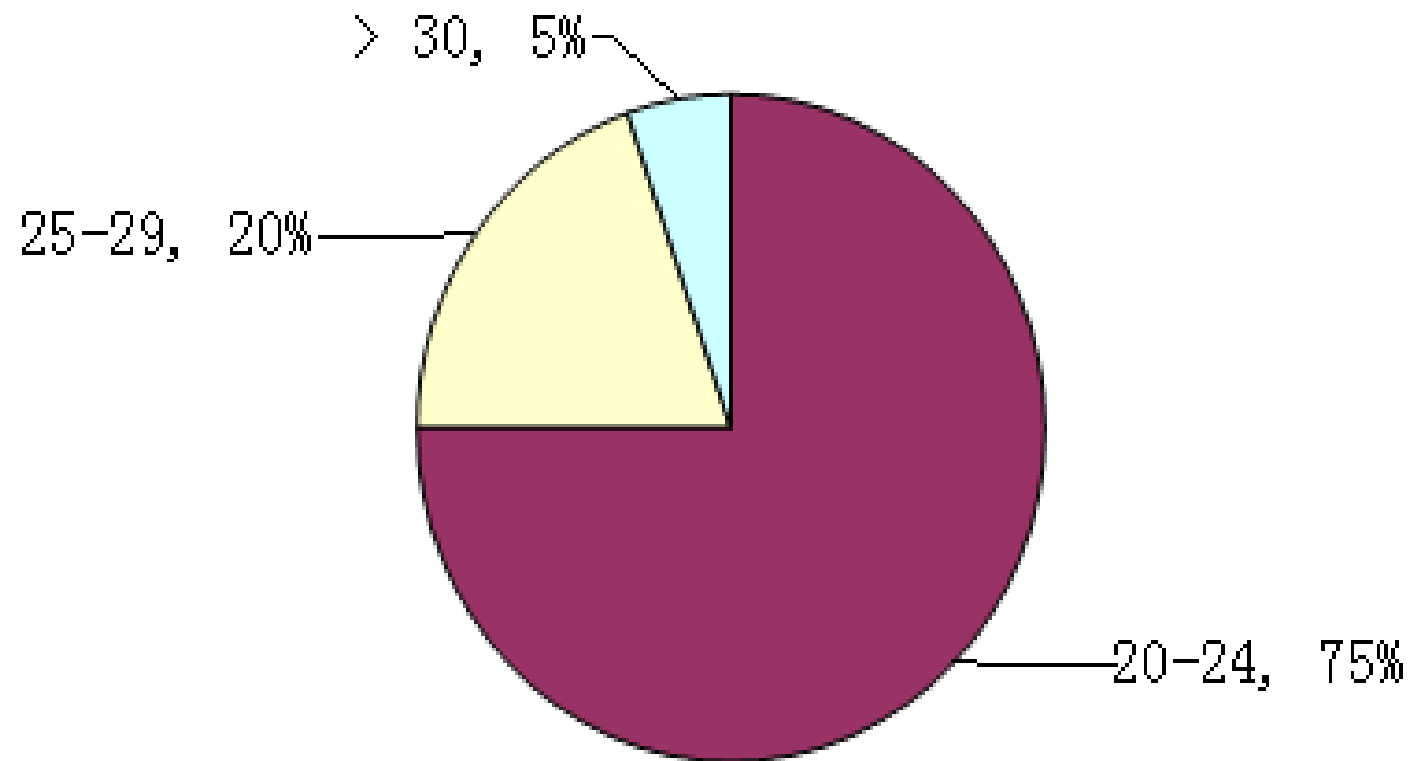
# Gender

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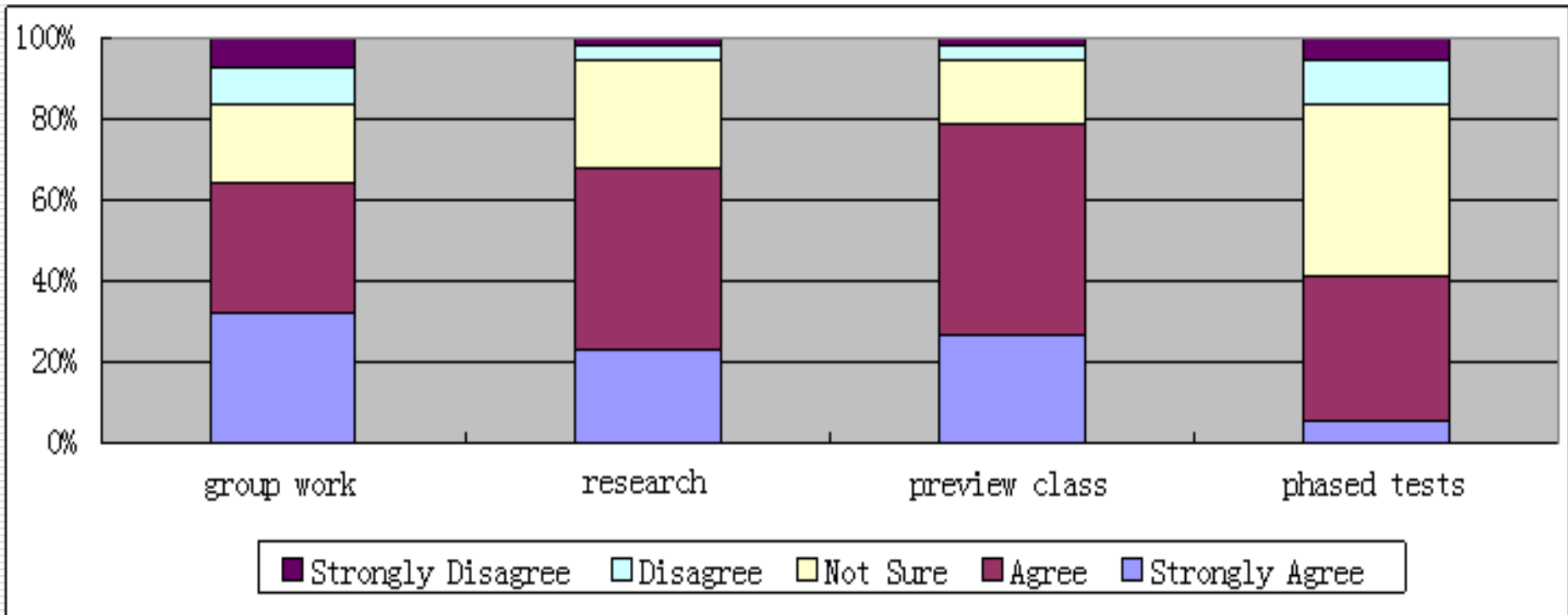


# Age

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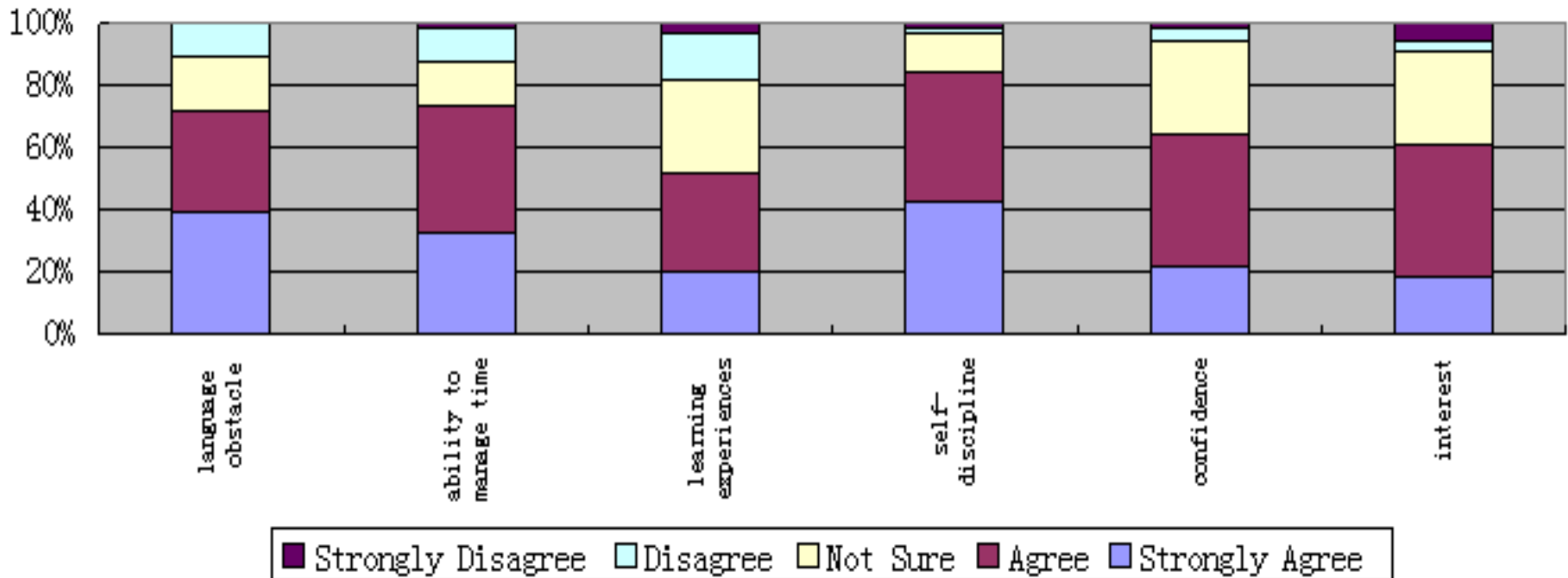


# Preferences of learning



- *The figure indicates that more than 60% students prefer to group work, research and preview class in their learning.*
- *There are more than 20% students strongly agree the learning styles of group work, research and preview.*
- *Lots of students (about 40%) are not sure they prefer to the phased tests.*

# Factors of affecting preferences



- The figure indicates that more than **60%** students agree with the factors including language obstacle, ability to manage time, self-discipline, confidence and interest. Especially more than **80%** students think self-discipline is an important factor in their learning. More than **70%** agree with language obstacle and ability to manage time. Only about 50% students agree with learning experience in China as a important factor.

# Relationship between factors and preferences

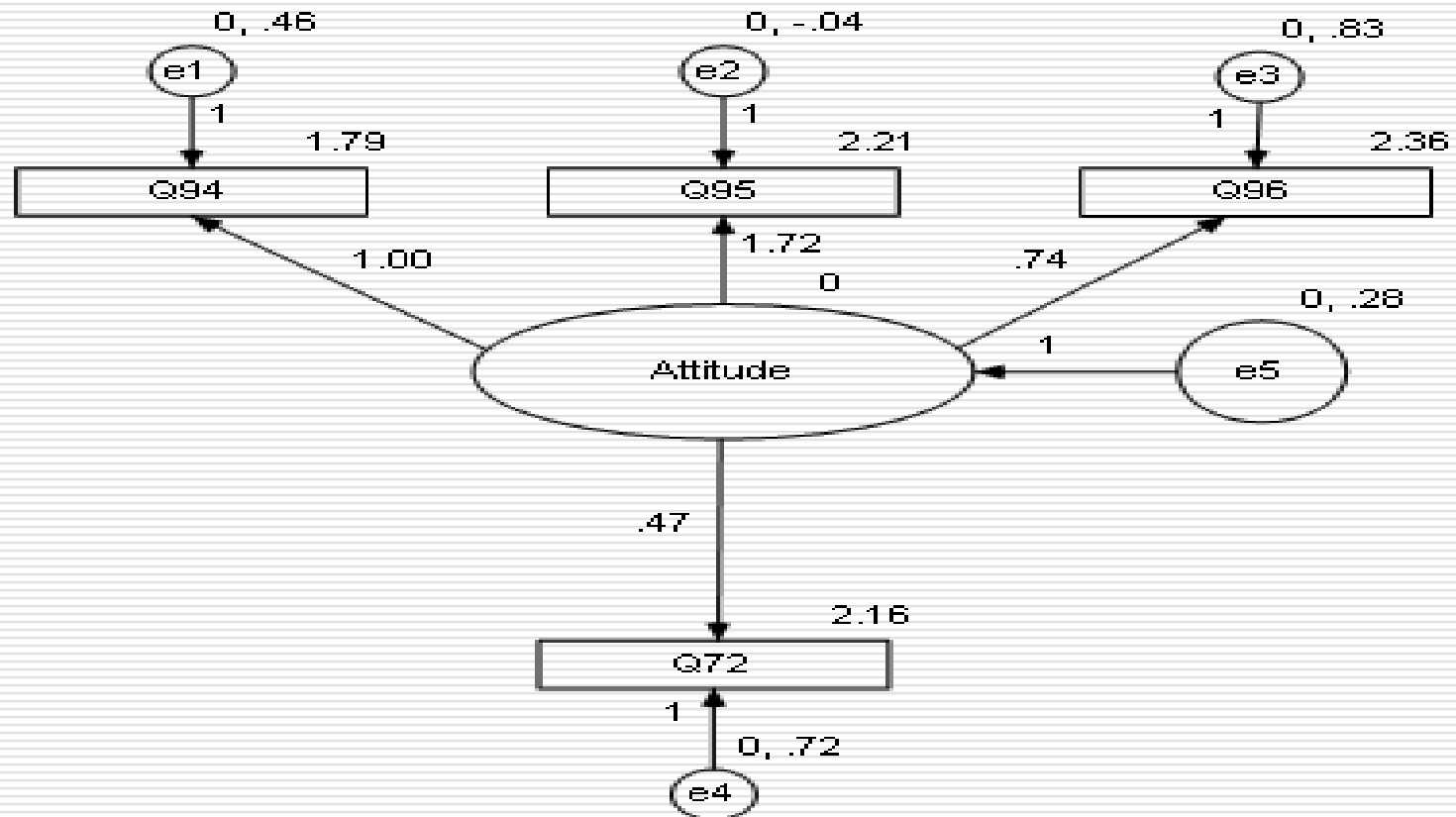
	Language Obstacle					Ability to Manage Time					Learning Experiences					Self-discipline					Confidence					Interests										
Group Work	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total						
strongly Agree	7	6	4	1		18	4	8	5	1		18	3	7	4	3	1	18	6	8	4			18	5	7	6			18	3	6	7	2		18
Agree	7	5	3	3		18	8	7	2	1		18	3	5	9	1		18	7	8	2	1		18	3	6	8	1		18	3	10	4		1	18
Not Sure	4	3	2	2			4	5		2		11	1	4	3	3		11	7	4				11	1	7	3			11	2	5	3		1	11
Disagree	2	3				5		2	1	2		5	1	2	1	1		5	2	2	1			5	1	3		1		5	1	3	1			5
Strongly Disagree	2	1	1			4	2	1			1	4	3				1	4	2	1			1	4	2	1			1	4	1		2		1	4
Total	22	18	10	6		56	18	23	8	6	1	56	11	18	17	8	2	56	24	23	7	1	1	56	12	24	17	2	1	56	10	24	17	2	3	56
	Language Obstacle					Ability to Manage Time					Learning Experiences					Self-discipline					Confidence					Interests										
Research	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total						
strongly Agree	6	6		1		13	6	5		1	1	13	3	5	4		1	13	7	4	1		1	13	5	5	2		1	13	2	4	6		1	13
Agree	11	5	6	3		25	3	13	5	4		25	5	9	6	4	1	25	11	11	3			25	5	12	8			25	5	13	4	1	2	25
Not Sure	4	5	4	2		15	7	5	2	1		15	3	3	6	3		15	6	6	2	1		15	2	7	5	1		15	3	6	5	1		15
Disagree	1	1				2	1		1			2			1	1		2		1	1			2			1	1		2			2			2
Strongly Disagree		1				1	1					1	1					1		1				1			1			1		1			1	
Total	22	18	10	6		56	18	23	8	6	1	56	11	18	17	8	2	56	24	23	7	1	1	56	12	24	17	2	1	56	10	24	17	2	3	56
	Language Obstacle					Ability to Manage Time					Learning Experiences					Self-discipline					Confidence					Interests										
Preview	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total						
strongly Agree	9	3	3			15	7	4	2	1	1	15	5	4	6			15	5	6	2	1	1	15	4	4	5	1	1	15	2	6	6		1	15
Agree	10	10	4	5		29	5	15	4	5		29	4	11	6	7	1	29	12	14	3			29	3	17	9			29	5	17	3	2	2	29
Not Sure	2	4	3			9	3	4	2			9	1	2	4	1	1	9	5	2	2			9	4	1	3	1		9	3		6			9
Disagree	1			1		2	2					2		1	1			2	2					2	1	1			2		1	1			2	
Strongly Disagree		1				1	1					1	1					1		1				1		1			1		1			1		
Total	22	18	10	6		56	18	23	8	6	1	56	11	18	17	8	2	56	24	23	7	1	1	56	12	24	17	2	1	56	10	24	17	2	3	56
	Language Obstacle					Ability to Manage Time					Learning Experiences					Self-discipline					Confidence					Interests										
Phased Tests	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total	strongly A	Agree	Not Sure	Disagree	Strongly D	Total						
strongly Agree	2	1				3	1	1			1	3	3					3	1	1			1	3	2			1	3		1	1		1	3	
Agree	9	7	3	1		20	5	10	2	3		20	2	7	7	3	1	20	8	10	1	1		20	2	9	9			20	4	9	4	1	2	20
Not Sure	8	5	6	5		24	9	8	5	2		24	4	8	8	4		24	11	8	5			24	6	10	6	2		24	4	11	9			24
Disagree	2	3	1			6	1	3	1	1		6	1	2	1	1	1	6	3	2	1			6	1	4	1			6	2	3		1		6
Strongly Disagree	1	2				3	2	1				3	1	1	1			3	1	2				3	1	1	1			3			3			3
Total	22	18	10	6		56	18	23	8	6	1	56	11	18	17	8	2	56	24	23	7	1	1	56	12	24	17	2	1	56	10	24	17	2	3	56

# Causing-Result Analysis

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- We could not get the statistics evidences of the direct relationships between preferences and the causing factors, although there are lots of students agree with them at the same time.
- We find it is confident that preference of *Research in Assignment* is caused by *Attitude/Self-discipline, Confidence of learning, and Interest*

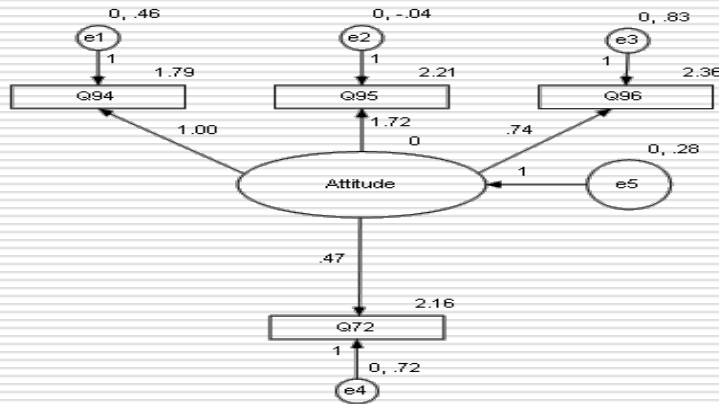
# Causing-Result Analysis



*Q72\_research in assignments; Q94\_Attitude/Self-discipline; Q95\_Confidence of learning; Q96\_interest*



# Statistics analysis results



Intercepts: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Q72	2.161	.118	18.240	***	
Q94	1.786	.116	15.456	***	
Q95	2.214	.118	18.719	***	
Q96	2.357	.133	17.730	***	

Regression Weights: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Q94 <--- Attitude	1.000				
Q95 <--- Attitude	1.722	.623	2.766	.006	
Q96 <--- Attitude	.740	.260	2.848	.004	
Q72 <--- Attitude	.465	.226	2.060	.039	

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.944	.719	.988	.928	.986
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

*Q72\_research in assignments; Q94\_Attitude/Self-discipline; Q95\_Confidence of learning; Q96\_interest*

# Results

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- Chinese students' preferences include *group work, research and preview* in School of Business, Wintec.
- Most of Chinese students agree with the main factors causing preferences include *Language obstacle, Ability to manage time, Attitude/Self-discipline, Confidence of learning, and Interest.*

# Results (cont')

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- Chinese students' *Attitude/Self-discipline, Confidence of learning, and Interest* affect their learning preferences of *Research in assignment* directly.
- Especially the *Confidence of learning* is the most important factor for *Research in assignment*.

# Results (cont')

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- From the figure, most of Chinese students choose *preview class materials* as the preference of learning, and choose *language obstacle* as the causing factor at the same time. So we believe *Language obstacle* is the most important factor for Chinese students.

# Recommendation

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- Because English is an big obstacle for students, the questionnaire in English may be a little hard to them. So we will continue the research in Chengdu/Shandong/Shenzhen city, and do the comparison research for them in Chinese.

# Recommendation

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- The model is not very good to fit the facts. So we need continue research and improving the fit level of model.

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# Thanks