Gender Differences in Autonomous Learning: A Study of Non-English Majors in a Chinese University Discourse

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Abstract

Fostering learners to be autonomous has become one of the aims in New English College Curriculum in mainland China since 2007 (Ministry of Education). However, Chinese university students feel difficult to adapt to this new learning environment designed for this purpose and the teaching method used. Particularly, the different perceptions on autonomous learning between the two genders will result in significant difference of the behaviours in classrooms. This paper attempts to find out the relationship between the gender differences and learning autonomy using data collected with a mixed research method. Also, pedagogical implications are discussed based on the research findings, and suggestions are provided for future researchers and educators in China.

Key words: Learning autonomy, gender difference, EFL teaching and learning

Background

The concept of learning autonomy has been a popular topic in Chinese EFL learning and teaching for the past 25 years. The shift in the focus of responsibility from teachers to learners also has also triggered a great research interest amongst Chinese researchers. An increasing number of studies have been undertaken based on learners’ perspectives. An autonomous learner can self-motivated, self-monitored, and self-evaluated in his/her learning process (Godwin-Jones, 2011). In other words, he/she is capable of setting goals for learning, making plan in details for study, monitoring the study process and progress, and adjusting learning strategies if he/she does not think it is effective for learning. Although substantial research on learning autonomy has been carried out over the past 25 years in China, this issue still needs to be further explored. Moreover, since the theory of learning autonomy originated from western countries, seeking ways in applying it to the teaching practices in Chinese educational contexts remains an on-going effort. Up till now, few studies in China have focused on the influence of gender differences on learning autonomy, particularly in the Chinese monolingual foreign language education system.

The Jimei University has been chosen for this study for a number of reasons. First of all, the university is a well-known higher education institution in the southern part of China, was founded by Mr. Chen Jianggeng (also known as Mr. Tan KahKee), who is a famous overseas patriotic leader. Due to its high reputation and top academic work, a large number of overseas students are attracted from South Korea, Taiwan, Indonesia and Philippine every year. Secondly, this university has a geographical privilege since it is close to Taiwan along the Taiwan Strait. The location has been an important place for both academic and military affairs for nearly half a century. Third, English, as a major foreign language, has been put a top-down reform since 2008. Also, learning autonomy has been applied into college English teaching practice and some empirical researches on the self-access learning centres have been conducted by scholars in this university. Therefore, it is believed that the staff and students from this university are familiar with this new teaching method and the new learning environment. Last, it has more than 10,000 full time undergraduate students, among which are 5000 students who
take English as a compulsory unit every semester. Hence, selecting the Jimei University is considered to be appropriate.

**Review of previous studies**

**Studies of learning autonomy**

Despite the widespread recognition of the importance of improving learners’ autonomy, the definition of this term and its application for language learning is still uncertain. Scholars have made attempts to define the concept of autonomy from different perspectives. Over the past 20 years, a concern with the nature and benefits of learner autonomy has been well-established in the literature (Brookes & Grundy, 1988; Charge & Taylor, 1996; Cortazzi & Jin, 1996b; Dickinsion, 1992; Ellis & Sinclair, 1989; Feast, 2002; Gao & Ting-Toomey, 1998; Gauntlett, 2000; Kramsch, 1995; Riley & Zoppis, 1985; Wenden, 1991; Wenden & Rubin, 1987). The concept of ‘autonomy’ could be traced back to ancient Greece and to a political context, in which it referred to a Greek city that wanted to obtain freedom from outside interference (Halstead & Zhu, 2009). However, most researchers have accepted the definition of learning autonomy from Holec (1981) who believed that the autonomous learners are capable of:

- determining the objectives;
- defining the contents and progressions;
- selecting methods and techniques to be used;
- monitoring the procedures of acquisition; and
- evaluating what has been acquired. (Holec, 1981, p.3)

Generally, early ideal practice of learning autonomy focused on ‘total independent learning’ (Dickinsion, 1987; Gao & Ting-Toomey, 1998), which suggested that learners should be responsible for the whole decision-making process in their learning. During this process, learning autonomy was regarded as “a rejection of the traditional classroom and the introduction of wholly new ways of working” (Allwright, 1988, p. 35). According to Allwright’s (1988) ideas, most participants in early experiments were adults who did not have chances to attend classroom-based courses. However, Allwright (1988) claimed that if autonomy was applied into the classroom, it needed to be re-conceptualized (Yao, 2000). Later, Dickinson (1992) also argued learners often behaved independently in the classroom. Thus, with Dam’s demonstration of autonomy, in which principles could be integrated into classrooms. A shift to classroom applications was a second wave of autonomy interest in the 1990s (Dam, 1995). During this period, scholars put emphasis on the theoretical implications of the pedagogical research (Cortazzi & Jin, 1996b; Little, 1995). Meanwhile, large quantities of self-access learning centers were set up after the 1990s, which further put Allwright’s pedagogy into a reality that language teachers could come to terms with (1988). Thus, with the influence of the deconstruction of the conventional classroom, many researchers come to a third wave of interest in learner autonomy, which leads to a tendency of exploring and understanding the role of autonomy in language teaching and learning (Yao, 2000).

**Studies of genders in language learning**

The influence of language and genders can be dated back to the Bible, but the systematic study of language and gender commenced in the middle of the 1970s. The first influential study of language use was introduced by Lakoff (1975), who pointed out that females were expected to use more “tag questions, hedges, intensifier, embedded imperative, colour terms and adjectives than males” (cited by Pan, 2011, p. 1016). Although her book has been regarded as the first one to establish theories for explaining gender differences in language use, her study is restricted to the levels of phonology, morphology, and syntax. Later, Zimmerman and West (1975) shifted the focus from the research on phonology, morphology, and syntax to discourse. They placed the stress on the dynamic use of language in conversational interactions. Their studies are grounded in an analysis of natural language in authentic situations. Hence, the research findings are more persuasive. However, many factors could affect language variations, and therefore it is difficult to decide which one is the determinant factor.

Other research (Greenwood, Terry, Delquadri, Elliott, & Arreaga-Mayer, 1995; Maltz & Borker, 1982; Tannen, 1990) proposed cultural issues, such as different socio-linguistic subcultures, could lead to gender differences in language. Tannen (1990) claimed that men and women used different ways to express themselves and to interpret others’ words based on their cultural assumptions. For example,
in women's subculture, they would like to speak in a way which could build their equal relationship. On the contrary, males prefer to using languages to build hierarchical relationship (Tannen, 1990).

In the Chinese culture, women are regarded as having different roles from men, and this phenomenon can be seen in idioms saying that ‘Males and females should be treated differently’ (‘Nan nv you bie) (Chen, H.-C. Ko, & Lin, 2005). Furthermore, women are seen to be subordinate to men. For example, Chinese people usually say ‘A woman follows her husband no matter what his personality is’ (jiaji sui ji, jiagou sui gou), and ‘three obedience’ (‘san cong) (Chen, et al., 2005). Since Chinese culture has different social expectations of men and women, the ways in which people talk may also be influenced by culture.

In addition, the different ways of learning are studied between men and women. Males are usually more field-independent and females are more field-dependent (Good & Brophy, 1987; Shipman, Krantz, & Silver, 1992). Females are more likely than males in using thinking approach (analytic, impersonal, objective, and factual) and feeling approach (emotional, personal, subjective, and empathic). McCaulley (1990) believed that females have a higher degree of empathy and (skills in) cooperative learning. Also, females tend to use social and affective strategies more often than males (Oxford, Park-Oh, Ito, & Sumrall, 1993). Oxford (1995) claims that males are somewhat more logically minded in processing language, while females behave more field-sensitive, globally-patterned, subjective, and emotional.

Most studies mentioned above focused on gender differences with regard to learning styles, learning strategies and learning performance. Hence, this research tries to fill the gap between gender differences and learning autonomy in China. To be more specific, this paper seeks the answers to the following questions:

- Are there any gender-related differences emerged in the process of students’ learning autonomy?
- Which aspect of the autonomous learning can be influences more obviously by gender differences?
- What are the implications of gender-related differences in learning autonomy for EFL teaching and learning in Chinese universities?

Data collection

Participants

This study was conducted in the second semester, 2012. Students from 129 students participated in this study. These students came from Faculty of Science and Food Industry, who have been in English classes with self-access learning teaching method for one semester. Hence, it is believed they would know the teaching methods and teaching model.

Research methods

A mixed method was utilised, including both quantitative and qualitative methods, to collect and analyse data. It is believed that these two methods can be used separately in different phrases in a study (Tashakkori & Teddlie, 1998). Involving both quantitative and qualitative methods benefits the research in a number of ways (Johnson & Onwuegbuzie, 2004). First of all, it can enable the researcher to have a broaden mind on data collection and analysis. Also, during this process, the researcher could gain deeper insights into the views of the participants within the research area. Therefore, the findings of the study are more likely to have covered the strengths of mixed methods and offset the weakness of using only one of them (R. B. Johnson & Turner, 2002). Thus, the overall strength of this research is potentially greater than the studies based on one method only (Creswell, 2009; Teddie&Tashakkori, 2009).

Research method tools

As both quantitative and qualitative methods were used in this study, the tools were designed for both stages respectively. At the quantitative stage, a survey was designed to investigate students’ perceptions on autonomy and learning in order to answer the research questions. A five-point Likert Scale was utilised to measure students’ thoughts in the final form. It is believed there are some strengths of using Likert Scales to collect data. On the other hand, a semi-structured interview was constructed for the university students to express their opinions with more freedom.
The data analysis

The statistics data analysis software SPSS 18.0 was used to analyse the quantitative data. In order to ensure the validity of the study, the students were required to complete the same questionnaire twice, which was a month time in between. Later, the agreement analysis was used by SPSS to test the inner validity and credibility of this questionnaire. For the case of two raters, this function gives Cohen's kappa (weighted and unweighted) and Scott's pi as measures of inter-rater agreement for two raters' categorical assessments (Fleiss, 1981; Scott, 1995). For three or more raters, this function gives extensions of the Cohen kappa method, due to Fleiss and Cuzick (1979) in the case of two possible responses per rater, and Fleiss, Nee and Landis (1979) in the general case of three or more responses per rater. According to Landis and Koch (1977), the strength of agreement is divided into five levels, from poor to very good, which shows in table 1. Therefore, this survey had a very strong strength since the strength of agreement reaches 0.83 in this study (0.8<0.83 ≤1).

Table 1: The relationship between Kappa values and the strength of agreement

<table>
<thead>
<tr>
<th>Kappa</th>
<th>Strength of agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 0.2</td>
<td>Poor</td>
</tr>
<tr>
<td>&gt; 0.2 £ 0.4</td>
<td>Fair</td>
</tr>
<tr>
<td>&gt; 0.4 £ 0.6</td>
<td>Moderate</td>
</tr>
<tr>
<td>&gt; 0.6 £ 0.8</td>
<td>Good</td>
</tr>
<tr>
<td>&gt; 0.8 £1</td>
<td>Very good</td>
</tr>
</tbody>
</table>

There were 65 male students and 64 female students involving in the study, which took 50.4% and 49.6% of the total number respectively. Figure 1 shows the details of the two groups.

Figure 1: The numbers of male and female participants

Research findings

Both questionnaires and interviews were adopted in the study to investigate the differences between female and male students’ autonomous learning capacity in from the five aspects mentioned above in Holec’s (1985) definition. The outcome shows that the two genders do have (different) characteristics in the process of autonomous learning in EFL learning environment. However, there are also some common points between the two genders.
Four questions have been employed in the first item of the questionnaire to distinguish male and female students' abilities on determining the objectives in the English learning process. The two genders do not have significant differences in making their own English learning plans (Q1) or knowing teachers' purposes in teaching within the classrooms (Q2). However, there are significant differences between the two groups in understanding English learning objectives before English class (Q3) and in making plans in English after class (Q4), as it can be observed from the p values (<0.05) in these two questions. It proves that females are inclined to pursue their study in a more self-consistent and purpose-oriented way. Table 2 shows the data in details.

Table 2: The relationships between gender difference and item 1 in the questionnaire

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>65</td>
<td>3.00</td>
<td>1.00</td>
<td>0.829</td>
<td>0.408</td>
</tr>
<tr>
<td>female</td>
<td>64</td>
<td>2.86</td>
<td>0.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>65</td>
<td>3.42</td>
<td>0.83</td>
<td>-1.301</td>
<td>0.196</td>
</tr>
<tr>
<td>female</td>
<td>64</td>
<td>3.61</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>65</td>
<td>2.77</td>
<td>0.93</td>
<td>-4.112</td>
<td>0.000</td>
</tr>
<tr>
<td>female</td>
<td>64</td>
<td>3.42</td>
<td>0.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>65</td>
<td>3.22</td>
<td>0.86</td>
<td>-2.968</td>
<td>0.004</td>
</tr>
<tr>
<td>female</td>
<td>64</td>
<td>3.63</td>
<td>0.70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Questions 5 to question 9 were consisted of the second section in the questionnaire. They were designed to measure the differences between the two gender groups on defining the contents and progressions. In this part, the responses of the participants show few differences between two genders. For instance, the result of Q13 shows that more females would like to preview textbooks before English class than males (p=0.005, female SD=0.85, male SD=0.84).

Questions 10 to 17 were set to measure the differences between the two genders in selecting learning methods and techniques in English learning. In this section, only the responses of two questions (Q10 and Q11) showed females were in a higher rate than that of males. Responses of question 10 indicated that female students would like to learn from others more often and question 11 showed that there are more female students who understand how to choose learning strategies effectively. The participants’ responses to the other questions in this section were not significant. The details in the third item are displayed in the following table.

Table 3. The relationships between two genders and the capacity of selecting learning methods

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>T</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>65</td>
<td>3.14</td>
<td>0.93</td>
<td>-1.963</td>
<td>0.050*</td>
</tr>
<tr>
<td>female</td>
<td>64</td>
<td>3.42</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>65</td>
<td>3.22</td>
<td>0.93</td>
<td>-2.084</td>
<td>0.039*</td>
</tr>
<tr>
<td>female</td>
<td>64</td>
<td>3.52</td>
<td>0.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>65</td>
<td>3.14</td>
<td>0.97</td>
<td>-0.104</td>
<td>0.917</td>
</tr>
<tr>
<td>female</td>
<td>64</td>
<td>3.16</td>
<td>0.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>65</td>
<td>2.74</td>
<td>0.87</td>
<td>-1.547</td>
<td>0.124</td>
</tr>
<tr>
<td>female</td>
<td>64</td>
<td>2.98</td>
<td>0.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q14</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>65</td>
<td>2.03</td>
<td>0.87</td>
<td>-0.112</td>
<td>0.911</td>
</tr>
<tr>
<td>female</td>
<td>64</td>
<td>2.05</td>
<td>0.76</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In section four, the research outcome did not show any difference between the strategies used by females and males in monitoring their learning progression in English. Similarly, there are slim differences in the last item of distinguishing how female students and male students evaluate their learning acquisition in English. Within these 6 questions in the last section of the questionnaire, the result indicated that more female students preferred using paper examination to evaluate their English learning process, while males preferred to use e-learning software and English on-line test system to evaluate their English acquisition.

Besides the questionnaire, the researcher interviewed some students based on their knowledge about autonomous learning. During the interview, the students were expected to express their personal views freely in regarding to the following questions:

- Do you like self-directed learning method or teacher-directed learning method?
- What is your perception of autonomous learning?
- Why do you learn English?
- What learning strategies do you often use in English learning?
- How do you evaluate your progress in learning English?
- In your opinion, female or male is superior in language learning?
- What is the advantage of the opposite gender in language acquisition?

According to the answers of the interviewees, the researcher used the comparative analysis to investigate the data step by step. Most students thought English teachers still play an indispensable role in the language learning process but they are not the only dominant source as they used to be in the past. Students (nowadays?) desire a more diversified learning environment with multi resources. At present, they regard that the language learning is restrained to the location and transmission of knowledge. Moreover, a large number of students lack knowledge of autonomous learning and motivation for English learning. Most students believed autonomous learning means learning by themselves. Traditionally, they had got used to sit quietly in the classroom and wait to be “spoon-fed”. Therefore, they have no idea of the essence of learner autonomy being letting alone using the effective methods to improve their degree of learning autonomy. Thirdly, the majority of male students do not think they are inferior to their counterparts in learning English. Similarly, female students think males are capable of learning English as well as themselves. Lastly, the analysis of the textual data found that the main effects of gender on strategy use were significant.

It was discovered that the female students were in a higher rate of the usage of learning strategies, especially metacognitive strategies and affective strategies. Several reasons accounting for this can be drawn here. Firstly, female students have more self-control ability and self-regulation ability and they seem to be more diligent than male students in the university. Secondly, with the pressure of employment, it seems that female students should provide a better performance than males if they are provided an equal chance in the employment market. Hence, female students have been aware of the need to be more proficient in English for an achievement in both in their career and education. Oxford and Nyikos(1989) also claimed that the frequent use of social metacognitive strategies reflects female students’ desire for good results and their need for social approval. Hence, they are more positive and enthusiastic in making effective use of English learning strategies.

Pedagogy implications

The results of the study identifies that gender-related differences do exist in some aspects of learning autonomy, owing to the differences in the traditional stereotyped impression and psychological development of both genders. Moreover, high learning autonomy capacity is becoming an important
indicator of the successful College English reform in China. Therefore, the following suggestions are given regarding to the gender differences to English teachers.

Avoid gender bias in teaching

It is a common case that English teachers prefer to choose male students to answer questions in classrooms than female students. The contributions and experiences of females are still often ignored in textbooks, curricula, and standardized tests (Maher & Thompson Tetreault, 1997). Without being aware of it, English teachers may have a gender bias in classroom teaching in three principal ways: reinforcing gender stereotypes, maintaining sex separation, and treating female students and male students differently in the class (Levy, 1972; Öngen, 2007). The bias would cause negative consequences for both girls and boys in schools (Bailey, 1995). From this point of view, teachers should create an equal opportunity for both girls and boys to participate in class activities, and encourage both of them to take leadership roles in group discussions and role-plays. Also, teachers should ignore discrimination on genders when students need guidance in English learning. As mentioned before, autonomous learning does not mean learning alone. Thus, group work and peer help cannot be ignored. Both female and male students should be encouraged to learn from each other, which can effectively develop learners’ learning autonomy. In this way, it also helps them to communicate with people, develop independence, and use English as a language tool in future job positions.

Use different teaching strategies regarding the gender difference

Gender difference should be taken into account in English teaching, since it is in conformity with the requirement of psychological development of either gender. This helps to implement genuine equality in teaching and will be beneficial to the achievement of learning independence for both males and females. Regarding the gender difference in teaching strategies, it is reported that at least two layers of meaning has been entailed. The first one was to discover and utilize traits of both genders to promote their levels of learner autonomy in language learning, and the second one is to avoid and remedy male and females’ respective weakness in different aspects of autonomous learning (Education Audiovisual and Culture Executive Agency, 2009). Therefore, it is expected that English teachers should notice and respect these gender-differentiated characteristics and take effective pedagogy to create a better English learning environment to develop learning autonomy within both female and male students (Wilson, 1979).

Encourage integration

The sexual stereotypes are to be avoided by teachers. It is suggested that when assigning the classroom tasks, the teachers could give equal chances to both girls and boys. One of the effective ways to promote integration is to organize mixed sex group activities. Goodwin (2006) points out that mixed sex group activity is the best strategy to improve students’ communicative competence. He also believes that gendered conversations could create more comprehensible language intake (Goodwin, 2006). Hence, it is believed that mixed sex verbal communication can enhance verbal output and is a more efficient way of converting language input into intake.

Create a harmonious learning environment

The importance of a harmonious learning environment cannot be underestimated. A understanding of the influences of the environment in learning is particularly important for language teachers (Stoll, Fink, & Earl, 2003). The immediate physical environment of the classroom and the nature of the personal interactions that occur within it will have a profound influence upon what and how individuals learn a language. Chambers (2003) claims that learners need to continually answer questions, select a topic, or take some activities in the classroom, which present a striking contrast to the inherent passive instructional approach employed by the lectures, textbooks, and the educators. Therefore, there should be a shift from teacher-directed teaching to learn-centeredness, particularly, to foster students’ autonomy.

Within the classrooms, English teachers are responsible to create a relaxing and friendly language learning environment that suitable for both females and males. Students should be treated equally and given equal opportunities to answer questions. After class, students should be encouraged to come to the self-access learning centres, where is a starting point in initiating learner autonomy. It is believed that both female and males students should share information and discuss language difficulties freely in the self-access learning centres.
Conclusion

This study gave us a deep insight into how gender differences influence students’ learning autonomy in the Jimei University in China. Firstly, it looked back the previous studies of learning autonomy within China and western countries. Then it moved to explain the research significance and research questions. Thirdly, research methods and the data analysis were provided in details. Fourthly, discussions and recommendations were presented. The research findings based on the application of independent variable T-test showed a strong, statically significant relationship between the two gender groups in autonomous learning. Results showed that the distinctions between female and male students occur in the aspects of determining the objectives, defining the contents and progressions, selecting learning methods and techniques, and evaluating learning outcomes. In terms of the gender differences in these aspects, the researcher provided some suggestions related to the pedagogies for both the English educators, who can put effort into future practices.

References


