

Individual differences and non-English-majors' engagement in business English language classrooms in the Chinese university context

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Abstract

This study used two-stage surveys to investigate the individual differences in personality, motivation, challenges, learning styles and strategies, and needs among 55 non-English-majors in business English language classrooms in a Chinese university. The study finds positive affective factors in personality and motivation, although the participants experienced challenges in learning business English vocabulary and improving their English skills. The participants used different learning strategies and styles. They demonstrated high levels of cognitive engagement, behavioural engagement, emotional engagement, enjoyment, focus, and task familiarity in business English learning. Although the participants encountered problems, they reported learning gains in business English vocabulary expansion, improvement in business writing, workplace communication, business knowledge and culture, business reading, problem-solving, listening, interest in English, and critical thinking skills. This study offers empirical evidence of individual differences among China's non-English-major learners in business English learning, showing how individual differences relate to engagement and learning outcomes. It provides practical implications for business English teachers, who should adapt their teaching approaches and strategies to accommodate to individual differences.

Keywords: Individual differences, engagement, learning outcomes, China's non-English-majors, business English language classrooms.

Resumen

Diferencias individuales y participación de estudiantes no angloparlantes en aulas de inglés comercial en el contexto universitario chino

Este estudio se basa en encuestas de dos etapas realizadas a 55 estudiantes no angloparlantes en aulas de inglés comercial en una universidad china para investigar las diferencias individuales relacionadas con la personalidad, motivación, desafíos, estilos y estrategias de aprendizaje y necesidades. Se han identificado factores afectivos positivos en la personalidad y la motivación, aunque los participantes experimentaron desafíos en el aprendizaje del vocabulario comercial en inglés y en la mejora de sus habilidades generales del idioma. Los participantes, que utilizaron diferentes estrategias y estilos de aprendizaje, demostraron altos niveles de compromiso cognitivo, conductual y emocional, disfrute, concentración y familiaridad con las tareas en el aprendizaje del inglés comercial. A pesar de encontrar problemas, indicaron mejoras en relación con el vocabulario comercial, la escritura empresarial, la comunicación en el lugar de trabajo, el conocimiento y la cultura empresarial, la lectura de textos de negocios, la resolución de problemas, la comprensión auditiva, el interés por el inglés en general y las habilidades de pensamiento crítico. Este estudio ofrece evidencia empírica de las diferencias individuales entre los estudiantes chinos no angloparlantes en el aprendizaje del inglés comercial y muestra cómo estas diferencias se relacionan con el compromiso y los resultados del aprendizaje. Asimismo, ofrece implicaciones prácticas para los profesores de inglés comercial, quienes deberían acomodar sus enfoques y estrategias de enseñanza para adaptarse a las diferencias individuales.

Palabras clave: Diferencias individuales, compromiso, resultados del aprendizaje, estudiantes no angloparlantes en China, clases de inglés de los negocios.

1. Introduction

The bibliography on business English teaching –and language for specific purposes (LSP) teaching in general– suggests that gathering learner needs and information is an important step. Ellis and Johnson (2002, p. 72) indicate that information such as learners’ “attitudes and assumptions about language learning” and learning styles is important. It is also necessary to understand learners’ motivations, especially with pre-experience groups, who are learners without concrete work experience. Frenco (2005) also suggests that before business English training, trainers should be aware of learners’ preferred learning styles and strategies. In a recent monograph on individual

differences in second and foreign language learning, Pawlak (2021, p.v) observes that learner differences will deeply impact second and foreign language learning processes. Individual differences between learners could include areas such as “motivation, learning aptitude, learning strategy and newly emerging boredom, enjoyment, curiosity and grit”. This study will mainly focus on personality, motivation, challenges, learning styles and strategies and learner needs, defined by Frendo (2005) as the key learner factors affecting business English learning.

There are very few empirical studies on the relationship of individual differences to the business English language learning process. This study will fill this gap by addressing the impact of individual differences on non-English-major pre-experience learners' engagement and learning outcomes in business English classrooms. The aims of the study are as follows:

1. To examine non-English-major participants' individual differences in personality, motivation, challenges, learning styles and strategies, and needs in the business English learning process, in the Chinese university context;
2. To investigate non-English-majors' engagement and learning outcomes in business English learning in the Chinese university context, taking into account these individual differences.

2. Literature review

2.1. Review of theories on individual differences and their relations with the language learning process

A review of theories on individual differences in LSP learning should cover analyses of relevant literature on personality, motivation, learning strategies, challenges and needs in the language learning process. For the dimension of personality, Larsen and Buss (2015) provide a systematic overview of personality theories, presenting various taxonomies to account for individual uniqueness and differences in personality. The typical framework is the simple Big Five personality taxonomy of “extraversion, agreeableness, conscientiousness, emotional stability and openness-intellectual” (2015, p. 78), which can be used to classify the different personality types of non-English-major business English learners and their relations with the learning process. This five-factor personality model and its relations with academic

performance were also reviewed by Vedel and Poropat (2020). These theories on personality have an impact on the language learning process and lay the foundation for the present study.

As for motivation, it is clearly relevant to goal-setting behaviour, which is influenced by “person and situation factors” (Heckhausen & Heckhausen, 2018, p. 4). In the context of Korea, Kim (2021) investigated the historical changes in second language learning motivation, which are influenced deeply by external factors, such as social, cultural and family factors, and internal learning motives. It is found that when English learning cannot bring direct academic and career success, English language learners’ learning motivation may be influenced negatively. Kim (2021, p. 174) further indicates the instrumental value of English learning, which could bring job opportunities. This may explain the main motivation for English learning in the contemporary Chinese context.

“Learning strategies” refer to supportive methods and resources adopted by learners in the language learning process, which can be assessed by the second language strategy inventory (SILL) (Oxford, 1989). Similarly, learning styles can also be scientifically assessed by other established instruments developed by Keefe et al. (1989) and Oxford (1993).

Learners’ challenges and needs in business English learning are also important factors for trainers or teachers to know about, since they are relevant to learners’ “necessities, lacks and wants” (Hutchinson & Waters, 1987, p. 55). These factors should provide the basis for course design. According to Hutchinson and Waters (1987), trainers or teachers should consider the “needs, potential and constraints” in the target learners’ “learning situation” (1987, p. 61).

Moreover, previous studies in different country contexts also examine the relations of individual differences with language learning. For example, in the earlier US context, one study found that different types of learners (categorized as field independent and field dependent) had different “verbal outputs” (Steingart et al., 1975, p. 241). Another study in the Austrian context examined the connection between motivation, personality, and language learning, highlighting the importance of “personality, motivation and empathy” (Rizvanović, 2018, p. 102) in language learning.

More recently, in the Spanish context, researchers used computational methods to extract personality trait information from learners’ written language, which provides empirical evidence of the connection between

personality and written communication (Moreno et al., 2021). The prior literature thus offers guidance on conducting empirical research on individual differences and their relations with language learning in various cultural and educational contexts.

2.2. Review of studies on engagement in language classrooms

In defining the concept of engagement, Hiver et al. (2021) consider it to be action in response to the learning environment, which is a “dynamic and multi-dimensional construct” (2021, p. 3). Its five dimensions can be further categorized into “behavioural, cognitive, affective, social and task” (2021, p. 19) engagement. To measure higher education students’ levels of engagement, a scale was developed and validated based on the five dimensions of engagement, which can be used to predict students’ learning outcomes and satisfaction with university experiences (Zhoc et al., 2019).

In Poland, informed by the engagement research literature, eight teachers were interviewed to understand in-depth information about learner engagement and the reasons why engagement was reduced. Their study found that teachers concentrate on the behavioural dimensions, and lack knowledge about other dimensions, which may be explained by students’ personal life experiences (Mystkowska-Wiertelak, 2020).

To conduct research on engagement and learning processes, in China in the context of Hong Kong, one study indicates that motivation is correlated with learner engagement in the English as a second language context (Chung & Leung, 2016). In mainland China, the large-scale study by Wang et al. (2023, p. 6682) finds that students’ academic engagement is correlated with “learning adaptability, foreign language anxiety, and English learning self-efficacy”, which played key roles in the learning processes.

However, there is limited research focusing on individual differences in personality, motivation, challenges, learning styles and strategies, and needs, engagement and learning outcomes in the English as a second/foreign language context, and particularly in business English classrooms in international settings.

2.3. Review of relevant studies in the Chinese university context

This section addresses the status of current research on individual differences in language learning in the Chinese context. Although it is clear

that being extrovert or introvert has no direct relations with English achievement, teachers should adapt their teaching design and implementation to meet the needs of different types of learners (Wang, 2009). Another study highlights the impact of individual differences including motivation, personality, intelligence and prior knowledge and experiences on foreign language learning, and suggests that teachers should adapt their teaching strategies based on knowledge about different learners (Pu, 2005). However, there is a lack of empirical investigations on the relations of personality and language learning (Liu, 2015).

Finally, there is scarcely any research concerning the connection between individual differences and engagement and learning outcomes in business English classrooms in the Chinese university context.

3. Research questions

To address this research gap, this study aims to examine the individual differences in personality, motivation, challenges, learning styles and strategies, and needs in connection with non-English-majors' engagement and learning outcomes in business English classrooms in the Chinese university context. The research questions are as follows:

1. What are the individual differences in personality, motivation, challenges, learning styles and strategies and needs of non-English-major students in the Chinese university context?
2. How do these individual differences affect the levels of non-English-majors' engagement and business English learning outcomes in the Chinese university context?

4. Methodology

This study follows both quantitative and qualitative paradigms, because both are needed to investigate the individual differences in personality, motivation, challenges, learning styles and strategies, and needs in relation to engagement and learning outcomes in business English learning (Brown, 2014). The main data collection instruments are two-stage surveys, which include both Likert-type scales and open-ended questions, in order to generate both quantitative

and qualitative information over a complete cycle of business English learning. The study thus provides empirical evidence about individual differences, engagement and learning outcomes in business English learning. The data collection process, participant information and data analysis process are explained in the following sections.

4.1. Data collection

4.1.1. Stage one survey

The stage one survey (see Appendix A) was administered in September 2021, in the first week of business English courses, to the groups of non-English-major business English learners who enrolled in business English and writing as well as trade correspondence courses at a public university in the east of China. There are nine rating-scale and open-ended questions adapted from Hiver et al. (2021, p. 194), Larsen and Buss (2015, p. 78, p. 140), Yang (2009, p. 597) and Xie (2016, p. 248). The stage one survey investigated learners' motivation for learning, personality types, challenges in learning business English, learning styles and strategies, and ways to help the learners to learn business English better.

4.1.2. Stage two survey

The stage two survey (see Appendix B) was administered in December 2021, in the final week of business English courses to the same groups of non-English-major learners so that the study covers the whole business English course learning process. There are four rating-scale and open-ended questions adapted from Chan (2018, p. 44) and Hiver et al. (2021, pp. 139, 180, 239). The questions inquired about levels of engagement in the learning process, difficulties in the learning process, and the overall learning gains.

The survey questions had previously been used in prior research which generated meaningful results such as those reported by Xie (2016). This ensures the validity and reliability of the data collection instruments. The survey questions were translated into Chinese and the translated wording was checked by a senior bilingual researcher to ensure accuracy and make sure that the participants could understand the questions fully. They provided responses mainly in Chinese. Pseudonyms were used to ensure the confidentiality of the participant identities. Although the ethical approval process was not required in the institution of the study, consent was

obtained from the participants and they were assured that the study results would help develop the business English curriculum.

4.2. Participants

Overall, there were 55 participants for the study obtained through convenience sampling, as the researcher was also the lecturer on the business English reading and writing and trade correspondence courses: 24 (43.6%) participants were male and 31 (56.3%) participants were female. Their average age was 19 years old. Over 65% of participants had passed the College English Test-Band 4 (CET-4), and more than 16% of the participants also passed the College English Test-Band 6 (CET-6).

The participants' academic programmes are shown in Figure 1. Around 27% of the participants were from the computer science programme. About 21% were from the Japanese language programme. Other participants were from the programmes on the Internet of things (10.9%) as an emerging field, electric engineering (10.9%), automation (10.9%), design (including industrial design and environmental design, 10.9%), and microelectronics (7.2%). The participants could be considered representative of Chinese university non-English-major business English learners.

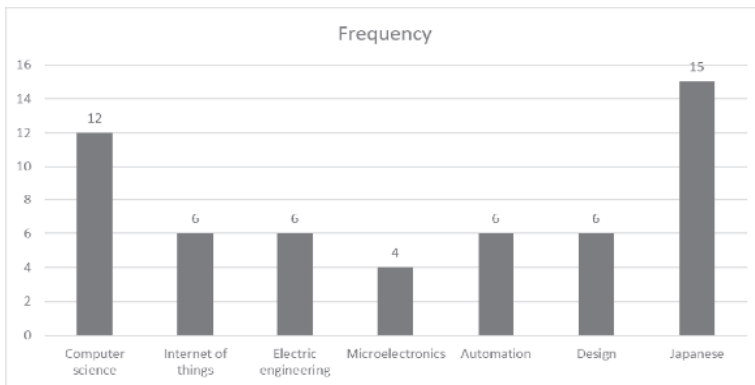


Figure 1. Participants' academic programmes.

4.3. Data analysis

For the Likert-type questions, means and standard deviations were calculated and analysed to obtain profiles of individual differences in personality, motivation, challenges, learning styles and strategies, needs and learning

engagement. The means and standard deviations are presented in Table 1-3. For open-ended questions, the responses were read and reread several times. The main themes were identified and their frequencies calculated and presented in Figures 2-6. Typical answers in Chinese were translated from Chinese into English by the bilingual researcher, to demonstrate insights into individual differences and learner engagement and learning outcomes. The selected translated quotes are provided in the result sections. The results of the study are presented in the following sections.

5. Results

5.1. The individual differences in personality, motivation, challenges, learning styles and strategies and needs of non-English-major students in the Chinese university context

The participants' self-assessed personality profiles are shown in Table 1. "Makes own decisions" had the highest mean at over 3.94. "In good shape" was in the second place with a mean of over 3.86, and standard deviation at 0.86. "Powerful", "has lots of friends", "lazy", "confident", "happy", "openness-intellectual", "emotional stability", "conscientiousness" and "agreeableness" all had means over 3 out of 5, with standard deviations between 0.88 and 1. Other personality descriptors including "unimportant", "manipulates people", "speaks well in public", "travels widely", "depressed" and "extraversion" all had the means of over 2 but below 3, with standard deviations between 0.9 and 1. The standard deviations showed that there were individual differences in participants' personality profiles.

Personality profiles	Mean	Standard Deviation
Extraversion	2.68	1.12
Agreeableness	3.39	0.89
Conscientiousness	3.39	0.89
Emotional stability	3.50	0.92
Openness-intellectual	3.08	0.88
Happy	3.66	0.94
Confident	3.00	0.96
Depressed	2.13	1.04
Lazy	3.18	0.95
Travels widely	2.58	1.03
Has lots of friends	3.18	0.98
Destitute (poor)	2.84	1.17
In good shape	3.87	0.91
Speaks well in public	2.29	1.01
Makes own decisions	3.95	0.87
Manipulates people	2.39	1.10
Powerful	3.05	1.01
Unimportant	2.34	1.05

Table 1. Participants' personality profiles.

The participants' motivation about learning English was assessed using a scale of 1~5, where 1 means the least motivated and 5 means the most motivated. The means were calculated and are shown in Table 2. Participants enjoyed English learning both in and out of class. They would have chosen to learn English even if English had not been a compulsory subject. All these three items had the highest means between 3.3 and 3.6. Participants also believed that they would use English in daily life in the future, were confident and supportive in English learning (mean just over 3), which showed positive results.

However, the other categories did not have the means over 3. The means were below 3 and above 2 with standard deviations between 0.7 and 1.1, which indicates that participants had a low-to-medium level of motivation about learning English. This may be because they were non-English-major undergraduates who focused on academic learning in their specialisation.

Participants' motivation	Mean	Standard Deviation
I enjoyed learning English in class in the past.	3.53	0.95
I enjoyed learning English out of class in the past.	3.32	0.81
Even if English had not been a compulsory subject, I would have chosen to study it in the past.	3.58	0.98
I was confident in learning English in the past.	3.05	0.93
I regularly use English in class with my classmates.	2.45	0.80
Even if the teachers were not close to me, or could not hear me, I still speak English with my classmates.	2.45	0.95
In class, my classmates and I support each other's English learning reciprocally.	3.03	0.91
In class, my classmates and I talk about English related future careers.	2.53	0.95
Outside of the class, I make an effort to speak more English with my classmates.	2.37	0.82
Outside of the class, my classmates and I support each other's English learning reciprocally.	2.89	1.09
Outside of the class, my classmates and I talk about English related future careers.	2.55	0.98
Outside of the class, I make an effort to speak more English with other people (friends, teachers, family etc.)	2.26	0.89
Outside of the class, other people (friends, teachers, family etc.) support each other's English learning reciprocally.	3.08	1.17
Outside of the class, other people (friends, teachers, family etc.) and I talk about English related future careers.	2.63	1.02
I think I will use English in my daily life in the future.	3.18	0.95
I think I will get a job using my English abilities in the future.	2.95	0.96
I can imagine belonging to a group of friends who use English in the future.	2.95	0.96
I can imagine belonging to a group of professionals who use English in the job in the future.	2.95	0.96

Table 2. Participants' motivation for learning English.

The following results in this section are based on the responses to the open-ended questions. The participants' challenges as non-English-majors in learning English for business communication are summarised in Figure 2. More than 27% of the participants mentioned the lack of business English vocabulary as the main problem. For example, participant 1 said he had "limited professional vocabulary and did not have the competence to link them into a complete sentence".

More than 23% of the participants said they did not have adequate English skills, including reading, listening, speaking and pronunciation. More than

10% of the participants mentioned the lack of a English learning environment. Participant 3 said that outside the classroom, he seldom spoke English and this “led to the problem in English usage”.

Other problems included lack of professional business knowledge (5.4%), study time (5.4%), assessment and resource information (3.6%), memorisation skill (3.6%), teacher guidance (1.8%), perseverance (1.8%), and motivation (1.8%). It can be seen that the participants had challenges not only in language ability and study skills but also with soft skills such as motivation and perseverance. There were individual differences when the participants faced different challenges in learning business English.

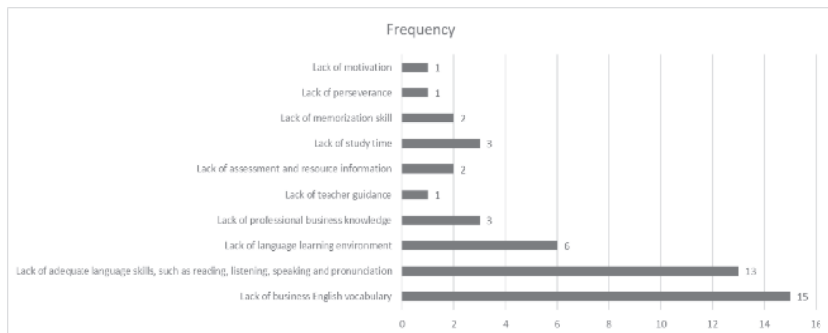


Figure 2. Participants' challenges/problems/obstacles as non-English majors in learning English for business communication based on responses to open-ended questions.

The participants' preferred business English learning styles and strategies based on responses to open-ended questions are shown in Figure 3. More than 23% of the participants mentioned various self-regulated learning strategies, such as doing reading, listening and speaking exercises by themselves. More than 12% of the participants preferred teacher-guided learning. Over 12% of the participants preferred multimedia-based learning, such as “watching TV dramas from UK and US”. More than 9% of the participants wanted to learn in a relaxing environment. Over 5% of the participants mentioned communication and practice-based learning. Other learning styles and strategies included more Chinese explanation (3.6%) and situation-based learning (3.6%). It can be summarised that self-regulated learning, teacher-guided learning and multimedia-based learning were these participants' most preferred business English learning styles and strategies.

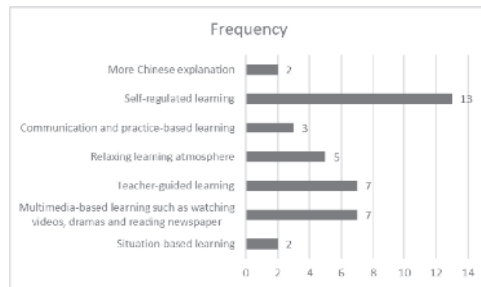


Figure 3. Participants' preferred business English learning styles and strategies based on responses to open-ended questions.

Helping strategies for enhancing business English learning for non-English-major participants are shown in Figure 4. Twenty percent of the participants mentioned doing more exercises or self-study in English reading, listening and speaking, and more than 10% of the participants mentioned teacher-guided learning. Participant 8 wanted teachers to share “dictation, oral communication and writing knowledge”. Over 7% of the participants said they should increase confidence, interest and discipline in English learning. More than 5% of the participants hoped to have explanations about the difference between Chinese and English, such as in pronunciation (Participant 9). Other suggestions included connecting with the real world (5.4%), reading English magazines (5.4%) and watching videos and movies (5.4%). More than 3.6% of the participants wanted a vocabulary list “which should be suitable and practical” (Participant 10). Another 3.6% of participants hoped to learn about business English culture. These strategies were in line with their preferred business English learning styles and strategies.

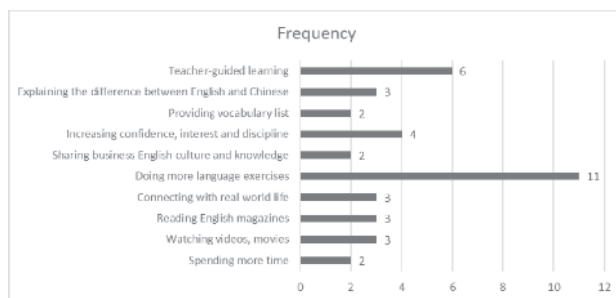


Figure 4. Helping strategies for enhancing business English learning for non-English-major participants based on responses to open-ended questions.

5.2. Non-English-majors' engagement and business English learning outcomes in the Chinese university context in terms of individual differences

The means of participants' levels of engagement in tasks in class are summarised in Table 3 on a scale from 1 to 5, where 1 is the lowest level while 5 is the highest level. It can be found that most of the negative aspects of the tasks are below 3, such as “got tense in the task”, “anxious”, “nervous”, “unfamiliar with the task”, “difficult”, “restricted in expressing ideas”, “thinking about other things”, and “boring”. “Paying attention to the teacher” ($M=4.38$, $SD=0.64$) and “comprehending the teacher's English” ($M=4.31$, $SD=0.72$) had the highest means, which demonstrated high levels of cognitive engagement. Participants also demonstrated a high level of behavioural engagement in participation in class activities ($M=4.15$, $SD=0.71$), with the third highest mean. Other positive engagement dimensions, including “emotional engagement”, “enjoyment”, “focus”, “task familiarity”, “considering task as easy” all had high means of over 3. It can be summarised that participants had positive experiences in doing the tasks and high levels of engagement in “cognitive, emotional and behavioral dimensions” (Hiver et al., 2021, p. 239).

Engagement in tasks in class	Mean	Standard Deviation
I enjoyed doing the task.	4.04	0.87
Doing the task was fun.	3.88	0.87
I thought the task was enjoyable.	3.81	0.91
The task was interesting.	3.92	0.79
The task was boring.	1.96	1.17
I paid attention to what my classmates said.	3.98	0.84
When doing the task, I thought about other things which were unrelated to the task.	2.58	1.16
I was focused on doing the task.	4.02	0.68
This task allowed me to express my own ideas.	3.94	0.73
I could make decisions about what to say and when to say it.	3.56	1.01
I had a choice in what to propose.	4.02	0.70
I felt restricted in expressing my ideas.	2.42	1.11
I found the task difficult.	2.71	0.97
Doing the task was difficult.	2.65	0.98
Doing the task was easy.	3.13	0.82
I found the task easy.	3.11	0.79
I was unfamiliar with the content of the task.	2.52	0.92
The content of the task was familiar to me.	3.44	0.97
I had prior knowledge about the content of the task.	3.26	1.05
Doing this task made me nervous.	2.98	1.10
I was anxious while doing this task.	2.54	1.15
I got tense while doing this task.	2.50	1.15
I participated in the class activities.	4.15	0.71
I paid attention to the teacher.	4.38	0.64
I listened very carefully in class.	4.04	0.78
I felt good in class.	3.94	0.73
I enjoyed class activities.	3.88	0.96
I was interested in class.	3.92	0.79
The class was fun.	3.71	0.87
I expressed myself using English.	3.58	1.11
I thought about what I wanted to say.	4.00	0.74
I thought about what others were saying in English.	3.90	0.81
I tried to comprehend my teacher's English	4.31	0.72

Table 3. Participants' levels of engagement in tasks in class, on a scale of 1 to 5, where 1 is the least engaged while 5 is the most engaged.

The participants experienced actual difficulties in business English learning, which are shown in Figure 5. Difficulties in understanding business English vocabulary were the main barriers, which was mentioned by over 40% of the

participants. For example, participant 32 said she “lacked basic understanding of business English terms, due to vocabulary constraints”. Poor listening skills were also one of the main difficulties. Participant 33 mentioned that he “responded slowly and could not understand the content”. The difficulties could also lie in group cooperation due to the differences in group members’ background. Difficulties could also be due to limited communication and learning time as well as lack of confidence in speaking tasks. Other minor difficulties included “understanding teachers and classmates” (5.4%), “unfamiliar with topics” (3.6%), “case analysis” (1.8%) and “writing tasks” (1.8%). To summarise, though participants experienced various difficulties, it can be seen that lack of understanding about business vocabulary could be one of the major barriers for business English learning.

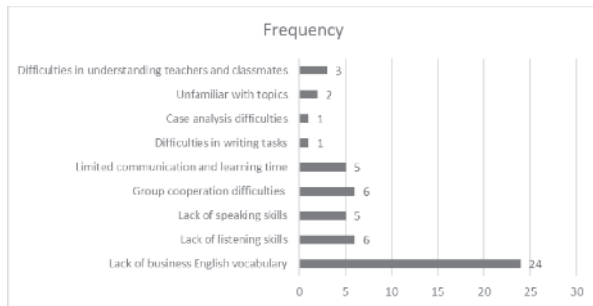


Figure 5. Actual difficulties in business English learning based on responses to open-ended questions.

The participants’ perceived learning gains are summarised in Figure 6. More than 41% of the participants mentioned they had expanded their business English vocabulary, including business terms. More than 38% of the participants felt they had improved their business writing skills. Close to one third of the participants had improved their business and workplace communication skills. Participants mentioned that they had learnt to use English to communicate and cooperate and summarise views. They had become more confident in using English and were not afraid of speaking English, which could also be seen as part of a competence development process. More than 21% of the participants had gains in business knowledge and culture. This included “cultures and knowledge of famous companies from different countries” (Participant 41) as well as “business concept and success experiences of many successful businesses” (Participant 42).

Other gains mentioned were in the areas of business reading skills (5.4%), problem-solving skills (3.6%), listening skills (3.6%), group cooperation (3.6%), interest in English (3.6%) and critical thinking skills (1.8%). It can be seen that in addition to improving business vocabulary, most of the learning gains focused on development of competences and business communication skills.

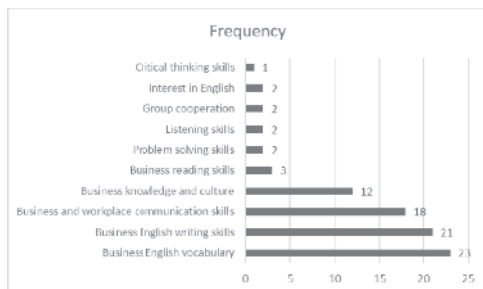


Figure 6. Business English learning gains based on responses to open-ended questions.

6. Discussion

6.1. The individual differences in personality, motivation, challenges, learning styles and strategies and needs of non-English-major students in the Chinese university context

The study first highlights the uniqueness of the non-English-major participants by presenting their personality profiles and the teacher should adapt the teaching and learning activity design accordingly. “Making own decisions” and “being in good shape” had the highest means in personality profiles for this group of participants. The study by Rizvanović (2018) indicates the significance of affective factors including personality, motivation and empathy in the success in language learning, which was confirmed in this study.

As for motivation, participants enjoyed learning English both in and outside class. They supported each other and were willing to learn English as a subject. However, the study found that the group of participants had only an intermediate level of motivation, as they had to spend more time in their academic study rather than learning English. Some ways to address this problem of low motivation have been proposed by previous authors, which

include increasing the contact with target language speakers (Csizér et al., 2021). The participants' own positive experiences when using English in communication could motivate them as language learners. However, some of these solutions might not be practical in the Chinese context, where contact with target language speakers is limited.

For challenges in learning business English, close to one third of the participants mentioned lack of business English vocabulary and adequate English skills, including reading, listening, speaking and pronunciation. There were other problems including lack of an appropriate English learning environment, professional business knowledge, study time, assessment and resource information, memorisation skills, teacher guidance, perseverance and motivation. Dudley-Evans and St John (1998, p. 123) indicate that the business English curriculum design should be based on an understanding of “necessities, lacks and wants”. The results of this study provide important information for further curriculum development in our context.

Regarding business English learning styles and strategies, close to one third of the participants preferred self-regulated learning. More than 10% also mentioned teacher-guided learning. Other learning styles and strategies included multimedia-based learning, a relaxing environment, communication and practice-based learning, more Chinese explanations, and situation-based learning. Previous studies in other contexts, such as that by Włosowicz (2021), suggest that the choice of learning styles and strategies tends to be very individual while different language learning strategies tend to be combined. The results of the present study illustrate the importance of individualizing the way we cater for learning styles and strategies in business English learning in the Chinese context.

Regarding helpful strategies for enhancing business English learning, the participants mentioned doing extra exercises or self-study in English reading, listening and speaking. The participants also mentioned that they would appreciate teacher-guided learning, explanations about the differences between Chinese and English, connecting with real life, reading English magazines, watching videos and movies, vocabulary lists, and sharing of business English culture and knowledge. In the words of Chan (2018, p. 33), it is essential to gather information such as “the environment, the effectiveness of different teaching approaches and methods” in order to inform the design of the business English curriculum. The results of this present study therefore also are important for course development in this context.

6.2. Non-English-majors' engagement and business English learning outcomes in the Chinese university context in terms of individual differences

For levels of engagement in business English learning, all the negative dimensions of engagement were below 3. Cognitive engagement, behavioural engagement, emotional engagement, enjoyment, focus, and task familiarity all had high means of over 3, which demonstrated that the levels of engagement were high among this group of participants. Like Carver et al. (2021, p. 134) we found that the levels of engagement could be important predictors of the relation between classroom behaviours and learning outcomes.

For actual difficulties, more than 40% of the participants had problems in understanding business English vocabulary. Other difficulties were in group cooperation, limited communication and learning time, confidence in speaking tasks, understanding teachers and classmates, unfamiliarity with topics, case analysis, and writing tasks. Frenedo (2005), evaluating the effectiveness of the business English curriculum, mentions that teachers could make a quick assessment of the classroom situation and adjust the teaching approaches in line with students' learning strategies and styles so that more improvement could be observed. Similarly, for this study, the participants' actual difficulties and problems could be overcome by teachers making adaptations in the teaching and learning process.

For learning gains, more than 40% of the participants had expanded their business English vocabulary. They also improved their business writing, business and workplace communication, business knowledge and culture, business reading, problem-solving, listening, interest in English and critical thinking skills. The results of this study add to our knowledge by revealing further dimensions of learning gains, compared with the results from prior research (Xie, 2021).

7. Conclusion

The study reports an investigative study with 55 non-English-major participants in a Chinese university concerning individual differences in personality, motivation, challenges, learning styles and strategies, needs, engagement and business English learning outcomes taking account of individual differences. It offers empirical evidence of individual differences

among non-English-major learners in business English courses in the Chinese university context, considering their positive engagement, learning difficulties and learning gains. Although there are various difficulties and challenges, teachers should endeavour to enhance positive learner engagement and learner motivation, as well as guide learners' learning styles and strategies, to ultimately overcome challenges and bring about better learning outcomes.

The study also makes theoretical contributions to the individual differences and engagement literature by providing a real-world depiction of business English teaching and learning in a Chinese university context. As far as practice is concerned, these results suggest that business English teachers should adapt their teaching approaches and strategies to accommodate to individual differences and enhance engagement, and teaching and learning effectiveness.

For policy, this research also shows that curriculum adaptations could be made based on a thorough understanding of learner individual differences to maximise engagement and teaching effectiveness. Though the study was conducted in only one Chinese university context with relatively limited generalisability to other contexts, the research process could be replicated in other cultural environments. Future research could examine other affective factors in second language learning, such as emotion and self-efficacy, to see how they have an impact on learner engagement and teaching effectiveness.

Article history:

Received 7 January 2023

Received in revised form 13 April 2023

Accepted 13 July 2023

Acknowledgements

The authors would like to express heartfelt thanks to the participants for their helpful contributions to the study. The authors are also grateful for the expert comments from editors and reviewers for revising this article. This work was funded by 2022 World Language and Culture Research Project [WYZL2022]S0002] and Higher Education Research Association Foreign Language Education Branch project [21WY]YYB05].

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Appendices

Appendix A

Adapted from Hiver, Al-Hoorie and Mercer (2021, p. 194), Larsen and Buss (2015, p. 78, 140), Yang (2009, p. 597) and Xie (2016, p. 248).

Stage One Survey: Business English Needs Analysis

Profile

1. Gender _____ Age _____ Major _____ Grade _____

2. Please describe your business English level (Please ✓)

Beginner	High beginner	Lower intermediate	Intermediate	High Intermediate	Advanced	Native level

3. Please write your previous English test score (IELTS, TOEFL, BEC Vantage, BEC Higher TEM-4, CET-4/6) _____

4. Please describe your motivation and reasons for taking the course.

5. Please complete the following table about motivation in English learning, where 1 is the least motivated while 5 is the most motivated. Please circle the appropriate numbers.

I enjoyed learning English in class in the past.	1	2	3	4	5
I enjoyed learning English out of class in the past.	1	2	3	4	5
Even if English had not been a compulsory subject, I would have chosen to study it in the past.	1	2	3	4	5
I was confident in learning English in the past.	1	2	3	4	5
I regularly use English in class with my classmates.	1	2	3	4	5
Even if the teachers were not close to me, or could not hear me, I still speak English with my classmates.	1	2	3	4	5
In class, my classmates and I support each other's English learning reciprocally.	1	2	3	4	5
In class, my classmates and I talk about English related future careers.	1	2	3	4	5
Outside of the class, I make an effort to speak more English with my classmates.	1	2	3	4	5
Outside of the class, my classmates and I support each other's English learning reciprocally.	1	2	3	4	5
Outside of the class, my classmates and I talk about English related future careers.	1	2	3	4	5
Outside of the class, I make an effort to speak more English with other people (friends, teachers, family etc.)	1	2	3	4	5
Outside of the class, other people (friends, teachers, family etc.) support each other's English learning reciprocally.	1	2	3	4	5
Outside of the class, other people (friends, teachers, family etc.) and I talk about English related future careers.	1	2	3	4	5
I think I will use English in my daily life in the future.	1	2	3	4	5
I think I will get a job using my English abilities in the future.	1	2	3	4	5
I can imagine belonging to a group of friends who use English in the future.	1	2	3	4	5
I can imagine belonging to a group of professionals who use English in the job in the future.	1	2	3	4	5

6. Please complete the following table about your personality types, where 1 is the lowest and 5 is the highest.

Extraversion	1	2	3	4	5
Agreeableness	1	2	3	4	5
Conscientiousness	1	2	3	4	5
Emotional stability	1	2	3	4	5
Openness-intellectual	1	2	3	4	5
Happy	1	2	3	4	5
Confident	1	2	3	4	5

Depressed	1	2	3	4	5
Lazy	1	2	3	4	5
Travels widely	1	2	3	4	5
Has lots of friends	1	2	3	4	5
Destitute (poor)	1	2	3	4	5
In good shape	1	2	3	4	5
Speaks well in public	1	2	3	4	5
Makes own decisions	1	2	3	4	5
Manipulates people	1	2	3	4	5
Powerful	1	2	3	4	5
Unimportant	1	2	3	4	5

7. What are the challenges as non-English majors in learning English for business communication?
8. What are your most favorable learning styles and strategies in business English learning?
9. What would help you to learn business English as non-English majors better?

Appendix B

Adapted from Chan (2018, p. 44), Hiver, Al-Hoorie and Mercer (2021, pp. 139, 180, 239).

Stage Two Survey: Business English Curriculum Assessment

1. Class _____ Class Number _____ Name _____

Gender _____ Age _____ Program _____

2. Please **circle** the number in the following table about engagement in the course, 1 is the least engaged while 5 is the most engaged.

I enjoyed doing the task.	1	2	3	4	5
Doing the task was fun.	1	2	3	4	5
I thought the task was enjoyable.	1	2	3	4	5
The task was interesting.	1	2	3	4	5
The task was boring.	1	2	3	4	5
I paid attention to what my classmates said.	1	2	3	4	5
When doing the task, I thought about other things which were unrelated to the task.	1	2	3	4	5
I was focused on doing the task.	1	2	3	4	5
This task allowed me to express my own ideas.	1	2	3	4	5
I could make decisions about what to say and when to say it.	1	2	3	4	5
I had a choice in what to propose.	1	2	3	4	5

I felt restricted in expressing my ideas.	1	2	3	4	5
I found the task difficult.	1	2	3	4	5
Doing the task was difficult.	1	2	3	4	5
Doing the task was easy.	1	2	3	4	5
I found the task easy.	1	2	3	4	5
I was unfamiliar with the content of the task.	1	2	3	4	5
The content of the task was familiar to me.	1	2	3	4	5
I had prior knowledge about the content of the task.	1	2	3	4	5
Doing this task made me nervous.	1	2	3	4	5
I was anxious while doing this task.	1	2	3	4	5
I got tense while doing this task.	1	2	3	4	5
I participated in the class activities.	1	2	3	4	5
I paid attention to the teacher.	1	2	3	4	5
I listened very carefully in class.	1	2	3	4	5
I felt good in class.	1	2	3	4	5
I enjoyed class activities.	1	2	3	4	5
I was interested in class.	1	2	3	4	5
The class was fun.	1	2	3	4	5
I expressed myself using English.	1	2	3	4	5
I thought about what I wanted to say.	1	2	3	4	5
I thought about what others were saying in English.	1	2	3	4	5
I tried to comprehend my teacher's English	1	2	3	4	5

3. What are the difficulties you and/or your fellow-learners encountered during the business English teaching and learning activities?

4. Overall, what have you learned in the business English curriculum?

