

Investigating Autonomous English Language Learning of Thai Students

PITCHAYAPA WONGYIMYONG*

Language Institute, Thammasat University, Thailand

KITTITOUCH SOONTORNWIPAST

Language Institute, Thammasat University, Thailand

Corresponding author email: pitchayapa.wyy@gmail.com

| Article information | Abstract |
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| <p>Article history: Received: 4 Dec 2023 Accepted: 28 Jan 2024 Available online: 17 Jun 2024</p> <p>Keywords: Autonomous learning English learning Learner beliefs Learning behaviors Metacognitive knowledge Factors influencing English learning Mixed methods</p> | <p><i>Autonomous learning, which emphasizes learners taking charge of their knowledge acquisition, plays a vital role in effective English language acquisition. However, attempts to foster autonomous learning in the Thai context face many challenges. Therefore, this mixed-methods study explores how autonomous learning thrives in the context to inform future attempts to foster autonomous learning. The study employed exploratory sequential mixed-methods research which consists of two phases to collect the data. The data collection began with the qualitative phase which involved interviewing fifteen first-year undergraduate students who have high English language proficiency. The focus was on their English language learning experiences concentrating on the four main constructs suggested by literature to reflect autonomous learning namely: learner beliefs, learning behaviors, metacognitive knowledge, and factors influencing English language learning. Themes and sub-themes emerged from the interview were used subsequently to develop a questionnaire with 396 undergraduate respondents. In the quantitative phase, the questionnaire results confirmed that the findings in the qualitative phase were prevalent in the larger sample. Moreover, the discussion presents several causal relationships between the factors influencing English learning and the other three constructs, suggesting that the manipulation of the factors may help in fostering autonomous learning in the Thai context.</i></p> |

INTRODUCTION

Learner autonomy is defined by Holec (1981) as “the ability to take charge of one’s own learning.” (p. 3). It is a complex and multifaceted construct that cannot be adequately described by a single behavior or even by a set of behaviors. Although there is a common misconception that autonomous learning can only be displayed through certain behaviors, Little (1991) claims that it can be manifested in various ways depending on a variety of factors. Benson (2006) agrees that autonomous learning is “contextually-variable”, and proposes that the mainstream perspectives of learner autonomy barely consider the “cultural variability within language education on a global scale” (p. 23). The different manifestation of learner autonomy has made it difficult to pinpoint it in countries outside the Western context, where the mainstream

version of autonomous learning originated. This complication leads to challenges that many teachers face when attempting to foster learner autonomy in these countries.

Since autonomous learning results in effective learning in almost any subject including English (Palfreyman, 2003), it is considered to be one of the ultimate goals of education. Hence, considerable attempts have been made to foster autonomous learning in English classrooms in various countries. A challenge that is often mentioned when autonomous learning is being fostered in countries outside the Western world is the incompatibility between learner autonomy and certain aspects of a culture. Teachers in Thailand also find it challenging to foster learner autonomy in the Thai context. For example, an issue which hinders the promotion of autonomous learning in the Thai context concerns mismatch beliefs about teacher and student roles. In the Thai context, students view teachers as the authoritative figure who makes decisions in class. Thus, an attempt to foster autonomous learning by suddenly transferring the responsibility for making decisions to students can be very challenging. (Intraboonsom et al., 2018; Orawiwatnakul & Wichadee, 2017; Sanprasert, 2010; Swatevacharkul, 2010). A suggestion for this issue is proposed by proponents of autonomous learning. Palfreyman and Smith (2003) suggest that the first step to tackle this issue is to embrace cultural perspectives when viewing autonomous learning, in agreement with Benson's claim: to accept the different manifestations of learner autonomy. For example, learning approaches that are "frowned upon in progressive Western circles" like memorization, "should be understood as an effective learning strategy," which is considered one of the dimensions of learner autonomy, rather than "unthinking repetition" since they lead to higher academic achievement (Watkins & Biggs, 1996 as cited in Palfreyman, 2003, p. 11). In emphasizing that "cultures of learning may also be misinterpreted by outside commentators," the authors necessitate more attention, investigation, and construction of the local approaches to autonomy. Furthermore, Benson (2006) puts forward that there should be a deconstruction of the concept to get a clearer view of how learner autonomy is manifested in a specific context. The proposed solution signifies the immense impact that a context exerts on autonomous learning. It reflects, that before beginning to foster it, it is highly critical that one should have a good grasp of how autonomous learning in one's context is different from the mainstream version since context can greatly influence autonomous learning and attempts to foster it. To better understand the version of autonomous learning generally employed by Thai students, this study put the suggestions from the above-mentioned proponents of autonomous learning into practice by deconstructing the concept of autonomous learning in the Thai context while adopting the cultural perspectives.

To learn more about how autonomous learning thrives in the Thai context, the purpose of this study is to explore the concept exercised by Thai students who have high English proficiency and are capable of learning English effectively. This decision was supported by a considerable amount of literature confirming that students with high English proficiency are autonomous learners. For example, Little (1995) claims that there is nothing new about learner autonomy, "that genuinely successful learners have always been autonomous" (p. 175). More specifically, Smith et al. (2018) asserted that students who can achieve a high level of English proficiency in a context where the materials or input in English is scarce are, by default, autonomous learners because they take an active role in making use of sources outside classrooms. These claims agree with empirical research studies investigating the correlation between learner

autonomy and English proficiency in various contexts. These research studies conducted in, for example, China (Cheng et al., 2018; Dafei, 2007), Japan (Sakai & Takagi, 2009), and Iran (Ghorbandordinejad & Ahmadabad, 2016), revealed a significant positive relationship between learner autonomy and English proficiency.

The literature mentioned in the previous paragraph seems to suggest that students with high English proficiency practice autonomous learning. The next step is to determine what should be focused on in order to investigate autonomous learning in the Thai context. Moreover, autonomous learning is a latent variable which means that it cannot be directly observed. It has to be investigated indirectly by exploring relevant observable constructs. To answer the question posed above, a review of the literature was undertaken to gather more information about what autonomous learning encompasses and through which ways it can be manifested or reflected. The review of literature ruled out four points to focus on - namely learner beliefs and attitudes about English and learning, English learning behaviors, metacognitive knowledge, and factors influencing English learning. Consequently, the research questions for this study are framed as shown below

RQ1: What beliefs do Thai students who learn English autonomously hold?

RQ2: What learning behaviors do Thai students who learn English autonomously exhibit?

RQ3: What metacognitive knowledge do Thai students who learn English autonomously have?

RQ4: What factors influence autonomous English learning of Thai students?

LITERATURE REVIEW

This section of the article elaborates on the literature which guided the formation of the research questions. The main framework guiding this study was derived from Wenden (1991). According to Wenden (1991), there are three components that lead to autonomous learning. To become an autonomous learner, one needs to possess: learning strategies, metacognitive knowledge, and the beliefs or attitudes which drive her or him to use the strategies and the knowledge to learn English autonomously. Even though the literature concerning autonomous learning often mentions learning strategies, the term learning behaviors is used in the present study. This is to prevent emerging data from being restricted by terminology because not all behaviors reported by the participants can be categorized as learning strategies. Therefore, instead of pinpointing which learning behaviors are considered learning strategies, or are related to autonomous learning, the study focuses on reporting the learning behaviors of Thai autonomous learners when learning English. Moreover, various factors can influence the aforementioned components, which in turn can create impacts on autonomous learning. The following paragraphs discuss each component in detail supported by literature from several proponents of English autonomous learning.

Learner beliefs

Because they are highly influential on students' learning behaviors (Cotterall, 1995), tapping into students' beliefs and attitudes is essential for the investigation of autonomous learning.

In other words, a prerequisite for autonomous learners is to hold certain beliefs or attitudes which then encourage them to exhibit these learning behaviors. Wenden (1991) suggests that the attitudes mandatory for autonomous learners are the willingness to take on responsibility and the confidence in their ability as learners. Benson and Lor (1998) conducted empirical research at a university in Hong Kong which explored beliefs about autonomous language acquisition of students participating in the Independent Learning Program (ILP). The participants' discourse was analyzed and the findings about their beliefs were categorized into three groups namely: beliefs about language learning concerning what it takes to be able to learn a language effectively, beliefs about situational context concerning the relationship between the students and certain social or institutional contexts and their prior learning experiences, and beliefs about self, concerning students' evaluation of their English proficiency, their confidence, and their capacity to learn English.

Learning behaviors

Many learning behaviors that are focused on in the literature in the area of autonomous learning are considered as learning strategies. This is due to the characteristics that learning strategies entail are in line with a core principle of autonomous learning: active involvement in the learning process (Benson & Lor, 1998). For instance, Oxford describes that learning strategies are behaviors that are consciously employed by students. They are tools for active, autonomous involvement necessary for developing L2 communicative ability (O'Malley & Chamot, 1995). In addition, Benson (1997) includes learning strategies in his model of autonomous learning. He calls the dimension where learners use management strategies and techniques of learning to acquire English: the technical dimension. Wenden (1991) also agrees that students need to possess learning strategies that enable them to learn the target language autonomously. She divides learning strategies into two kinds: Cognitive strategies which concern ways that learners comprehend, store, and retrieve English input, and Self-management strategies which involve learners planning, monitoring, and evaluating their English learning. These strategies are executed through various learning behaviors. For example, using dictionaries to comprehend input and talking to oneself in the target language to retrieve input, are learning behaviors related to cognitive strategies. Monitoring the effectiveness of learning activities and evaluating one's progress are examples of how self management strategies are executed.

Metacognitive knowledge

According to Flavell (1979, p. 1), metacognitive knowledge is 'our knowledge about ourselves and others as cognitive agents, about tasks, actions or strategies, and how all these interact to affect the outcome of any sort of intellectual enterprise.' Autonomous learners must acquire the metacognitive knowledge that enables them to learn English autonomously. Pintrich (2002) proposes that there are three types of metacognitive knowledge which include: strategic knowledge (concerns knowledge of general strategies of learning that apply to learning most subjects, knowledge about cognitive tasks (concerns knowledge about choosing suitable strategies for tackling a task, and self-knowledge (concerns awareness of one's strengths and weakness). Similarly, Wenden (1991) suggests three kinds of metacognitive knowledge that

English learners should have to become autonomous. The first kind is personal knowledge, which concerns an individual being aware of his or her unique characteristics as an English learner; for example, learners knowing their learning styles or strengths and weaknesses. Next, strategic knowledge is related to learners knowing how to acquire a language well and which strategies work best for them. Lastly, task knowledge includes learners' knowledge of the purpose, the nature, the demand of a task, and knowing when a task requires deliberate learning. Benson (2011) also acknowledged metacognitive knowledge as a part of the psychological dimension of autonomous learning. This dimension of autonomous learning concerns learners exerting control over their cognitive processing which includes attention, reflection, and metacognitive knowledge. Moreover, Benson made a comparison between the psychological dimension of autonomous learning with Wenden's types of metacognitive knowledge. He suggests that Wenden's task knowledge is connected to the concept of control over the learning process. (Benson, 2011)

Factors influencing autonomous learning

Numerous factors have been suggested or found to influence autonomous learning by various theoretical and empirical studies. These factors may have direct or indirect; supporting or hindering influences on autonomous learning. For example, Wenden (1991) suggests various factors influencing learners' attitudes towards autonomy, which in turn affect their autonomous learning. These factors are: socialization processes, conflicting role demands, the complexity of roles, the lack of metacognitive knowledge, learned helplessness, self-esteem, and self-image. Other factors suggested by the literature include learners' motivation, significant others: teachers, friends, and family, learning context, materials and resources, and task types. (D'Ailly, 2003; Kemala, 2016; Reinders, 2011; Smith et al., 2018; Tran & Doung, 2020; Wharton, 2012)

METHODOLOGY

This study employed exploratory sequential mixed-methods research. This method was chosen because its advantages accommodate the objectives of this study that is to capture autonomous learning of Thai students. This research design is traditionally used to design a new instrument (Creswell & Plano Clark, 2018). The approach allows the researcher to investigate an unexplored issue or concept before validating the findings by using a questionnaire that is developed based on the investigation. This research design consisted of two consecutive phases beginning with a qualitative phase aimed at investigating the Thai students' experiences in learning English to gain more understanding about autonomous learning of Thai students and to help inform the development of the questionnaire in the next phase. The next phase is the quantitative phase which aims to help increase the credibility and generalizability of the research by revealing the prevalence of the different aspects of autonomous learning of Thai students. The next paragraph presents the overview of the process of each phase before the next section provides further details about the participants' data collection, and data analysis of the two phases consecutively.

In the qualitative phase, the researcher interviewed fifteen students who have high English proficiency about their English language experiences instead of asking them directly about autonomous learning to avoid the complications of translating the term “autonomous learning” into Thai which could be misleading. Then, the qualitative analysis sifted the data obtained from the interview leaving aspects of the interviewees’ experiences that are related to autonomous learning by focusing on the four main constructs which are suggested by the literature mentioned previously to reflect autonomous learning namely learner beliefs and attitudes about English and learning, English learning behaviors, metacognitive knowledge, and factors influencing English learning. Themes and sub-themes assigned in the analysis were used to inform the development of the questionnaire for the next phase which is the quantitative phase. The questionnaire was answered by 396 undergraduate students. The aim for the questionnaire is to find out whether Thai students, in general, also share common bits and pieces of the beliefs, learning behaviors, metacognitive knowledge, and factors influencing English learning of the fifteen students from the previous phase despite having different levels of autonomy and English proficiency.

Qualitative phase

Participants

According to the background and rationale of the study mentioned in the introduction, this research aims to explore autonomous learning in the context of Thailand from Thai students who have high English language proficiency. Thus, the purposeful sampling strategy, where participants were chosen by the researcher based on their typicality, was employed (Nunan & Bailey, 2009). The criteria that were used to purposefully identify the participants were:

1. Students whose upper-secondary level O-NET (The O-NET - Ordinary National Educational Test - is a national test required by the Thai educational system when students complete the upper secondary level) scores on the English language subject are in the top two score ranges namely ‘very good’ and ‘excellent’ according to their O-NET report card.
2. Students who had never studied in an international school in Thailand or studied in other countries.

The first criterion was set to identify students who were effective English learners. Thus, the participants in the study were first-year undergraduate students who had taken the O-NET exam. The second criterion excluded international school students whose English language learning experiences were different from typical Thai students. For example, students who studied in an international school were not only exposed to the English language more frequently with more opportunities to communicate in English, but who were also immersed in culturally diverse contexts (Hill, 2016; Jamudom & Tangkriengsirisin, 2020). As a consequence, their success in English language learning may have been largely due to their learning environment. Moreover, cultural diversity in an international school has the potential to impact beliefs about learning English and their learning behaviors in ways that were different from typical Thai students who emerged mainly in Thai society and culture.

In addition, the stratified purposeful sampling, according to Palinkas et al. (2015) can “capture major variations” as well as allowing “a common core,” to emerge were combined to help provide more comprehensive data. The investigation of Thai students’ autonomous learning would not have been completed if the researcher interviewed students who fit the criteria but whom all came from, for example, famous big schools in Bangkok. Therefore, two categories of variation were set to help ensure that the study included all the major variants. The first category, which concerned gender, was set because studies revealed that female and male students tended to show different variations of learner autonomy (Kirmizi & Kirac, 2018; Mardjuki, 2018). The latter category concerning variations of schools was set because various sources showed that the location and the school type resulted in notably different levels of student achievement and diverse learning contexts (Office for National Education Standards and Quality Assessment, 2020; Prasartpornsirichoke & Takahashi, 2013; Wongsurawat, 2010). The table on the next page shows variations of the fifteen students who were selected as participants in this study.

Table1
Participants variations

| Variations | Gender | | School location | | School Type | |
|---------------------|--------|------|--------------------|-----------------|-------------|---------|
| | Female | Male | Bangkok & vicinity | Other provinces | Public | Private |
| No. of interviewees | 7 | 8 | 7 | 8 | 8 | 7 |

Data collection and data analysis

A pilot interview was conducted with a Thai first-year undergraduate student who fits the sampling criteria of the present study. The interview questions were designed based on the rationale and the research questions of the study. The interview questions focused on the four main constructs mentioned in the research questions. The first draft of the interview questions was revised and the second draft of the interview questions was created and sent to three experts in the field to evaluate the content validity of items in the questionnaire via the Index of Item Objective Congruence (IOC). The final draft of the interview questions was developed based on the suggestions from the experts. Semi-structured interviews were conducted to gather in-depth information about the participants’ English language learning. Due to the COVID-19 pandemic, the interview was conducted online via Zoom instead of in a face-to-face interview. With participants’ consent, the interview was video recorded to aid data analysis. The interview conducted in Thai lasted from 60 to 80 minutes. The interview was transcribed and analyzed using the grounded theory method which included code assignment, sifting and categorizing major codes, and indicating themes and subthemes. Additionally, a peer review or peer debriefing, involving an expert familiar with the research and the context reviewing the analysis of the data gathered from the interview, was employed to assist in establishing the credibility of the analysis.

Quantitative phase

Participants

Convenience sampling used in the quantitative phase garnered 396 participants undergraduate students from 24 different faculties in 21 universities in Bangkok and other provinces.

Data collection and data analysis

The themes and sub-themes from the qualitative phase and a review of studies which utilized questionnaires to investigate autonomous learning guided the development of the questionnaire to gather the data in the quantitative phase. The questionnaire was developed, reviewed by experts, piloted, and distributed to Thai undergraduate students. The questionnaire was in Thai, and the majority of items in the questionnaire were on a 5-point Likert scale. The data obtained from the questionnaire were then used to generate the statistical data. The mean scores were used to determine the level of beliefs, learning behaviors, metacognitive knowledge and influences of the factors. The present study refers to Nunnally and Bernstein's (1994) work to guide the interpretation of the mean scores. The table below shows the mean score interpretation of this study.

Table 2
Mean score interpretation

| Mean Score | Interpretation |
|-------------|----------------|
| 1.00 – 2.00 | Low |
| 2.01 – 3.00 | Medium Low |
| 3.01 – 4.00 | Medium High |
| 4.01 – 5.00 | High |

FINDINGS

The following section presents the data obtained from the thematic analysis and the questionnaire. The themes are grouped according to the research questions to which they are related. This study highly prioritizes students' voices and makes them heard. However, due to limited space, the findings reported below are the researcher's attempt to summarize, yet comprehensively preserve all the aspects of each theme. In addition, the statistical tables which report the quantitative findings are included in the appendices.

Answering RQ1: What beliefs do Thai students who learn English autonomously hold?

The themes related to this research question are categorized into two groups. The first concerns the interviewees' beliefs about the English language. The second is the beliefs that are more specific to learning the language.

1.1 Beliefs about English language

| Themes | Sub-themes |
|------------------------------------|---|
| The importance of English | International posture, Instrumentality, Knowledge is in English |
| Positive attitudes towards English | - |

1.2 Beliefs about learning English

| Themes | Sub-themes |
|---|------------|
| English learning as a continuous self-improvement goal | - |
| the willingness to take responsibility for English learning | - |

The qualitative findings about beliefs were used to develop a set of items in the questionnaire to further explore the generalizability of the themes identified in the qualitative phase. The descriptive analysis of the quantitative data obtained from the questionnaire includes the frequency, mean, and standard deviation of the response for each item. The questionnaire uses a 5-point Likert scale. Respondents were required to answer to what degree they agreed or disagreed with the statements. The scores are ranked in ascending order with “Strongly Disagree” having the lowest score of 1 and “Strongly Agree” having the highest score of 5.

According to the table in Appendix A, the percentages of interviewees answering agree and strongly agree revealed that the majority of respondents agreed with every item. More importantly, the response with the largest proportion for every item is “strongly agree”. This is in line with the high level of mean scores of more than 4 in every item. Item “3) Since most information or knowledge is in English, I believe that English is important because it enables me to broaden or deepen my knowledge,” had the highest mean score ($\bar{X} = 4.64$, S.D. = 0.67). Item “7) I believe that we should never stop learning.” mean score ($\bar{X} = 4.6$, S.D. = 0.8) is almost as high as item 3)’s mean score. The item with the lowest mean score is “5) I have a positive attitude towards English” ($\bar{x} = 4.29$, S.D. = 0.9) The results confirmed that most Thai students held similar beliefs and attitudes of Thai autonomous learners.

Answering RQ2: What learning behaviors do Thai students who learn English autonomously exhibit?

The themes related to the second research question were divided into two groups. The first group concerned the learning behaviors that the interviewees reported they did in English classes. The second group was self-initiated learning behaviors or strategies that they did outside of English classes.

2.1 In-class learning behaviors

| Themes | Sub-themes |
|--------------------------|--|
| Taking notes | summarizing, paraphrasing, writing down translations of new vocabulary |
| Participating actively | interacting with teachers, participating in learning activities |
| Paying attention | - |
| Approaching teachers | - |
| Interacting with friends | teaching, asking, studying |
| Noticing input | - |

The behaviors reported by the interviewees in the qualitative phase were used to construct a set of items that explored how often Thai students exhibited the behaviors in English class. Respondents were required to answer how often they performed the behaviors. The scores are ranked in ascending order with “Never” having the lowest score of 1 and “Always” having the highest score of 5.

According to the table in Appendix B, in general, the percentages of students answering “Sometimes”, “Often” and “Always” were mostly higher than “Never” and “Rarely”. The levels of the majority of the in-class behaviors practiced by the respondents are at medium high level. The item with the highest mean score was “(10) I observe teachers’, friends’, or other audio sources’ sounds for the correct pronunciation of English.” ($\bar{X} = 4.18$, S.D. = 0.9). On the contrary, item “(5) I approach teachers to practice English or ask questions about English.” scored the lowest mean ($\bar{X} = 3.18$, S.D. = 1.27). In addition, almost one-third (31.6%) of the respondents answered that they either never or rarely approached their teachers.

2.2 Out-of-class learning behaviors/strategies

| Themes | Sub-themes |
|---------------------------------------|---|
| Taking an extra class | - |
| Self-studying for academic purposes | Doing practice tests, Reading or practicing on study guides / textbooks, Reviewing / preparing for tests |
| Creating opportunities to use English | Communicating with foreigners, Repeating after/imitating an input |
| Enlarging the exposure to English | Connecting personal interests to English language learning, Connecting daily life to English language learning |
| Seeking knowledge / information | - |
| Memorizing vocabulary | Making a list of vocabulary, Using flashcards, Grouping words, Putting vocabulary in context, Repetition, using mnemonics |

The behaviors reported by the interviewees in the qualitative phase were used to construct a set of items that explore how often Thai students exhibited the behaviors when they were

outside school. According to the table in Appendix C, the levels of the majority of the out-of-class behaviors practiced by the respondents are at medium high level. Almost every item obtained a mean score of above 3.00 except items 14) and 17) which are “I prepare beforehand for English classes.” and “I communicate in English with Thai friends.” respectively. Item 14) had the lowest mean score ($\bar{X} = 2.84$, S.D. = 1.27), while item 17) had the second lowest mean score ($\bar{X} = 2.9$, S.D. = 1.28).

However, there were four behaviors that approximately half of the respondents reported that they always did. Hence, they are the items that have the highest mean scores. Item “9) I familiarize myself with English / increase the exposure to English.” has the highest mean score ($\bar{X} = 4.31$, S.D. = 1). Item “11) I search for meanings of the words that I don’t know.” has the second highest mean score ($\bar{X} = 4.28$, S.D. = 0.96). Items 12) and 21) which are “I search for information or answer to my questions.” and “I connect my personal interests to English.” respectively had the third highest mean score ($\bar{X} = 4.2$, S.D. = 1.01).

Answering RQ3: What metacognitive knowledge do Thai students who learn English autonomously have?

It is apparent from the interviews that every interviewee possesses metacognitive knowledge. Their recounts reflected that they were aware of their English language learning. Various aspects of metacognitive knowledge emerged from the interviews and were categorized into themes and subthemes as follows.

| Themes | Sub-themes |
|------------------------|---|
| Person knowledge | Aware of one’s learning style |
| | Aware of one’s strengths and weaknesses |
| | Aware of one’s knowledge |
| Strategic knowledge | Have knowledge about language acquisition / language learning |
| Task knowledge | Aware of task, learning objectives |
| | Know when deliberate effort is required |
| Metacognitive strategy | Monitor one’s English language learning progress |
| | Plan one’s English language learning |
| | Evaluate one’s English language |
| Affective strategy | Satiation control |

The themes and sub-themes were used to develop a set of questions concerning learner’s metacognitive knowledge in English language learning. The questionnaire used a 5-point Likert scale. Respondents were required to answer to what degree they agreed or disagreed with the statements. The scores are ranked in ascending order with “Strongly Disagree” having the lowest score of 1 and “Strongly Agree” having the highest score of 5.

According to the table in Appendix D, the scores of most items are at medium high level. However, when considering the mean score of each item, it can be observed that the mean scores of most items are over 3.9 which is on the higher end of the score range for the medium high level. In fact, every item but one is over 3.9 The item that has the lowest mean score is Item “4) I plan my English language learning” ($\bar{X} = 3.39$, S.D. = 1.2).

The item that had the highest mean score was Item “6)I know which learning activity will help improve which aspect of my English.” ($\bar{X} = 4.1$, S.D. = 0.89) In addition, The mean scores of these items except the item that has the lowest mean score ranged from 3.9 to 4.1, with a difference of only 0.2. The gaps between the mean scores of all the items' mean scores were actually very close. Therefore, it could be concluded that there is not much difference among the items except the item that has the lowest mean score.

Answering RQ4: What factors influence autonomous English acquisition of Thai students?

The interviewees reported a variety of factors that influenced their English language learning. The recurrent factors were selected to report in this study. The influence of these factors can be categorized as either supporting or hindering English learning. Moreover, in some cases, a factor can demonstrate both positive and negative influences on English learning. The factors or themes reported in the following paragraphs are categorized into two groups namely Internal factors and External factors. Internal factors are factors that come from within the students themselves. In contrast, the external factors are those that surround the students' English learning journey. Many factors reported by the interviewees are in line with the reviewed literature. For example, the internal factor: having experience since a young age agreed with Wenden’s (1991) socialization process, and the external factors: teachers, friends, and family. In the questionnaire, respondents were required to answer the level of supporting influence and hindering influence each factor had on their English language learning experiences on a 5-point Likert Scale. However, due to limited space, only the themes and subthemes are presented in the following tables.

4.1 Internal factors

Various internal factors were reported to influence the English learning of the interviewees. However, it is worth noting that the interviewees claimed that these factors mostly had a supporting rather than a hindering influence.

| Themes | Sub-themes |
|-------------------------------|---|
| Attributes | ambitious, confident, curious, independent, interdependent, motivated, open to feedback, perseverant / persistent/consistent, responsible, risk-taking, and paying attention to details |
| Personal interests | English language, things that are related to English language |
| Objective learning English | work, going abroad, university admission, personal development |
| Experiences since a young age | - |
| Comparing oneself to others | - |

4.2 External factors

A larger number of themes and sub-themes were found and categorized as external factors. Numerous aspects of each factor were described by the interviewees and most of the factors had both supporting and hindering influences.

| Themes | Sub-themes | |
|---|---|---|
| | Supporting influence | Hindering influence |
| Teachers | non-judgmental, complimenting, encouraging / supportive, willing to help, suggesting / demonstrating learning strategies, teaching methods: Inductive method, engaging / fun, connecting real world | strict, boring, insulting |
| Friends | non-judgmental, shared personal interests, practice together / teaching friends, passive or indirect influence on English language learning | mocking |
| Family | suggesting, supportive, financial support, involvement | - |
| Social influencer /famous tutors | encouraging | - |
| Learning activities | allow students' control over learning content, boost confidence | - |
| University admission exam | motivate, work harder | pressured |
| Extra class | laying the foundation, tailored to individual's needs | - |
| Curriculum | too much focus on grammar, redundant topics | - |
| the Internet/devices | facilitate self-study, convenient | - |
| Social media | source of input, a means to practice communicating in English. | (indirect) criticisms discourage attempts to use English on social media, pressured |
| the EFL context | - | lack of input, lack of opportunities to produce output |
| the Society and culture (the Thai society) | put a high value on the English language | carping, insulting, and/or judgmental towards Thais who speak English |
| the Society and culture (Foreign pop culture) | generate interests | - |

4.3 The most important factors

A wide range of factors were reported by the interviewees. However, among these factors, some were more influential than others. After interviewing three interviewees, it was observed that there were some factors that the interviewees considered to have played more significant

roles than the other factors that they mentioned. These factors were mentioned repeatedly or elaborated extensively during the interviews. Hence, the question “Which factor is the most influential or the most important to your English learning?” was asked at the end of the interviews. In addition, the question was added as an open-ended question at the end of the questionnaire. The respondents’ answers to the question were counted. The table below shows the number of respondents who mentioned each factor. Only 336 out of 396 respondents answered the open-ended question. Many respondents mentioned only one factor as being most important, while others mentioned more than one. The table includes the top ten (out of fifty-nine) factors that were stated by the respondents. The three most important on the list namely personal interest, media and communicating with foreigners will be discussed in detail in the following section.

Table 3
The most important factor

| Factors | no. of respondents | percentages (N = 336) |
|---|---------------------------|----------------------------------|
| personal interest | 69 | 20.54% |
| media (songs, YouTube, TV series, movies, cartoon, radio, online media) | 38 | 11.31% |
| communicating with foreigners | 34 | 10.12% |
| one's objective/motivation/ self-improvement | 32 | 9.52% |
| aware of the importance of English | 30 | 8.93% |
| experience since a young age | 27 | 8.04% |
| work | 23 | 6.85% |
| extra-class | 21 | 6.25% |
| oneself (efforts, self-discipline) | 21 | 6.25% |
| family | 18 | 5.36% |
| teacher | 18 | 5.36% |

DISCUSSION

The section focuses on elaborating the key themes confirmed by the qualitative and quantitative findings to be distinctive features of Thai students’ English language autonomous learning. They were the prevalent themes in the interviews during the qualitative phase and the themes that obtained the highest or lowest mean scores in the quantitative phase. In addition, their relationships with the other themes or constructs will be revealed in the following paragraphs. The identification of these causal relationships can open up possibilities regarding the implementation of an intervention on the themes or constructs as a way to encourage autonomous learning.

Beliefs

The item which received the highest mean score, “Since most information or knowledge is in English, I believe that English is important because it enables me to broaden or deepen

my knowledge” represents the theme: Knowledge is in English. It is one of the themes which concerns learners’ beliefs about the importance of English. As mentioned in the previous section, this is an emergent theme which was not found in the reviewed literature. One of the factors that is found to be related to this belief is the internet. Several interviewees mentioned this belief in connection with websites on the internet. The excerpt from the transcription of an interviewee’s statement below is an example of when the two themes were mentioned together. According to the interviewees’ statement, it can be inferred that their beliefs about the importance of English were formed as a result of their experiences in using the internet to search for information. The relationship between the use of the internet and the development of beliefs about the importance of English provide an insight into how to foster a belief that is fundamental to autonomous learning.

“Maybe I am interested in something trivial, but there is more information about it in English than in Thai. For example, when I studied (subject name), there were very few articles in Thai on the internet about a topic. So, if I want to know more about the topic, I need to know English to access a wider variety of information. Maybe it is not just an interest but a necessity to know English in order to level up my knowledge.” (Interviewee 9)

Even though the item, “I have a positive attitude towards English,” had the lowest mean score, the mean score was at a high level. This theme emerged from the interview as many interviewees mentioned that they like learning English and their statements pointed out they have positive attitudes towards English. Several interviewees mentioned how they came to have positive attitudes towards the English language or learning English. Below is an example of their statements.

“I started to like English when I was in primary school. To be more specific, it was when I was in Grade 3. My teacher complimented my pronunciation, and from that day on I have always liked English.” (Interviewee 3)

According to the interviewees, there are various factors which made the interviewees like English, such as learning activities like games, teachers’ compliments, parents’ involvement, and songs. However, there is one common theme that exists in all the interviewees’ comments. All of the interviewees recounted the experiences from when they were young, and in these cases, they referred to a time when they were primary school students. In fact, one interviewee mentioned that it was much more fun to study English during primary school than to study it during high school. Moreover, as stated previously in this chapter, some interviewees mentioned that the memorable experiences that they had since a young age can act as a shield which prevents them from getting discouraged by the unpleasant experiences that they encountered when learning English when they grew up.

In-class learning behaviors

It is worth noting that Thai students’ autonomous learning behaviors do not include only active behaviors full of motions like taking notes, asking questions or approaching teachers but also

include inactive behaviors which may lack motions or cannot be seen directly, for example paying attention or noticing input. These behaviors are closely related to the psychological dimension of learner autonomy. This dimension is related to learners' control over cognitive processing. According to Benson (2011), this dimension receives little interest in the field of autonomy. It is connected with attention, reflection and metacognitive knowledge and it also involves the "how" of learning. More importantly, Huang and Benson (2013, p. 10) connect this dimension of control to the concept of noticing stating that "attentional process must be controlled in order for features of input to be noticed, processed and learned."

According to the interviewees' statements, several factors can be related to the behaviors. Firstly, when the interviewees were asked from where their behaviors of observed input or noticing input came, they referred to factors such as the attribute of paying attention to detail and a learning activity that directed students' attention to sounds like filling in the missing lyrics of a song. Secondly, numerous factors could be associated with learners paying attention to learning English according to the interviewees. For example, learners' beliefs about the importance of English can drive them to pay attention to English classes. Furthermore, internal factors like personal interests or personal goals and external factors such as learning activities or teachers' teaching methods can have impacts on this behavior.

On the contrary, the item "I approached teachers to practice English or ask questions about English," had the lowest mean score. The researcher was unable to detect any reasons behind the low mean score of this behavior from any interviewees since a few of them mentioned that approaching teachers is one of the learning strategies needed to improve English. Nonetheless, the behavior is related to the attribute: interdependent which is a desirable attribute of autonomous learners (Candy, 1991). However, literature about Thai students and Thai culture may be able to shed light on this matter. Deveney (2005) stated that Thai teachers have a high status in Thai culture. This could create a gap between teachers and students.

Out-of-class learning behaviors

The out-of-class behavior that has the highest mean score was "I familiarize myself with English / increase the exposure to English." This behavior is in line with the learning strategy, "Use wider world to enlarge exposure to second language (television, radio, second-language books, or newspapers, movies)," stated in Wenden (1991). This behavior connected to two factors namely, the EFL context and learners' metacognitive knowledge concerning language learning. Firstly, the EFL context is considered as a factor that hinders English language learning in the present study because of the lack of exposure to the target language. However, Smith et al. (2018) claims that autonomous learning is indispensable in a context with insufficient exposure to English. This can be the reason for the high mean score in the behavior. According to Smith et al. (2018), autonomous learners were found to be able to exploit out-of-school resources to compensate for the restrictions of their context.

Secondly, another factor related to this factor is a learners' knowledge about English language learning or language acquisition. Statements from many interviewees suggest that they were very well aware that a large amount of exposure to the target language is required in order to learn the language successfully.

On the contrary, the out-of-class behavior, “I prepare beforehand for English classes,” had the lowest mean score. This behavior emerged from an interviewee who mentioned that she had to prepare before class because she was falling behind in class. She decided to put more effort in and study independently before each class. Nonetheless, the quantitative findings suggest that this behavior is not practiced very often by Thai students.

Metacognitive knowledge

The quantitative findings suggest that most respondents agreed that they have the metacognitive knowledge and strategies that were identified to be possessed by Thai autonomous learners in the qualitative phase. All but one item’s mean scores was over 3.9. The only item that scored less than 3.9 is the item that had the lowest mean score. This item, “I plan my English language learning,” represents the theme of metacognitive strategy: planning, emerged from the qualitative phase. According to the qualitative findings, when the interviewees were asked if they plan their English language learning, they often referred to planning their self-study to prepare for the university admission exam. Moreover, this strategy was not only used for English but also for other subjects.

The item that had the highest mean score was “I know which learning activity will help improve which aspect of my English.” This item represents the theme of Task knowledge: aware of tasks or learning objectives. The excerpts of the interviewees statement below are examples of how task knowledge influences learners’ behaviors. It can be seen from the excerpts that when learners understand why a learning activity or a task was assigned, they become more willing to participate and exhibit the desirable behaviors, including autonomous learning behaviors.

“I try to respond to the questions asked by my teachers because I know that the teachers want us to practice speaking as much as we can in class.” (Interviewee 1)

Q: Is there an in-class learning activity that you like?

“It is probably giving presentation. The teacher would let us choose a topic and then we prepared and gave a presentation in front of the class.”

Q: Why do you like this activity?

“I think it is an all-round practice. I had to write a script, search for information by myself, and practice speaking.” (Interviewee 6)

Factors

Numerous factors and their causal relationships with the participants’ beliefs, learning behaviors, metacognitive knowledge were revealed. Brief details regarding the three most important factors on the list will be discussed in detail in the following paragraphs.

The factor with the highest mentions was ‘personal interest’ with sixty-nine respondents mentioning that their personal interest was the most important factor supporting their English learning. The answers of the respondents in the questionnaire regarding this topic were similar to the interviewees’ answers during the qualitative phase. Both groups of participants stated that they learned English while enjoying their personal interests. For example, many respondents said that while they were playing online games, they were exposed to or got to practice using English in real-life situations

The factor ‘media’ ranks second on the list. Thirty-eight respondents considered various media sources namely songs, YouTube, TV series, movies, cartoons, radio, and online media as the main factors that supported their English learning. Most of the respondents regarded this factor as a source of English input rather than a platform to practice producing English output.

The factor ‘communicating with foreigners’ ranks third on the list. Thirty-four respondents stated that communicating in English with foreigners was the most important factor that supported English language learning. Many respondents mentioned communicating with foreigners in real-life situations helped them realize the actual level of their English language abilities. Some of the respondents stated that only when they had the opportunity to communicate with a foreigner did they realize they had to work harder or what they learned in class was not applicable.

CONCLUSION AND IMPLICATIONS OF THE STUDY

The findings of the present study provide insight into Thai students’ autonomous learning. The study captured Thai students’ autonomous learning through the exploration of four main constructs: learner beliefs, learning behaviors, metacognitive knowledge, and factors influencing English learning. Moreover, causal relationships between the factors influencing English learning and the other three constructs were revealed. These relationships suggest that the manipulation of the factors may help in fostering autonomous learning in the Thai context.

The underlying goal of this study is to help inform future practices of fostering autonomous learning. Before designing and carrying out a plan to foster autonomous learning of Thai students, a practitioner or a policymaker can find and use in-depth information about Thai students’ English language learning experiences, their beliefs about English language and learning it, their in-class and out-of-class learning behaviors, and the factors that influence their English language learning in the present study to help them make informed decisions.

In agreement with the literature which pointed out that autonomous learning is a complicated and multifaceted concept the findings of the present study reveal that the relationships among the constructs that are encompassed by autonomous learning are entangled, and inseparable. In addition, the interviewees’ narration of their English learning experiences in this study suggests that the development of autonomous learning is a gradual process involving various factors. Thus, it is reasonable to propose that it takes more than a single intervention spanning

over a short period and focuses on one construct to foster autonomous learning. In contrast, the researcher puts forward a holistic approach that takes the four main constructs of autonomous English learning into account. A logical way to utilize the findings of the present study to foster autonomous learning would be to develop metacognitive knowledge and to manipulate the factors identified in the study with the aim that it will result in the development of the desired beliefs and behaviors. To clarify this proposition, two suggestions are described below.

The first example proposes an initial step to establish autonomous learning. Positive beliefs or attitudes towards English which are prerequisites for independent learning were found to be influenced by several factors in this study such as teachers' compliments, fun and engaging learning activities, and personal interests that are related to English. Providing opportunities for students to experience compliments, fun activities, and the connection between their personal interests and English from a young age can help increase the chance of them having positive attitudes towards English and, vice versa, increase the possibility of becoming self-directed learners. The second example demonstrates how autonomous learning can be further supported. According to the findings and the literature, English input in the EFL context is scarce, so Thai students rely more on sources of input from outside of the classroom. The sources that they use come mainly from the internet. In this case, providing students with enough fundamental knowledge of English, introducing suitable sources, and developing their information-seeking skills will make it easier for them to learn English independently and autonomously.

THE AUTHORS

Pitchayapa Wongyimyong is a PhD candidate in the English Language Teaching program at Thammasat University's Language Institute. She received her M.A. in TESOL from the Institute of Education, University College London, UK. Her research interests include autonomous learning, language teaching methodology and second language acquisition. pitchayapa.wyy@gmail.com

Kittitouch Soontornwipast is an Assistant Professor at the Language Institute, Thammasat University, Thailand. He received his Ed.D. in Professional Development from Victoria University, Australia. His research interests include teaching methodology, materials development, mixed methods research, and qualitative research. kittitouch.s@litu.tu.ac.th

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Appendix A

Learners' beliefs and attitudes towards English and learning (n = 396)

| Item | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | \bar{x} | S.D. | Level |
|--|-------------------|-------------|---------------|----------------|----------------|-----------|------|-------|
| 1) I believe that English is important because it is used all over the world. | 3 (0.8%) | 6 (1.5%) | 41 (10.4%) | 103 (26%) | 243 (61.4%) | 4.46 | 0.8 | High |
| 2) I believe that English is important because it is useful or advantageous at work. | 2 (0.5%) | 7 (1.8%) | 25 (6.3%) | 85 (21.5%) | 277 (69.9%) | 4.59 | 0.73 | High |
| 3) Since most information or knowledge is in English, I believe that English is important because it enables me to broaden or deepen my knowledge. | 1 (0.3%) | 3 (0.8%) | 28 (7.1%) | 73 (18.4%) | 291 (73.5%) | 4.64 | 0.67 | High |
| 4) I believe that I am the one who is responsible for my English language learning. | 2 (0.5%) | 4 (1%) | 43 (10.9%) | 87 (22%) | 260 (65.6%) | 4.51 | 0.77 | High |
| 5) I have a positive attitude towards English. | 7 (1.8%) | 6 (1.5%) | 61 (15.4%) | 114 (28.8%) | 208 (52.5%) | 4.29 | 0.9 | High |
| 6) I think that it is good to be able to communicate in English well. | 2 (0.5%) | 5 (1.3%) | 44 (11.1%) | 67 (16.9%) | 278 (70.2%) | 4.55 | 0.78 | High |
| 7) I believe that we should never stop learning. | 2 (0.5%) | 6 (1.5%) | 33 (8.3%) | 66 (16.7%) | 289 (73%) | 4.6 | 0.75 | High |
| 8) I think that learning English is a never-ending self-improvement. | 2 (0.5%) | 2 (0.5%) | 36 (9.1%) | 60 (15.2%) | 296 (74.7%) | 4.63 | 0.71 | High |

Appendix B

In-class learning behaviors (n = 396)

| Items | Never | Rarely | Sometimes | Often | Always | \bar{x} | S.D. | Level |
|---|---------------|---------------|----------------|----------------|----------------|-----------|------|----------------|
| 1) I take notes when I study English. | 12 (3%) | 41 (10.4%) | 110 (27.8%) | 127 (32.1%) | 106 (26.8%) | 3.7 | 1.07 | Medium High |
| 2) I note down new or important vocabulary in an English class. | 10 (2.5%) | 28 (7.1%) | 86 (21.7%) | 116 (29.3%) | 156 (39.4%) | 3.96 | 1.06 | Medium High |
| 3) I actively participate in an English class | 16 (4%) | 41 (10.4%) | 130 (32.8%) | 99 (25%) | 110 (27.8%) | 3.62 | 1.12 | Medium High |
| 4) I pay attention to studying English in class. | 9 (2.3%) | 17 (4.3%) | 69 (17.4%) | 146 (36.9%) | 155 (39.1%) | 4.06 | 0.97 | High |
| 5) I approach teachers to practice English or ask questions about English. | 42 (10.6%) | 83 (21%) | 116 (29.3%) | 73 (18.4%) | 82 (20.7%) | 3.18 | 1.27 | Medium High |
| 6) I study English with my friend(s). | 32 (8.1%) | 67 (16.9%) | 123 (31.1%) | 102 (25.8%) | 72 (18.2%) | 3.29 | 1.18 | Medium High |
| 7) I help my friend(s) with English. | 40 (10.1%) | 64 (16.2%) | 99 (25%) | 108 (27.3%) | 85 (21.5%) | 3.34 | 1.26 | Medium High |
| 8) I ask my friend(s) for help when I have a question about English. | 29 (7.3%) | 59 (14.9%) | 82 (20.7%) | 111 (28%) | 115 (29%) | 3.57 | 1.25 | Medium High |
| 9) I observe language use and usage in English language lessons in the classroom. | 9 (2.3%) | 15 (3.8%) | 99 (25%) | 128 (33.3%) | 145 (36.6%) | 3.97 | 0.99 | Medium High |
| 10) I observe teachers', friends', or other audio sources' sounds for the correct pronunciation of English. | 2 (0.5%) | 16 (4%) | 71 (17.9%) | 126 (31.8%) | 181 (45.7%) | 4.18 | 0.9 | High |

Appendix C

Out-of-class learning behaviors (n = 396)

| Items | Never | Rarely | Some times | Often | Always | \bar{x} | S.D. | Level |
|---|---------------|---------------|----------------|----------------|----------------|-----------|------|-------------|
| 1) I take extra English classes outside of school. | 88 (22.2%) | 64 (16.2%) | 75 (18.9%) | 91 (23%) | 78 (19.7%) | 3.02 | 1.44 | Medium High |
| 2) I choose to take the extra English classes on my own | 84 (21.2%) | 44 (11.1%) | 59 (14.9%) | 85 (21.5%) | 124 (31.3%) | 3.31 | 1.53 | Medium High |
| 3) I learn and practice English outside the classroom independently. | 7 (1.8%) | 37 (9.3%) | 89 (22.5%) | 101 (25.5%) | 162 (40.9%) | 3.94 | 1.08 | Medium High |
| 4) I do practice tests when I learn English outside the classroom. | 35 (8.8%) | 79 (19.9%) | 100 (25.3%) | 87 (22%) | 95 (24%) | 3.32 | 1.28 | Medium High |
| 5) I read textbooks when I learn English outside the classroom. | 45 (11.4%) | 99 (25%) | 113 (28.5%) | 74 (18.7%) | 65 (16.4%) | 3.04 | 1.25 | Medium High |
| 6) I read study guides when I learn English outside the classroom. | 46 (11.6%) | 75 (18.9%) | 102 (25.8%) | 98 (24.7%) | 75 (18.9%) | 3.2 | 1.27 | Medium High |
| 7) I do the exercises in study guides when I learn English outside the classroom. | 51 (12.9%) | 76 (19.2%) | 113 (28.5%) | 86 (21.7%) | 70 (17.7%) | 3.12 | 1.27 | Medium High |
| 8) I create opportunities for practicing English. | 27 (6.8%) | 46 (11.6%) | 104 (26.3%) | 96 (24.2%) | 123 (31.1%) | 3.61 | 1.23 | Medium High |
| 9) I familiarize myself with English / increase the exposure to English | 9 (2.3%) | 17 (4.3%) | 51 (12.9%) | 84 (21.2%) | 235 (59.3%) | 4.31 | 1 | High |
| 10) I imitate or repeat after English speakers that I hear or watch. | 10 (2.5%) | 23 (5.8%) | 85 (21.5%) | 92 (23.2%) | 186 (47%) | 4.06 | 1.07 | High |
| 11) I search for meanings of the words that I don't know. | 5 (1.3%) | 20 (5.1%) | 54 (13.6%) | 98 (24.7%) | 219 (55.3%) | 4.28 | 0.96 | High |
| 12) I search for information or answers to my questions. | 3 (0.8%) | 18 (4.5%) | 73 (18.4%) | 104 (26.3%) | 198 (50%) | 4.2 | 0.95 | High |
| 13) I search for English language learning strategies. | 29 (7.3%) | 46 (11.6%) | 114 (28.8%) | 89 (22.5%) | 118 (29.8%) | 3.56 | 1.23 | Medium High |
| 14) I prepare beforehand for English classes. | 71 (17.9%) | 94 (23.7%) | 106 (26.8%) | 76 (19.2%) | 49 (12.4%) | 2.84 | 1.27 | Medium |

| Items | Never | Rarely | Some times | Often | Always | \bar{x} | S.D. | Level |
|---|---------------|---------------|----------------|----------------|----------------|-----------|------|-------------|
| 15) I review or prepare for English tests by summarizing, paraphrasing, mind mapping, or listing. | 58 (14.6%) | 57 (14.4%) | 105 (26.5%) | 96 (24.2%) | 80 (20.2%) | 3.21 | 1.32 | Medium High |
| 16) I practice English or prepare for English tests with friends. | 33 (8.3%) | 74 (18.7%) | 126 (31.8%) | 96 (24.2%) | 67 (16.9%) | 3.23 | 1.18 | Medium High |
| 17) I communicate in English with Thai friends. | 75 (18.9%) | 98 (24.7%) | 99 (25%) | 78 (19.7%) | 46 (11.6%) | 2.9 | 1.28 | Medium low |
| 18) I apply the grammar rules that I learned when communicating in English. | 23 (5.8%) | 59 (14.9%) | 130 (32.8%) | 112 (28.3%) | 72 (18.2%) | 3.38 | 1.12 | Medium High |
| 21) I connect my personal interests to English. | 7 (1.8%) | 21 (5.3%) | 66 (16.7%) | 95 (24%) | 207 (52.3%) | 4.2 | 1.01 | High |
| 22) I connect my daily life to English. | 7 (1.8%) | 23 (5.8%) | 73 (18.4%) | 87 (22%) | 206 (52%) | 4.17 | 1.03 | High |
| 23) I talk to myself in English. | 10 (2.5%) | 33 (8.3%) | 98 (24.7%) | 93 (23.5%) | 162 (40.9%) | 3.92 | 1.1 | Medium High |
| 24) I observe English grammar in use. | 9 (2.3%) | 42 (10.6%) | 100 (25.3%) | 109 (27.5%) | 136 (34.3%) | 3.81 | 1.09 | Medium High |
| 25) I observe English vocabulary in use. | 8 (2%) | 27 (6.8%) | 89 (22.5%) | 113 (28.5%) | 159 (40.2%) | 3.98 | 1.04 | Medium High |
| 26) I try to remember English vocabulary. | 6 (1.5%) | 28 (7.1%) | 88 (22.2%) | 114 (28.8%) | 160 (40.4%) | 3.99 | 1.02 | Medium High |

Appendix D

Metacognitive knowledge (n = 396)

| Items | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree | \bar{x} | S.D. | Level |
|---|-------------------|---------------|----------------|----------------|----------------|-----------|------|-------------|
| 1) I am aware of my learning styles for English language learning. | 8 (2%) | 16 (4%) | 92 (23.2%) | 135 (34.1%) | 145 (36.6%) | 4 | 0.97 | High |
| 2) I know how to learn English effectively. | 7 (1.8%) | 32 (8.1%) | 88 (22.2%) | 137 (34.6%) | 132 (33.3%) | 3.9 | 1.01 | Medium High |
| 3) I monitor my own learning. | 4 (1%) | 19 (4.8%) | 92 (23.2%) | 159 (40.2%) | 122 (30.8%) | 3.95 | 0.91 | Medium High |
| 4) I plan my English language learning. | 31 (7.8%) | 57 (14.4%) | 120 (30.3%) | 102 (25.8%) | 86 (21.7%) | 3.39 | 1.2 | Medium High |
| 5) I know my strengths and weaknesses in English. | 15 (3.8%) | 24 (6.1%) | 92 (23.3%) | 113 (28.5%) | 152 (38.4%) | 3.92 | 1.1 | Medium High |
| 6) I know which learning activity will help improve which aspect of my English. | 3 (0.8%) | 15 (3.8%) | 78 (19.7%) | 145 (36.6%) | 155 (39.1%) | 4.1 | 0.89 | High |
| 7) I know when my deliberate effort is needed. | 4 (1%) | 21 (5.3%) | 75 (18.9%) | 131 (33.1%) | 165 (41.7%) | 4.09 | 0.95 | High |
| 8) I know how to make it easier or less boring to learn English. | 10 (2.5%) | 23 (5.8%) | 102 (25.8%) | 122 (30.8%) | 139 (35.1%) | 3.9 | 1.03 | Medium High |
| 9) I am aware of my background knowledge. | 7 (1.8%) | 30 (7.6%) | 86 (21.7%) | 140 (35.4%) | 133 (33.6%) | 3.91 | 1.01 | Medium High |
| 10) I know my approximate English proficiency level. | 5 (1.3%) | 20 (5.1%) | 92 (23.2%) | 157 (39.6%) | 122 (30.8%) | 3.94 | 0.92 | Medium High |