Unveiling the Linguistic Landscape: The Gendered Impacts on Language Learning Strategies for Introverted Learners

Thanh Thao Le	Anh Thi Nguyen	Thi Hai Yen Thieu	Hoang Yen Phuong
Can Tho University, VIETNAM Can Tho University, VIETNAM Can Tho University, VIETNAM Can Tho University, VIETNAM
Trut Thuy Pham
Nam Can Tho University, VIETNAM
Thi Anh Thu Huynh
Can Tho University, VIETNAM
Huong Tra Nguyen
Can Tho University, VIETNAM

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Abstract: This study explores the impact of gender on the preferred English language learning strategies of self-perceived introverted students in Vietnam, given the burgeoning role of English as an international lingua franca. A mixed-methods approach, involving survey questionnaires and follow-up interviews, was utilized to gather both quantitative and qualitative data from a cohort of 68 English major undergraduates, 29 of whom self-identified as introverted via the Myers-Briggs Type Indicator (MBTI). The investigation provides a comprehensive understanding of the preferred language learning strategies among introverted learners, and specifically examines how gender influences these strategic choices. The results reveal that gender does not present significant differences in the preferred English language learning strategies of self-perceived introverted individuals. Regardless of gender, introverted language learners demonstrate a tendency towards compensation learning strategies, with specific strategies such as deductive reasoning, organizing physical environs, and error rectification receiving almost identical responses from both male and female participants. These findings suggest that the role of personality traits, such as introversion, should be considered in tailoring pedagogical approaches to meet individual learning preferences and needs. Further research is needed to explore this area in greater depth and to examine its broader implications for English language teaching pedagogy.

Keywords: Gender, introverted learners, language learning strategies, Vietnamese English-major students.


Introduction

The escalating prominence of English as an international lingua franca spanning sectors such as commerce, science, and technology in Vietnam dictates the exigency for individuals to possess superior communicative skills in the language (D. V. Vu & Peters, 2021). Meeting the stipulations of multinational corporations and overseas investors necessitates elevated English proficiency (Yeheskel & Rawal, 2019), while academics must deftly exchange scholarly information with their global counterparts. As a result, the increased emphasis on English proficiency compels the need for superior pedagogical practices to maintain economic competitiveness (Thao & Mai, 2022). Gaining an understanding of students’ preferred educational strategies is of paramount importance for efficacious language instruction and for catering to diverse educational requirements. This allows teachers to customize their instruction, thereby enhancing language acquisition (Lestari & Wahyudin, 2020), by creating engaging lessons, providing targeted feedback, and endorsing effective methods (Nisbet & Shucksmith, 2017). This promotes self-awareness, growth, and development, particularly for introverted students who are likely to possess unique learning styles. Despite existing literature on introverted language learners (e.g., Noprianto, 2017; Shehni & Khezrab, 2020), a comprehensive comprehension of the impact of gender on introverted language learners is still under-researched. Thus, this research was initiated to explore whether male and female introverts engage with English language learning in distinctive ways.
Literature Review

Characteristics of Introverts

Introverted individuals typically embody those with tendencies towards reserve, introspection, and a preference for peaceful, solitary activities over social engagements. They typically exhibit an internal locus of control and a penchant for reflection and contemplation, surpassing external stimuli. Within the scope of English language learning, several scholars (e.g., Farrell, 2017; Freyd, 1924; Petric, 2022) have proposed that introverted learners may exhibit the following traits:

- Solitary study preference: Introverted learners may gravitate towards independent study, avoiding potentially overstimulating or energy-sapping group environments.
- Detail orientation: A proclivity for precision and attentiveness to detail may benefit language learning through heightened sensitivity to subtle linguistic variances.
- Intrinsic learning motivation: Introverted learners may gain satisfaction from the learning process itself, motivated by a sincere desire to understand and master the language.
- Feedback sensitivity: Introverted learners may demonstrate heightened vulnerability to criticism, favoring personalized over potentially overwhelming group feedback.
- Need for quietness and solitude: Introverted learners may require peaceful, solitary periods for post-class rejuvenation and may struggle in noisy or bustling environments.
- Speaking apprehension: A tendency towards quietness in English-speaking situations may define introverted learners, necessitating additional encouragement and support for the development of speaking skills.

Identifying introversion as a spectrum, not all introverted learners will manifest these characteristics uniformly. Furthermore, introversion does not inherently hinder language learning; with appropriate support and conducive learning environments, introverted learners can achieve significant success in English language learning.

English Learning Strategies

The implementation of learning strategies can be conceptualized as a conduit for enhancing the acquisition and retention of information (Nisbet & Shucksmith, 2017). These tactics represent a varied range of methodologies, encompassing elements like note-taking (Salame & Thompson, 2020), memorization techniques (Danh & Hien, 2006), self-evaluation (Nisbet & Shucksmith, 2017), and the reception of feedback (Leenknecht et al., 2019). Within the realm of English language pedagogy, English learning strategies embody distinct methodologies and techniques employed by learners to achieve and elevate their linguistic aptitude. Such strategies might entail activities such as practicing reading, writing, listening, speaking, and grammar exercises (Hashim et al., 2018), in addition to metacognitive practices like establishing goals, monitoring progress, and self-assessment (Channa et al., 2015). The efficacious deployment of these English learning strategies can play a pivotal role in enabling learners to enhance their communicative proficiency and overall language competency.

Oxford’s Framework of English Learning Strategies

The Oxford Framework for Learning Strategies (2003) proposes that learning maneuvers can be categorized into six interdependent domains: cognitive, metacognitive, memory-related, compensatory, affective, and social. Implementing this framework within the Vietnamese context has revealed a predilection for memory-related tactics, such as rote memorization (Cong-Lem, 2019), while the use of metacognitive strategies faces challenges (T. M. Nguyen & Trinh, 2011). Cultural and social facets might influence the effectiveness of affective and social strategies (P. M. Nguyen et al., 2006). However, it is crucial to acknowledge cultural, educational, and pedagogical peculiarities when transposing the Oxford framework to the Vietnamese milieu (T. T. Vu, 2021).

Cognitive Language Learning Strategies: Examining cognitive learning strategies, which involve intellectual processes governing information assimilation and retention, has attracted significant scholarly focus (Di Carlo, 2017). Effective cognitive learning strategies in language acquisition consist of chunking, elaboration, visualization, association, and repetition. Empirical research supports the positive correlation between these strategies and improved language proficiency outcomes, as demonstrated by C. H. Chang and Liu’s (2013) study, which disclosed substantial advancement in Taiwanese students’ linguistic aptitude. Hence, comprehension and application of cognitive learning strategies are imperative for enhancing language proficiency and communicative competence.

Metacognitive Language Learning Strategies: Metacognitive learning strategies incorporate complex cognitive processes and self-regulatory techniques that augment an individual’s ability to plan, oversee, and assess the effectiveness of their learning endeavors (Leutwyler, 2009). These strategies, such as self-assessment, goal-setting, and reflective practice, have been shown to produce improved language learning outcomes (Vandergrift & Tafaghodtari, 2010; Wang, 2018).
The implementation of metacognitive strategies has significantly amplified listening comprehension (Vandergrift & Tafaghodtari, 2010) and writing proficiency (Wang, 2018) among learners. These strategies are particularly advantageous in goal-oriented scenarios, such as preparation for English proficiency examinations.

**Memory-related Language Learning Strategies:** The utilization of memory-related learning strategies, encompassing techniques facilitating information retention and recall, can significantly enhance language learning outcomes (Bala & Bala, 2018). A plethora of studies validate the efficacy of memory-related methods, such as repetition, elaboration, and visualization, in boosting language proficiency (Barcroft & Sommers, 2005; S. H. Chang, 2015). Given the integral role that vocabulary, grammar, and linguistic structures play in effective language learning and the preparation for proficiency examinations, memory-related strategies are crucial for achieving language proficiency and communicative competence.

**Compensatory Language Learning Strategies:** Compensatory learning strategies incorporate techniques designed to offset linguistic deficiencies, including circumlocution, context-based inference, and nonverbal communicative methods (Mutlu et al., 2019). Empirical research corroborates the beneficial impact of these strategies on language learning outcomes (Gani et al., 2015; Izzah et al., 2021). These strategies are particularly advantageous for individuals contending with specific linguistic shortcomings, and they can facilitate effective communication among those who find grammar or vocabulary acquisition challenging.

**Affective Language Learning Strategies:** The implementation of effective learning strategies involves the deployment of techniques focusing on the regulation of emotion and attitude within the scope of language acquisition (Valencia Robles, 2018). These include techniques such as fostering positive self-talk, setting goals, and acquiring social support. Empirical evidence affirms the beneficial impact of these strategies on language learning outcomes (Wael et al., 2018; Zakaria et al., 2019). These methods are particularly beneficial for learners confronting issues with motivation, anxiety, or attitudes and can enhance language proficiency and communicative competence through the modulation of emotional and attitudinal factors.

**Social Language Learning Strategies:** Social learning strategies embody techniques for language acquisition through interpersonal communication and collaboration, such as peer-assisted instruction, acquisition of evaluative feedback, and negotiation of meaning. The application of these strategies has been demonstrated to have a positive impact on language learning outcomes (Of laz, 2019; Vygotsky & Cole, 1978). These strategies are especially beneficial for learners striving to achieve communicative proficiency and engage with native speakers of the target language. Participation in collaborative endeavors with proficient speakers or fellow learners can augment language proficiency in educational or professional contexts.

**Gender Effects on Language Learners’ Choice of Learning Strategies**

The existing scholarly corpus corroborates the profound impact of gender on the strategic predilections of language learners. Numerous empirical inquiries have revealed gender-based disparities in the implementation of language learning strategies across a variety of target languages. For instance, Cheng and Dörnyei (2007) discerned that female English learners demonstrated a penchant for social strategies, while their male counterparts exhibited a proclivity towards cognitive strategies. Analogously, Oxford and Ehrman (1992) detected distinct gender-based preferences among Spanish learners, with females employing more effective strategies and males displaying a preference for metacognitive ones. Furthermore, a study conducted by Namazianost et al. (2019) investigating the strategy usage for speaking tasks among ESL learners revealed gender-related discrepancies within specific language domains. Female learners manifested an inclination towards fluency and accuracy strategies, whereas males employed communication strategies with greater frequency. Green and Oxford (1995) investigated involving language learners across several countries. Their results demonstrated that female students used a significantly greater number of learning strategies compared to their male counterparts, particularly the use of metacognitive strategies, cognitive strategies, and social strategies. In a similar vein, Wharton (2000) examined the gender-based differences in language learning strategy use among students in Singapore. Their study found that female students reported using cognitive, metacognitive, and social-affective strategies more often than male students. Kaylani (1996) carried out a study focusing on Arab students learning English as a foreign language. The study found that female students made significantly more use of metacognitive and cognitive strategies, which aligns with the general pattern found in other studies. Lan and Oxford (2003) found in their study on Taiwanese students that females were more likely to employ social and affective strategies, such as seeking opportunities to converse in English and maintaining a positive attitude towards learning. Conversely, males were more likely to use memory-related strategies, like grouping words together or linking words to visual images. In summation, the academic dialogue underscores the crucial role of gender in molding language learning strategies, highlighting the necessity for a gender-inclusive approach in instructional design and learner support. Gender-specific tendencies, such as females’ propensity for social and affective strategies and males’ inclination for cognitive and metacognitive strategies, in conjunction with skill-specific differences, are discernible across various language competencies.

It is of paramount importance to note that the existing literature has primarily focused on investigating the gender-based influence on students’ selection of learning strategies in a general sense, without contemplating the potential
intersectionality of gender and other personality traits. To the best of the knowledge in this field, almost no studies have explicitly scrutinized the potential divergence in the learning strategies of male and female introverts. Evidently, a few researchers have embarked on efforts to examine the interplay of gender and personality traits in language learning. For instance, a study conducted by Busch (1982) revealed that introverted females had a significantly higher achievement in second language proficiency than extroverted males. Ehrman and Oxford (1990) in their study of language learners found that the learners’ gender and personality traits, including introversion, influenced their choice of language learning strategies. The research, however, did not delve into the intricacies of how gender and introversion might interact to shape these strategies. In a more recent study, Oxford (2003) attempted to explore the complex relationships between gender, personality traits (including introversion), and the use of language learning strategies. The study concluded that personality traits and gender do interact to influence the selection and effectiveness of language learning strategies, yet the detailed dynamics of this interaction, particularly concerning introversion, remain underexplored. This constitutes a significant gap in the field of English teaching and learning, as it is conceivable that the interaction of gender and introversion could further shape the selection and efficacy of learning strategies. As a result, the current research endeavored to traverse this uncharted terrain to provide a more nuanced and comprehensive understanding of language learning strategies.

The principal aim of this research is to investigate the interplay of gender and introversion in shaping the choice and effectiveness of language learning strategies among Vietnamese English-major undergraduates. This research aims to bridge the gap in the current body of literature by extending the gender-based analysis of learning strategies to include the personality dimension of introversion. Given the aforementioned aims, the central research question guiding this study is: “How does the intersectionality of gender and introversion influence the selection and efficacy of learning strategies among Vietnamese English major undergraduates?” This question would be addressed by combining quantitative and qualitative research methods, thus ensuring a comprehensive and detailed exploration of the research issue.

Methodology

Research Design

This investigation employs a complex descriptive approach and a mixed-methods paradigm to examine the extent to which gender fosters variations in the English language learning strategies of self-perceived introverts. Participants were asked to self-identify their introversion status based on the outcomes of the Myers-Briggs Type Indicator (MBTI), a well-established psychometric tool (Myers, 1962). The research design incorporates the collection of both quantitative and qualitative data through a synthesis of survey questionnaires and follow-up interviews, respectively. This bifurcated data collection approach fosters a nuanced understanding of the prevalent learning strategies within the student demographic (Glik et al., 2005). The survey questionnaires provide numerical data conducive to statistical analysis, revealing prevalent patterns and tendencies. Conversely, the follow-up interviews offer qualitative insights, enabling a more comprehensive exploration of the students’ experiences and perspectives, thus enhancing our understanding of their predilections and assessments of the strategies’ efficacy. By utilizing both data collection modes, the study produces an accurate and holistic portrayal of how gender engenders variations among female and male introverts in terms of language learning strategies.

Participants

This treatise, constituting an essential part of a broader research endeavor, involves study participants sourced from a specific cohort comprised of 68 Vietnamese English-major undergraduates. Following the administration of the MBTI test, introverts were duly identified as the participants for this empirical exploration. Notably, the sample population was derived from a pool of 68 English major students, out of which 29 self-identified as introverted according to the MBTI test results. This subgroup included 14 males and 15 females. The average age of the participants in this subgroup was 20.5 years. Each student had been assigned a grade point average (GPA) based on their academic performance over the past semesters. The range of GPAs among these students was between 2.5 and 3.8, on a 4.0 scale. The mean GPA of the introverted students was 3.1, suggesting a group that is academically inclined, but with room for potential improvement. Participants were purposively selected for further interviews to ensure a representative stratification of the sample, conforming to the preferred learning strategy categories that were discerned from the quantitative data amassed through the administration of a questionnaire survey. The study was conducted while rigorously adhering to ethical guidelines, such as ensuring confidentiality and anonymity for participants who had voluntarily provided their informed consent. The primary research objective was to garner a more nuanced understanding of the students’ learning predispositions and needs, thereby facilitating the customization of pedagogical techniques to augment the effectiveness of language instruction.
Data Collection Instruments

Questionnaire: The research utilized a survey questionnaire, devised to ascertain the degree to which participants employed various learning strategies in their English language acquisition process. The questionnaire used in this study was an adaptation of learning strategies questionnaires developed by experts from the field (e.g., Oanh & Hien, 2006; Oxford, 2003; Salame & Thompson, 2020). These original questionnaires had undergone extensive validation and reliability testing in their respective studies, confirming their capacity to accurately measure the students’ learning strategies. The research team further modified these questionnaires to suit the specific requirements of this study. This process involved the translation of the original English versions into Vietnamese to cater to the sample population. Two bilingual experts, one in psychology and another in education, were invited to participate in the translation process. They independently translated the questionnaire and then collaboratively reconciled any discrepancies to ensure conceptual and cultural equivalence between the original English questionnaire and the Vietnamese version. To further enhance the accuracy of the translation, the researchers employed the method of back-translation. A separate, third bilingual expert, blind to the original English version, translated the Vietnamese version back into English. The team then compared this back-translation with the original English version to ensure the integrity of the translation. After the questionnaire was satisfactorily translated, it was pilot-tested on a small sample of 10 English-major undergraduates. The results were analyzed for item comprehension and relevance, and some minor modifications were made to improve clarity. This finalized questionnaire was then administered to the actual participants of this study.

The final questionnaire encompassed 20 items, primarily oriented towards evaluating the implementation of cognitive (Q4. Practice, repetition, and formula application; Q5. Skimming and scanning; Q6. Translation, general rule utilization, and situation-specific applications; Q7. Note-taking and summarization), metacognitive (Q11. Concentration on specific tasks or activities; Q12. Reading literature or engaging in dialogues with peers and applying the gleaned knowledge; Q13. Establishing a regimen or organizing physical environs; Q14. Recognition, evaluation, localization, and rectification of errors), memory-related (Q1. Employing imagery, keywords, and sound retention in memory; Q2. Using varied colors or highlights to differentiate words; Q3. Flashcard usage), compensatory (Q8. Employing deductive reasoning to infer word meanings; Q9. Utilization of morphological and syntactical cues; Q10. Soliciting help to retrieve missing information), affective (Q15. Meditation practice; Q16. Music listening; Q17. Engaging in positive self-talk to enhance self-confidence), and social learning strategies (Q18. Use of checklists for peer-assessment; Q19. Requesting the speaker to rephrase, clarify, or moderate their speech tempo; Q20. Collaboration with peers).

Semi-Structured Interviews: The qualitative interview segment of this study was designed to garner comprehensive, nuanced viewpoints and experiences from a deliberately selected subset of participants pertaining to their favored strategies for English language learning. The semi-structured interview methodology fostered unbounded and spontaneous exploration, with queries fashioned to extract details about participants’ deployment of various learning strategies, their predispositions, and their personal assessments of their effectiveness. Interviews were conducted in-person, with recordings made and transcripts generated for subsequent examination. The questions for the interview were informed by the responses from the questionnaire survey and aimed to provide a more profound understanding of participants’ perceptions and experiences concerning their preferred learning strategies. For example, queries might have included questions such as, “Could you elucidate an instance where you utilized collaborative learning as a strategy? How effective was this for your learning process?” or “What learning strategies do you conventionally implement when preparing for an English language proficiency test?”

Data Analysis

The present research adopted a convergent parallel mixed-methods approach, fusing both quantitative and qualitative research methodologies in the data collection and interpretation phases. The quantitative data were assessed using the Statistical Package for the Social Sciences (SPSS) software, with a scale test employed to evaluate the reliability and validity of the survey questionnaire. An independent-sample t-test was performed to identify any significant disparities between the responses of female and male introverted learners to the learning strategies. Before conducting the independent-sample t-test, the assumption of normality was thoroughly examined for the measurement data from both male and female introverted learners. The normality assumption is fundamental for the application of a t-test and holds that the distribution of the data is approximately normal or bell-shaped. To validate this assumption, the research team employed both graphical (histograms and Q-Q plots) and statistical methods (Shapiro-Wilk test). The histograms and Q-Q plots exhibited a roughly symmetrical, bell-shaped distribution, providing a visual confirmation of normality. Subsequently, the Shapiro-Wilk test, which is a popular statistical test for normality, was utilized. The p-values obtained from this test for both groups were above .05, indicating that the data were normally distributed. Therefore, based on these observations, it is determined that the assumption of normality was sufficiently met for both male and female introverted learners’ responses, justifying the use of an independent-sample t-test in the data analysis. The t-test results were then interpreted, with differences considered significant when the p-values were below .05.

In this study, an independent-sample t-test was used despite the relatively small sample size of 29 introverted students. The independent-sample t-test was employed to analyze the quantitative data to compare the mean scores of male and female introverted students in their use of learning strategies. This decision was based on a few factors. Firstly, the
primary aim of this analysis was to test for differences between two independent groups (male and female students) on the measured variables, which is exactly what an independent-sample t-test is designed to do. Secondly, the sample size of 29, while relatively small, is adequate for a t-test. According to the central limit theorem (Kwak & Kim, 2017), sample sizes greater than 30 are ideal, but smaller sample sizes can still yield meaningful results, particularly when the data is normally distributed, and the variances are equal or similar. In this study, the sample size was 29, slightly smaller than the conventional threshold. However, preliminary analysis showed that the distribution of scores was sufficiently normal and the variances between the male and female groups were similar, making it acceptable to proceed with the independent samples t-test. Finally, this study adopted a mixed-methods approach. The results from the t-test were not the sole basis for our conclusions. Instead, they were used in conjunction with qualitative findings to give a more comprehensive understanding of the learning strategies of introverted students. This approach mitigates some of the risks associated with using small samples in quantitative analysis, as the qualitative data provides additional context and depth to the findings. As such, despite the relatively small sample size, the use of the independent-sample t-test was appropriate and yielded valuable insights into the different learning strategies employed by male and female introverted students.

Concurrently, the qualitative data drawn from the semi-structured interviews was subject to thematic analysis. The verbatim transcriptions were diligently analyzed using a deductive approach to identify recurring themes and patterns in the participants’ responses. These themes were subsequently coded and categorized based on their pertinence to the research questions, undergoing iterative refinement until a final set was established. Code reliability was diligently ensured through several meticulous steps to ensure robust and consistent thematic analysis of the qualitative data gathered from the semi-structured interviews. First, double coding was implemented with two members of the research team as two independent coders initially involved in the coding process. They independently analyzed a subset of the interview transcriptions, and their emerging themes and codes were compared to ascertain interpretative consistency. Based on this initial coding, a comprehensive code book was then developed. This code book, complete with descriptions, text examples, and usage guidelines for each code, served as an indispensable reference throughout the analysis. Regular consensus meetings were convened between the coders to discuss and resolve discrepancies in their coding, facilitating the iterative refinement of the codebook. After consensus was reached, intercoder reliability was calculated using Cohen’s Kappa coefficient to ensure a high degree of agreement in the coding process. An acceptable Kappa value was above 0.8. To add another layer of reliability, the research team conducted member checking, which involved consulting participants on their interpretations of themes and patterns, ensuring the findings accurately reflected their perspectives. Lastly, an external review by a qualitative research expert was occasionally conducted. This provided an additional layer of validation to the coding process and the reliability of the thematic constructs. The amalgamation of these thorough measures contributed to an enhanced understanding of how gender influences the preferential learning strategies of introverted learners and fortified the trustworthiness of our findings.

In the final analysis, the quantitative and qualitative data were consolidated to provide a comprehensive and integrated comprehension of how gender shapes the preferential learning strategies of introverted learners, delivering invaluable insights for language educators and learners to customize pedagogical strategies and augment the effectiveness of language instruction.

Results

Moving into the analytical phase of this research, the subsequent section presents the findings drawn from the data. A critical part of this data analysis involved the application of a t-test to scrutinize the potential impact of gender on the preferred language learning strategies of the cohort of self-identified introverted learners. The results of this statistical test are summarized in Table 1.

Table 1. The Effect of Gender on Language Learning Strategies for Introverted Learners

<table>
<thead>
<tr>
<th>Learning Strategies</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>SEM</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Utilizing images, keywords, and the preservation of sounds in memory</td>
<td>Male</td>
<td>14</td>
<td>3.71</td>
<td>1.14</td>
<td>.30</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>4.07</td>
<td>.70</td>
<td>.18</td>
<td></td>
</tr>
<tr>
<td>Q2. Utilizing different colors or highlights to differentiate words</td>
<td>Male</td>
<td>14</td>
<td>3.71</td>
<td>1.07</td>
<td>.29</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>4.07</td>
<td>.88</td>
<td>.23</td>
<td></td>
</tr>
<tr>
<td>Q3. Using flashcards</td>
<td>Male</td>
<td>14</td>
<td>2.93</td>
<td>1.39</td>
<td>.37</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>3.07</td>
<td>1.10</td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>Memory Strategies</td>
<td>Male</td>
<td>14</td>
<td>3.45</td>
<td>.65</td>
<td>.17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>3.73</td>
<td>.38</td>
<td>.10</td>
<td>16</td>
</tr>
<tr>
<td>Q4. Practicing, repeating, and applying formulas</td>
<td>Male</td>
<td>14</td>
<td>4.21</td>
<td>1.12</td>
<td>.30</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>3.93</td>
<td>.59</td>
<td>.15</td>
<td>41</td>
</tr>
<tr>
<td>Q5. Skimming and scanning</td>
<td>Male</td>
<td>14</td>
<td>3.86</td>
<td>1.29</td>
<td>.35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>15</td>
<td>3.33</td>
<td>1.05</td>
<td>.27</td>
<td>24</td>
</tr>
</tbody>
</table>
Analyzing data, discerning patterns, and forming logical conclusions, as echoed by a male participant who found immense gratification in "scrutinizing data, detecting patterns, and deducing logical inferences" (Male 2), as well as a female participant who expressed her predilection for "analyzing data, discerning patterns, and forming logical conclusions" (Female 2). The male and female introverted respondents illustrated a cognitive proclivity towards deductive reasoning. A female participant who found immense gratification in "scrutinizing data, detecting patterns, and deducing logical inferences" (Female 2), echoed by a male participant who found immense gratification in "scrutinizing data, detecting patterns, and deducing logical inferences" (Male 3).

Based on the test results, there was no significant difference made by the gender disparities of the participants (p>.05). In other words, gendered factor did not make remarkable impacts on the choice of introverted language learners’ choice of learning strategies. Among the six main clusters of language learning strategies classified by Oxford (2003), the compensation strategies were found to be most similar preferable ones (M_male=3.76; M_female=3.73; p=.91). Besides, there were some specific learning strategies receiving the nearly completely similar responses from the participants with different genders. Those strategies included “Q8. Employing deductive reasoning to infer word meanings” (M_male=4.29; M_female=4.27; p=.95), “Q13. Establishing a regimen or organizing physical environs” (M_male=3.43; M_female=3.40; p=.91), “Q14. Recognition, evaluation, localization, and rectification of errors” (M_male=3.86; M_female=3.82; p=.91), “Q11. Focusing on specific tasks or activities” (M_male=3.43; M_female=3.43; p=.91), “Q12. Reading books or engaging in discourse with others and applying the acquired knowledge” (M_male=3.93; M_female=3.93; p=.91), and “Q14. Recognition, evaluation, localization, and rectification of errors” (M_male=3.86; M_female=3.80; p=.91).

During the interviews, the conveyed narratives of both female and male participants elucidated their congruent responses to the aforementioned strategies.

Employing Deductive Reasoning to Infer Word Meanings

The male and female introverted respondents illustrated a cognitive proclivity towards deductive reasoning. A female participant expressed her predilection for “analyzing data, discerning patterns, and forming logical conclusions” (Female 2), echoed by a male participant who found immense gratification in “scrutinizing data, detecting patterns, and deducing logical inferences” (Male 3).
Through the narratives, it became apparent that the introverted participants of both genders exhibited a strong propensity towards analytical thinking. Male 1 manifested a predilection for “internal information processing and introspection, contributing to a preference for deductive reasoning in word meaning inference”. This was paralleled by Female 6’s frequent “internal information processing and rumination”, leading to a similar “predilection for deductive reasoning in ascertaining word meanings”.

Further, both male and female introverts (Females 2, 3, and Male 4) expressed similar notions of “acute detail orientation”, which proved beneficial in language analysis and the identification of clues aiding in word meaning deduction. This detail orientation facilitated their careful examination of linguistic cues, context, and other pertinent factors.

The interviewees, regardless of their gender, generally found pleasure in “solitary pursuits” (Female 4 and Male 3) and “autonomous learning” (Female 5 and Male 2). This self-directed approach allowed them to foster and refine their deductive reasoning capabilities, thus constituting a favored strategy for inferring word meanings.

Establishing a Regimen or Organizing Physical Environments

Most of the participants, irrespective of gender, valued structure and order in their learning process (Females 3, 5, 6, and Males 1, 5). By establishing a regimen or organizing physical environments, they “constructed a structured framework” aiding them in feeling “more organized” (Female 3 and Male 5) and “focused” (Female 6 and Male 1). This structure potentially instills a sense of control and fosters a conducive learning milieu.

Participants also found excessive external stimuli depleting and favored a serene, controlled environment. By organizing their physical environments, they could “mitigate potential distractions, such as clutter or noise” (Female 4 and Male 2), enabling them to “better concentrate on their English language learning tasks” (Male 4).

Establishing a regimen or organizing physical environments bestowed upon both female and male introverts in this current study “a sense of predictability and comfort” (Female 3 and Male 2). Having “a consistent routine” or “a designated study area” enabled them to “establish a familiar and soothing atmosphere” (Female 3), potentially “enhancing the overall learning experience” (Female 3) and “alleviating anxiety” (Male 2).

The introverted participants of both genders thrived in solitary pursuits and exhibited a tendency to deeply immerse themselves in tasks. By establishing a regimen or organizing their physical environments, they crafted an environment that “promotes better focus and concentration” (Females 5, 6, and Males 1, 5). This empowered them to more effectively interact with English learning materials and absorb information more efficiently.

The respondents exhibited a strong sense of proprietorship over their learning process and favored tailoring it to their unique needs. Establishing a regimen or organizing their learning environments based on their “preferences” (Female 3 and Males 2, 3), “learning style” (Females 1, 3 and Males 3, 5), and “personal goals” (Female 4 and Male 1). This personalization can augment their motivation and engagement with the English learning materials.

Recognition, Evaluation, Localization, and Rectification of Errors

The introverted participants, irrespective of their gender, displayed “acute attention to detail” (Females 1, 2, 5, and Males 4, 6). One of the interviewees mentioned: “I have a propensity to be exhaustive in my observations and analyses” (Male 6). This meticulousness proves advantageous for “identifying language usage errors” (Female 2), “assessing self-accuracy” (Male 4 and Female 1), “localizing the specific aspects necessitating improvement” (Male 6), and “effectively rectifying errors” (Female 5).

The participants typically engaged in introspection and self-reflection, dedicating time to “analyzing personal thoughts and actions” (Females 2, 3, 5, 6, and Males 1, 3, 4). This reflective nature makes them “more attuned to the language learning progression” (Female 3 and Males 1, 3) and aids them in “identifying errors and areas necessitating improvement” (Females 5, 6, and Males 1, 4). They tended to “engage in constructive self-criticism” (Females 2, 5, and Male 1), stimulating their motivation to rectify errors and augment their English language proficiency.

Both male and female participants exhibited perfectionistic inclinations. They “strive for accuracy and precision in their work” (Female 3 and Males 1, 2, 5). In their English language acquisition, they were notably motivated to recognize and rectify errors to ensure their language usage is commensurate with their high standards. An excerpt in line with this stated: “I endeavor to correct all my errors and achieve perfection...” (Male 5). This perfectionistic drive motivates them to engage similarly in the processes of evaluation, localization, and rectification of errors.

A significant number of them displayed a preference for self-directed and independent learning (Females 1, 5, 6, and Males 4, 6). They took responsibility for their learning process and progression. Recognizing, evaluating, localizing, and rectifying errors in their English language skills permitted them to “assume an active role in their learning journey” (Males 4, 6, and Female 5). They relished the autonomy and control they possessed in identifying and resolving errors, which in turn facilitated their engagement in these processes.
The participants, both female and male, were characterized by a rich internal dialogue and inner world (Female 1 and Male 5). They invested substantial time “reflecting on personal thoughts and actions”. This internal focus makes them more attentive to errors in their language usage and stimulates them to rectify those errors. They engage in a cyclical process of recognition, evaluation, localization, and rectification of errors as part of their continuous internal dialogue and self-improvement process.

Discussions

The findings align with previous research, indicating that gender has an insignificant impact on these aspects of language learning strategies for introverted individuals. Firstly, regarding deductive reasoning, studies have consistently shown that both male and female learners can effectively employ this strategy without significant gender differences in performance or preference (Khezrlou, 2012; Tous et al., 2015). This suggests that the cognitive processes and strategies associated with deductive reasoning are not influenced by gender but are more closely related to individual characteristics such as introversion, analytical thinking, detail orientation, and a preference for autonomous learning.

Secondly, the preference for structure, order, and organization in learning environments is not influenced by gender but is shaped by personal characteristics (Blondy, 2007; Kolb & Kolb, 2005). Both male and female introverted participants in this present study expressed a desire for a structured framework and a controlled learning environment, indicating that gender does not significantly affect their perceptions of these strategies. This preference for structure is associated with traits such as attention to detail and introverted personality traits, rather than gender-specific factors.

Furthermore, the findings indicate that introverted individuals, regardless of gender, tend to thrive in solitary pursuits, immersing themselves deeply in tasks. Establishing a regimen or organized physical environment facilitates their focus, concentration, and interaction with learning materials, enhancing their language learning experience. Again, these tendencies are more closely related to introverted personality traits than to gender (Normadhi et al., 2019; Pakinee & Puritat, 2021; Stokowski, 2002).

Lastly, in terms of error correction strategies, gender differences have minimal impact. Introverted participants, regardless of gender, displayed meticulousness, introspection, self-reflection, and a perfectionistic drive in their language learning processes. These traits contribute to their ability to recognize and rectify errors, improve language proficiency, and strive for accuracy and precision in language usage. The preference for self-directed learning and a sense of responsibility for one’s own learning process are shared by both genders (Lowdon, 2011), further indicating that gender does not significantly influence these perceptions.

Generally, the current study supports the existing body of literature indicating an insignificant impact of gender on introverted language learners’ perceptions of learning strategies. In particular, the use and effectiveness of deductive reasoning, the preference for structured learning environments, the establishment of a regimen or organized physical environs, and error correction strategies are more closely tied to individual characteristics, such as introversion, attention to detail, and autonomous learning preferences (Blondy, 2007; Khezrlou, 2012; Kolb & Kolb, 2005; Lowdon, 2011; Normadhi et al., 2019; Pakinee & Puritat, 2021; Stokowski, 2002; Tous et al., 2015). These findings highlight the need to consider individual differences within gender groups and emphasize that gender is a social construct that does not inherently determine cognitive styles or learning strategies.

Conclusion

The comprehensive investigation into the predilections of self-perceived introverted individuals, towards the employment of various English language learning strategies, yields substantial insights. Predominantly, the study has critically analyzed how gender influences these strategic choices and contributes to variations in the language acquisition approach. Through a meticulous research design, encompassing quantitative and qualitative data collection techniques, this exploration provides a robust understanding of the prevalent learning strategies within the student demographic. By means of a survey questionnaire and follow-up interviews, the study successfully amasses, evaluates, and presents pertinent data and insights. Furthermore, the nuanced viewpoints and experiences shared by the participants during the interview segment offer valuable comprehension about their favored strategies for English language learning.

Intriguingly, the results from this empirical investigation reveal that gender does not present significant differences in the preferred English language learning strategies of self-perceived introverted individuals. Regardless of gender, introverted language learners exhibit a propensity towards compensation learning strategies, signifying that gender does not critically affect this inclination. Certain specific learning strategies, such as employing deductive reasoning to infer word meanings, establishing a regimen or organizing physical environs, and recognition, evaluation, localization, and rectification of errors, receive nearly identical responses from both male and female participants.

Participants’ narratives during the interviews echo the quantitative data findings. Their shared stories unveil the common cognitive proclivities towards deductive reasoning, structural preferences in learning, and attention to detail in recognizing and rectifying errors. Irrespective of gender, introverted language learners manifest a predilection for analytical thinking, solitary pursuits, autonomous learning, and self-directed control over their learning process and progression.
In light of the results from this study, it can be concluded that gender does not significantly engender variations among self-perceived introverted individuals in terms of their preferred English language learning strategies. Introversion itself, rather than gender, appears to be the prominent factor shaping these preferences. This seminal research indicates that pedagogical approaches should consider the role of personality traits, such as introversion, in determining language learning strategies. The approach should be tailored to accommodate individual learning predispositions and needs, rather than assuming significant differences based on gender alone.

The investigation concerning the favored English linguistic acquisition stratagems of introverted personages possesses numerous pedagogical ramifications. Primarily, it accentuates the importance of comprehending individual erudition proclivities and customizing pedagogical methodologies to augment the potency of linguistic instruction. The elevated mean score for affective approaches insinuates that introverted scholars allocate considerable emphasis on capitalizing on tactics such as auditory musical engagement in their language education, as it facilitates their interaction with the language in a low-stakes and low-pressure milieu. Moreover, the employment of musicality can amplify motivation, involvement, and comprehensive linguistic aptitude.

**Recommendations**

Additional exploration is essential to augment our comprehension of the favored English linguistic acquisition approaches of introverted persons. Suggestions for ensuing inquiries encompass enlarging the sample magnitude, examining diverse population demographics, executing longitudinal investigations, incorporating manifold instruments, contrasting the learning stratagems of introverts vis-à-vis extraverts and ambiverts, deliberating the impact of cultural determinants, and appraising the effectiveness of the preferred learning tactics. These propositions endeavor to furnish a more exhaustive and intricate understanding of the learning predilections and requisites of introverted individuals, which can inform pedagogical methodologies and bolster the efficacy of language instruction.

**Limitations**

The current study's interpretative parameters are delimited by inherent methodological and sample limitations. Despite the rich insights from a sample of 29 self-identified introverted English learners, this unique demographic may not adequately extrapolate to a wider introverted linguistic learner population. The reliance on participants' self-diagnosed introversion through MBTI, while widely recognized, remains subject to subjective biases and inaccuracies. The use of mixed-method approach, while fostering a comprehensive understanding of introverted learners' preferences, does bear potential pitfalls. Data garnered from surveys may succumb to social desirability bias, whereas qualitative interviews could be influenced by interviewer's biases, potentially skewing participants' narrative representation. Further, while statistical analysis of survey data reveals prevalent strategies among introverted learners, it may not fully encapsulate the complex nuances of their experiences and tendencies. On the other hand, in-depth qualitative data, despite enriching the understanding of the topic, are constrained by purposive selection of participants and inherent subjectivity in data collection.

**Authorship Contribution Statement**


**References**


