

## Gendered patterns of academic writing strategy use in undergraduate EFL thesis writing

Wynneke Putri Shabirah<sup>1\*</sup>, Albina Volkotrubova<sup>2</sup> and Satarova Zamira Kalykovna<sup>3,4</sup>

<sup>1</sup> Department of English Language and Literature, Faculty of Languages and Arts, Universitas Negeri Padang, **Indonesia**

<sup>2</sup> Department of Linguistics, Faculty of Philology, International University of Kyrgyzstan, **Kyrgyzstan**

<sup>3</sup> Department of Pedagogy, Faculty of Humanities, Ala-Too International University, **Kyrgyzstan**

<sup>4</sup> Department of Linguistics, English Language Faculty, International University of Central Asia, **Kyrgyzstan**

\*Corresponding Author: [wynneke@gmail.com](mailto:wynneke@gmail.com)

*Received:* 25 September 2025; *Revised:* 14 December 2025; *Accepted:* 19 December 2025

<https://doi.org/10.58712/se.v2i1.134>

**Abstract** Academic writing strategies play a crucial role in supporting undergraduate EFL students during thesis writing; however, gender-based differences in strategy use remain underexplored. This study examines gender differences in academic writing strategies employed by undergraduate EFL students when completing their thesis, drawing on Oxford's Language Learning Strategies framework. Using a quantitative descriptive design, data were collected from 44 undergraduate students (21 male and 23 female) in the Department of English Language and Literature at Universitas Negeri Padang. A 42-item questionnaire was administered to assess six categories of academic writing strategies: memory, cognitive, compensation, metacognitive, affective, and social. The results indicate that while both male and female students employed all six categories, distinct gender-related patterns emerged. Female students reported using metacognitive and affective strategies more frequently, reflecting stronger engagement in planning, monitoring, evaluation, and emotional regulation during thesis writing. Male students, in contrast, demonstrated slightly greater reliance on social strategies, particularly in seeking feedback and external support. No substantial gender differences were observed in memory and compensation strategies. These findings suggest that gender influences how EFL students regulate and support their academic writing during thesis completion. The study highlights the importance of incorporating gender-sensitive approaches in academic writing instruction and thesis supervision to better accommodate students' strategic preferences.

**Keywords:** academic writing strategies; gender differences; EFL thesis writing; metacognitive strategies; social strategies

### 1. Introduction

Academic writing is a fundamental component of higher education and a key means through which students demonstrate disciplinary knowledge and academic competence ([Rizkiawan et al., 2025](#)). In English as a Foreign Language (EFL) context, academic writing poses particular challenges due to limited exposure to academic discourse, genre conventions, and disciplinary writing practices ([Hyland, Ken, 2019](#); [Wingate, 2018](#)). Among academic writing tasks, undergraduate thesis writing is widely regarded as one of the most demanding, as it requires students to independently produce an extended academic text that integrates research skills, disciplinary conventions, and sustained writing effort over time ([Matikainen, 2024](#)). To manage the cognitive, linguistic, and emotional demands of thesis

writing, students rely on academic writing strategies, defined as deliberate actions used to plan, regulate, and support the writing process (Petrić & Czár, 2003). A substantial body of research has shown that strategic writing behavior is closely associated with writing quality, learner autonomy, and persistence in complex academic tasks (Graham & Harris, 1996; Teng & Zhang, 2020). In long-term writing tasks such as thesis writing, strategies related to self-regulation, revision, and feedback use become particularly critical (Kaplan et al., 2025; Shen & Bai, 2025).

Within applied linguistics, writing strategies are frequently examined through Oxford's Language Learning Strategies framework, which categorizes strategies into memory, cognitive, compensation, metacognitive, affective, and social strategies (Graham & Oxford, 1993). Studies adopting this framework consistently highlight the central role of metacognitive and affective strategies in academic writing development, especially at advanced levels of study (Chamorro-Atalaya et al., 2023; Zhang & Hyland, 2021). However, much of the existing research has focused on short-term or classroom-based writing tasks, leaving undergraduate thesis writing relatively underexplored.

Gender has increasingly been recognized as a learner-related factor that may influence how students engage with academic writing strategies. Prior studies suggest that male and female learners may differ in how they regulate cognition, manage emotion, and seek social support during writing tasks (Graham & Oxford, 1993; Oxford, 2016; Sumarni & Rachmawaty, 2019). Nevertheless, empirical evidence examining gender differences in academic writing strategies specifically within undergraduate thesis writing contexts remains limited, particularly in EFL higher education. Addressing this gap, the present study investigates how male and female undergraduate EFL students differ in their use of academic writing strategies during thesis writing.

Addressing this gap, the present study investigates gender differences in academic writing strategies used by undergraduate EFL students in completing their thesis. Grounded in Oxford's Language Learning Strategies framework, this study examines how male and female students differ in their use of memory, cognitive, compensation, metacognitive, affective, and social strategies during thesis writing. By foregrounding gender as the central analytical lens, this study aims to contribute clearer empirical evidence to the literature on academic writing strategies and to inform gender-sensitive academic writing instruction and thesis supervision in EFL higher education.

## 2. Literature review

### 2.1 Academic writing strategies in undergraduate EFL thesis writing

Academic writing is a complex, goal-oriented activity that requires writers to coordinate linguistic knowledge, cognitive processing, and affective regulation (Hyland, Ken, 2019). In EFL contexts, these demands are intensified by restricted access to academic discourse and limited familiarity with disciplinary writing norms (Siegel, 2020). Undergraduate thesis writing, in particular, requires sustained engagement across multiple stages of planning, drafting, revising, and responding to feedback, making strategic behavior essential for successful completion. Writing strategies are increasingly conceptualized as a core component of self-regulated learning, enabling learners to plan, monitor, and evaluate their writing processes (Graham & Oxford, 1993; Teng & Zhang, 2020). Research consistently demonstrates that metacognitive strategies, such as goal setting, self-monitoring, and evaluation, play a decisive role in academic writing development, especially in long-term writing tasks (Halim & Hadiyanti, 2021; Xu et al., 2023). Similarly, social strategies, including feedback-seeking and interaction with supervisors and peers, support academic socialization and writing development (Chao et al., 2025; Liu, 2026). Graham & Oxford (1993) framework provides a comprehensive lens for examining writing strategies because it captures both cognitive and non-

cognitive dimensions of writing behavior. This framework has been widely applied in EFL writing research and is particularly relevant to thesis writing, where strategic regulation, emotional management, and interaction intersect over extended periods ([Werdiningsih et al., 2024](#)).

## 2.2 Gender differences in academic writing strategy use

Gender has long been examined as a variable influencing language learning and writing behavior. Research in EFL contexts suggests that male and female learners may differ in how they engage with strategic processes, particularly in relation to self-regulation and affective control ([Oxford, 2016](#)). A growing body of studies reports that female learners tend to employ metacognitive and affective strategies more frequently, reflecting stronger engagement in planning, reflection, and emotional regulation during writing ([Liu, 2026](#); [Werdiningsih et al., 2024](#)).

In contrast, male learners are often found to rely more heavily on social strategies, such as peer discussion and feedback-seeking, as a means of managing writing difficulties ([El Mortaji, 2018](#); [Zhao, 2025](#)). These interaction-oriented strategies may serve as external regulation mechanisms that support writing development. However, findings across studies remain inconsistent, with some research reporting minimal or no significant gender differences, suggesting that strategy use may be shaped by task demands and academic context rather than gender alone ([Chao et al., 2025](#); [Zhao, 2025](#)).

Importantly, most existing studies have focused on essays or source-based writing tasks conducted within classroom settings ([Liu, 2026](#); [Zhao, 2025](#)). Undergraduate thesis writing, which is extended, self-directed, and emotionally demanding, remains underrepresented in gender-focused writing strategy research. Addressing this gap, the present study examines gender differences in academic writing strategy use among undergraduate EFL students during thesis writing. Gender has been widely examined as a learner-related factor influencing language learning and writing behavior. Research in applied linguistics suggests that male and female learners may differ in how they regulate cognition, manage emotions, and seek support during academic writing tasks ([Oxford, 2015](#)). These differences are often attributed to variations in learning preferences, self-regulation tendencies, and interaction styles.

A growing body of studies reports that female learners tend to use metacognitive and affective strategies more frequently, demonstrating greater engagement in planning, monitoring, and emotional regulation during writing ([Graham & Harris, 1996](#)). Such strategies are closely linked to self-regulated learning and may support more systematic management of demanding academic writing tasks. In contrast, male learners are often reported to rely more heavily on social strategies, such as discussing writing problems and seeking feedback from peers or supervisors ([Zhao, 2025](#)). These interaction-oriented strategies may serve as an external means of regulating the writing process. Despite these tendencies, empirical findings on gender differences in academic writing strategy use remain inconsistent. Several studies report minimal or no significant differences when contextual and instructional factors are taken into account, suggesting that gender effects may be task-specific rather than universal ([Chao et al., 2025](#)). Moreover, much of the existing literature has focused on short-term writing tasks, such as essays or examinations, while gender differences in undergraduate thesis writing remain underexplored.

Given the extended, self-directed, and emotionally demanding nature of thesis writing, a focused examination of gender-based differences in academic writing strategies is warranted. Understanding how male and female students differ in their strategic approaches can provide valuable insights into how students regulate their writing processes and how instructional and supervisory practices may be better tailored to support diverse strategic needs. Accordingly, the present study seeks to examine the

types of academic writing strategies employed by male and female undergraduate EFL students during thesis writing and the ways in which these strategies differ across gender. By foregrounding gender as the central analytical lens, this study aims to contribute clearer empirical evidence to the literature on academic writing strategies and to inform gender-responsive academic writing instruction and thesis supervision in EFL higher education.

### 3. Methods

#### 3.1 Research design

This study adopted a quantitative descriptive research design to examine gender differences in academic writing strategy use among undergraduate EFL students during thesis writing. A descriptive approach was selected to identify patterns of strategy use across gender groups without manipulating variables or inferring causality. This design is appropriate for capturing self-reported strategic behavior in authentic academic writing contexts.

#### 3.2 Participants

The participants were 44 undergraduate students from the Department of English Language and Literature at Universitas Negeri Padang who had completed their undergraduate thesis and passed the comprehensive examination in the 2023–2024 academic year. The sample consisted of 21 male students (48%) and 23 female students (52%). A purposive sampling technique was employed to ensure that all participants had experienced the full thesis-writing process. Focusing on students who had completed their thesis enabled the study to obtain comprehensive reflections on academic writing strategy use across all stages of thesis writing.

#### 3.3 Instrument

Data were collected using a 42-item academic writing strategies questionnaire adapted from previous studies based on Oxford's Language Learning Strategies framework. The questionnaire measured six categories of academic writing strategies: memory, cognitive, compensation, metacognitive, affective, and social strategies. Responses were recorded using a four-point Likert scale ranging from strongly disagree (1) to strongly agree (4). The use of a four-point scale was intended to reduce neutral responses and encourage participants to indicate their actual strategy use during thesis writing. The distribution of questionnaire items across strategy categories is recapped in Table 1.

**Table 1.** Item distribution

Strategy	Number of item	Sources
Memory Strategies	1-5	( <a href="#">Abdollahzadeh, 2010</a> )
Cognitive Strategies	6-13	( <a href="#">Abdollahzadeh, 2010</a> ; <a href="#">Nopmanotham, 2016</a> )
Compensation Strategies	14-18	( <a href="#">Abdollahzadeh, 2010</a> )
Metacognitive Strategies	19-31	( <a href="#">Nopmanotham, 2016</a> )
Affective Strategies	32-37	( <a href="#">Nopmanotham, 2016</a> ; <a href="#">Stoynoff, 1993</a> )
Social Strategies	38-42	( <a href="#">Nopmanotham, 2016</a> )

Prior to administration, the questionnaire was reviewed by experts in applied linguistics to ensure clarity and content relevance. A pilot study conducted with students outside the main sample yielded a Cronbach's alpha coefficient of 0.817, indicating satisfactory internal consistency.

### 3.4 Data collection procedure

Data collection was conducted after participants had completed their thesis and comprehensive examination to ensure that responses reflected their full thesis-writing experience. The questionnaire was distributed electronically, and participants were informed of the study's purpose and assured of the confidentiality and anonymity of their responses. Participants were instructed to respond based on their actual writing practices during thesis writing rather than their general writing habits. All completed questionnaires were screened to ensure completeness before analysis.

### 3.5 Data analysis

Data analysis focused exclusively on gender-based comparisons of academic writing strategy use. Descriptive statistics were used to calculate mean percentages for each strategy category. Strategy use was then compared between male and female students to identify similarities and differences across the six strategy types. The results were presented using summary tables and figures to illustrate patterns of strategy use across gender groups. Statistical interpretation was limited to descriptive comparison, consistent with the exploratory nature of the study.

## 4. Results

### 4.1 Memory strategies

The results indicate no meaningful gender difference in the use of memory strategies. Male and female students reported nearly identical levels of strategy use, with mean percentages of approximately 70% and 71%, respectively. This finding suggests that both groups employed memory-related strategies, such as recalling vocabulary and reviewing language forms, at comparable levels during thesis writing. Although minor variation was observed in the specific strategies favored by each group, memory strategies did not emerge as a distinguishing factor between male and female students.

**Table 2.** Male and female students' answers on memory strategies

	Memory				
	WS1	WS2	WS3	WS4	WS5
<b>Male</b>					
Score	65	61	59	45	64
Score max	84	84	84	84	84
Percentage	77%	73%	70%	54%	76%
Mean percentage	70%				
<b>Female</b>					
Score	69	70	65	55	68
Score max	92	92	92	92	92
Percentage	75%	76%	71%	60%	74%
Mean percentage	71%				

### 4.2 Cognitive strategies

Gender-based differences were observed in the use of cognitive strategies. Female students reported a higher frequency of cognitive strategy use than male students, with mean percentages of approximately 74% and 68%, respectively. This indicates that female students were more actively engaged in meaning-focused activities, such as analyzing texts, refining ideas, and learning from model texts. In

contrast, male students demonstrated lower engagement in these strategies, particularly those involving deeper textual processing.

**Table 3.** Male and female students' answers on cognitive strategies

	Cognitive							
	WS6	WS7	WS8	WS9	WS10	WS11	WS12	WS13
<b>Male</b>								
Score	69	51	59	53	52	57	57	58
Score max	84	84	84	84	84	84	84	84
Percentage	82%	61%	70%	63%	62%	68%	68%	69%
Mean percentage	68%							
<b>Female</b>								
Score	75	74	73	66	63	60	70	65
Score max	92	92	92	92	92	92	92	92
Percentage	82%	80%	79%	72%	68%	65%	76%	71%
Mean percentage	74%							

### 4.3 Compensation strategies

The findings reveal no significant gender difference in compensation strategy use. Both male and female students reported identical mean percentages (approximately 75%), indicating similar reliance on strategies used to overcome linguistic difficulties, such as paraphrasing or revising expressions based on feedback. This suggests that problem-solving approaches to language limitations were applied consistently across gender groups.

**Table 4.** Male and female students' answers on compensation strategies

	Compensation				
	WS14	WS15	WS16	WS17	WS18
<b>Male</b>					
Score	55	66	66	58	72
Score max	84	84	84	84	84
Percentage	65%	79%	79%	69%	86%
Mean percentage	75%				
<b>Female</b>					
Score	57	71	69	69	81
Score max	92	92	92	92	92
Percentage	62%	77%	75%	75%	88%
Mean percentage	75%				

### 4.4 Metacognitive strategies

Clear gender differences emerged in the use of metacognitive strategies. Female students reported substantially higher engagement in metacognitive strategies, with a mean percentage of approximately 85%, compared to 78% for male students. This finding indicates that female students were more actively involved in planning their writing, monitoring progress, and evaluating their drafts during thesis writing. In contrast, male students demonstrated comparatively lower engagement in these self-regulatory behaviors, suggesting differences in how the writing process was managed.

**Table 5.** Male and female students' answers on metacognitive strategies

	Metacognitive												
	WS 19	WS 20	WS 21	WS 22	WS 23	WS 24	WS 25	WS 26	WS 27	WS 28	WS 29	WS 30	WS 31
<b>Male</b>													
Score	69	63	65	51	64	71	67	68	67	69	66	68	64
Score max	84	84	84	84	84	84	84	84	84	84	84	84	84
Percentage	82%	75%	77%	61%	76%	85%	80%	81%	80%	82%	79%	81%	76%
Mean	78%												
Percentage													
<b>Female</b>													
Score	80	78	78	63	76	81	82	82	77	84	80	82	79
Score max	92	92	92	92	92	92	92	92	92	92	92	92	92
Percentage	87%	85%	85%	68%	83%	88%	89%	89%	84%	91%	87%	89%	86%
Mean	85%												
Percentage													

#### 4.5 Affective strategies

Gender differences were also evident in the use of affective strategies. Female students reported higher use of strategies related to emotional regulation, motivation, and anxiety management, with a mean percentage of approximately 82%, compared to 72% among male students. This suggests that female students were more attentive to managing emotional challenges associated with thesis writing, whereas male students engaged less frequently in affective regulation strategies.

**Table 6.** Male and female students' answers on affective strategies

	Affective						
	WS 32	WS 33	WS 34	WS 35	WS 36	WS 37	
<b>Male</b>							
Score		63	64	62	56	55	63
Score max		84	84	84	84	84	84
Percentage		75%	76%	74%	67%	65%	75%
Mean percentage		72%					
<b>Female</b>							
Score		76	76	79	77	74	69
Score max		92	92	92	92	92	92
Percentage		83%	83%	86%	84%	80%	75%
Mean percentage		82%					

#### 4.6 Social strategies

Both male and female students reported high use of social strategies, underscoring the importance of interaction and feedback during thesis writing. Female students reported slightly higher use (approximately 84%) than male students (approximately 80%); however, this difference was relatively small. The findings indicate that students across gender groups frequently relied on supervisors' and examiners' feedback and engaged in discussion with peers to support their writing. Overall, social strategies were widely valued and did not constitute a major point of gender differentiation.

**Table 7.** Male and female students' answers in the questionnaire related to social strategies

	Social				
	WS38	WS39	WS40	WS41	WS42
<b>Male</b>					
Score	57	69	62	72	75
Score max	84	84	84	84	84
Percentage	68%	82%	74%	86%	89%
Mean percentage	80%				
<b>Female</b>					
Score	65	78	79	81	82
Score max	92	92	92	92	92
Percentage	71%	85%	86%	88%	89%
Mean percentage	84%				

#### 4.7 Summary of gender-based differences

Taken together, the results show that gender-related differences in academic writing strategy use are most pronounced in metacognitive, affective, and cognitive strategies, with female students reporting higher levels of engagement in these areas. In contrast, memory and compensation strategies exhibited minimal variation across gender, while social strategies were highly used by both groups. These findings suggest that female students tend to adopt a more self-regulated and emotionally managed approach to thesis writing, whereas male students rely relatively more on interaction-based support.

### 5. Discussion

The findings of this study indicate that while both male and female undergraduate EFL students employed all six categories of academic writing strategies, clear gender-related patterns emerged, particularly in metacognitive, affective, and cognitive strategies. These findings are consistent with prior research suggesting that gender can influence how learners regulate and manage complex academic writing tasks (Chen & Lin, 2021; Oxford, 2015). Female students' stronger use of metacognitive strategies suggests greater engagement in planning, monitoring, and evaluating their writing. Such strategies are widely recognized as central to self-regulated learning and are strongly associated with successful academic writing, particularly in long-term tasks such as thesis writing (Teng & Zhang, 2020; Zhang & Hyland, 2021). This pattern indicates that female students may adopt a more systematic and reflective approach to managing the thesis-writing process.

Gender differences were also evident in affective strategy use, with female students demonstrating greater attention to emotional regulation and motivation management. Given the high levels of stress and anxiety often associated with thesis writing, particularly in EFL contexts, affective strategies play a crucial role in sustaining engagement (Zhao, 2025). This finding aligns with previous studies reporting stronger affective awareness among female learners in writing contexts (El Mortaji, 2018; Graham & Harris, 1996). Female students also reported higher engagement in cognitive strategies, reflecting deeper involvement in meaning-focused processing and idea development. This finding supports earlier research indicating that female learners often demonstrate stronger engagement in elaborative and reflective learning behaviors (Chen & Lin, 2021; Zhao, 2025). In contrast, male students' relatively greater reliance on social strategies highlights the importance of interaction and feedback as external support mechanisms in academic writing, reinforcing the inherently social nature of thesis writing (Chao et al., 2025; Wallwork, 2022).

Notably, the absence of meaningful gender differences in memory and compensation strategies suggests that foundational language-support strategies function as shared resources rather than gender-specific behaviors, particularly among advanced undergraduate students (Dang, 2020; Petrić & Czár, 2003). Taken together, these findings indicate that female students tend to adopt a more internally regulated approach to thesis writing, whereas male students rely relatively more on interaction-based support. These distinct strategic orientations underscore the importance of gender-responsive academic writing instruction and supervision in EFL higher education (Klein et al., 2022; Wingate, 2018). The present study set out to examine gender differences in academic writing strategy use among undergraduate EFL students during thesis writing. The findings demonstrate that although both male and female students employed all six categories of academic writing strategies, gender meaningfully shaped how these strategies were prioritized and enacted, particularly in relation to self-regulation, emotional management, and interaction with others. These results reinforce the view that academic writing is not only a cognitive activity but also a strategic and affective process influenced by learner characteristics, including gender (Oxford, 2015).

One of the most salient findings concerns the stronger use of metacognitive strategies among female students. Female participants reported higher engagement in planning, monitoring, and evaluating their writing, suggesting a more systematic and reflective approach to managing the thesis-writing process. Metacognitive strategies are widely regarded as central to self-regulated learning and are particularly critical in long-term academic writing tasks that require sustained effort and autonomous decision-making (Teng & Zhang, 2020). The greater use of these strategies among female students indicates greater awareness of the writing process, enabling them to anticipate challenges, adjust their writing plans, and evaluate progress more deliberately. Male students' comparatively lower engagement in metacognitive strategies may suggest a less structured approach to managing the writing process or greater reliance on external guidance rather than internal regulation.

The pattern of higher engagement in metacognitive and affective strategies among female students is consistent with broad findings in the literature that female learners often show greater use of strategic behavior in writing tasks (El Mortaji, 2018; Graham & Harris, 1996). Moreover, research on gender and writing in EFL contexts indicates gender-linked differences in writing strategy deployment and cognitive engagement, even though statistical significance is not uniform across studies (El Mortaji, 2018). Gender differences were also evident in affective strategy use, with female students demonstrating greater attention to regulating emotions, maintaining motivation, and coping with anxiety during thesis writing. Thesis writing is often associated with high levels of stress and emotional pressure, particularly in EFL contexts where linguistic demands add to cognitive load. The higher use of affective strategies among female students suggests stronger emotional awareness and a more proactive stance toward managing affective challenges, which has been linked to persistence and sustained engagement in demanding academic tasks (Zhao, 2025). In contrast, male students' lower reported use of affective strategies may indicate less frequent engagement in emotional self-regulation or a tendency to manage emotional challenges indirectly, for example through social interaction or avoidance.

In terms of cognitive strategies, female students also reported higher levels of engagement than male students. This finding suggests that female students were more actively involved in meaning-focused processing, such as analyzing texts, refining ideas, and learning from academic models. Such cognitive engagement is crucial in thesis writing, where argument development, coherence, and critical engagement with sources are essential. This pattern aligns with previous research indicating that female learners often demonstrate stronger engagement in elaborative and reflective learning strategies (Graham & Harris, 1996). Male students' lower use of cognitive strategies may reflect different

approaches to managing writing demands, potentially emphasizing efficiency or reliance on feedback rather than intensive internal processing.

In contrast to these differences, memory and compensation strategies showed minimal variation across gender. Both male and female students reported similar levels of reliance on vocabulary recall, paraphrasing, and linguistic problem-solving strategies. This finding suggests that foundational language-support strategies function as shared resources rather than gender-differentiated behaviors, particularly among undergraduate students who have reached an advanced stage of academic study. At this level, linguistic competence may be sufficiently developed that such strategies are used routinely and unconsciously, reducing their sensitivity to individual differences (Petrić & Czár, 2003).

With regard to social strategies, both gender groups reported high levels of use, highlighting the importance of interaction, feedback, and academic support during thesis writing. Although male students showed slightly greater reliance on social strategies, the difference was relatively small, indicating that social interaction is a central component of thesis writing for all students. This finding reinforces the notion that academic writing, especially thesis writing, is inherently social and shaped by engagement with supervisors, examiners, and peers (Chao et al., 2025). Feedback-seeking and discussion appear to serve as crucial mechanisms for clarifying expectations, improving writing quality, and sustaining motivation, regardless of gender.

Taken together, these findings suggest that female students tend to adopt a more internally regulated approach to thesis writing, characterized by stronger metacognitive control, emotional management, and cognitive engagement, whereas male students rely relatively more on interaction-based support to navigate the writing process. Importantly, these differences should not be interpreted as indicators of superiority or deficiency, but rather as distinct strategic orientations shaped by individual and contextual factors. Recognizing these differences has important implications for academic writing instruction and thesis supervision. Writing courses and supervision practices should explicitly support the development of metacognitive and affective strategies for all students, while also providing structured opportunities for interaction and feedback that align with diverse strategic preferences (Teng & Zhang, 2020; Wingate, 2018). Overall, this study contributes to a more nuanced understanding of gender differences in academic writing strategy use in undergraduate EFL thesis writing. By foregrounding gender as a central analytical lens, the findings extend existing research beyond short-term writing tasks and highlight the need for gender-responsive and strategy-aware approaches to academic writing instruction in EFL higher education.

## 6. Conclusion

This study examined gender differences in academic writing strategy use among undergraduate EFL students during thesis writing. The findings indicate that while both male and female students employed all six categories of academic writing strategies, distinct gender-related patterns emerged. Female students demonstrated greater engagement in metacognitive, affective, and cognitive strategies, reflecting a more internally regulated and reflective approach to managing the thesis-writing process. In contrast, male students relied relatively more on social strategies, emphasizing interaction and feedback as primary sources of support. These results underscore the importance of viewing thesis writing as a strategic, self-regulated, and socially mediated activity, and they highlight gender as a meaningful factor influencing how students manage the demands of long-term academic writing in EFL higher education.

Despite these contributions, this study has several limitations. First, the sample size was relatively small and drawn from a single academic program, which may limit the generalizability of the findings to

other institutional or disciplinary contexts. Second, the study relied on self-reported questionnaire data, which may not fully capture students' actual writing behavior during thesis completion. Future research could address these limitations by involving larger and more diverse samples, incorporating qualitative methods such as interviews or writing process logs, and examining how gender-related strategy use interacts with instructional practices and supervision styles. Longitudinal studies tracking strategy development across different stages of thesis writing would also provide deeper insight into how academic writing strategies evolve over time. Such research would further inform the development of gender-responsive and strategy-based academic writing instruction in EFL higher education.

### Author's declaration

### Author contribution

**Wynneke Putri Shabirah:** conceptualization, design of the research methodology, data collection, data analysis, and writing - the original manuscript. **Albina Volkotrubova:** conceptual framework, methodological guidance, writing-review and revision, and approval- the final version for publication. **Satarova Zamira Kalykovna:** writing-review and revision, and approval- the final version for publication.

### Funding statement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

### Data availability

The data supporting the findings of this study are not publicly available due to ethical considerations and the need to protect participants' privacy. However, anonymized data may be made available by the corresponding author upon reasonable request and with permission from the affiliated institution.

### Acknowledgement

The authors would like to express their sincere gratitude to the undergraduate students of the Department of English Language and Literature at Universitas Negeri Padang for their willingness to participate in this study. Appreciation is also extended to colleagues and academic staff who provided constructive feedback and academic support during the research process.

### Conflict of interest

The authors declare that they have no conflict of interest. The authors are not affiliated with or involved in any organization or entity that has a financial or non-financial interest in the subject matter or materials discussed in this manuscript.

### Ethical clearance

This study involved human participants and was conducted in accordance with the ethical principles of the Declaration of Helsinki. Permission to conduct the research was obtained from the Department of English Language and Literature, Universitas Negeri Padang. All participants were informed about the

purpose of the study and provided their informed consent prior to participation. Participants' anonymity and confidentiality were strictly maintained.

### AI statement

The content, analysis, and interpretations presented in this article are entirely the responsibility of the authors, and no AI-generated sentences were used without critical human review.

### Publisher's and Journal's Note

Researcher and Lecturer Society as the publisher, and the editor of Scientific English state that there is no conflict of interest towards this article publication.

### References

- Abdollahzadeh, E. (2010). Undergraduate Iranian EFL Learners' Use of Writing Strategies. *Writing & Pedagogy*, 2(1). <https://doi.org/10.1558/wap.v2i1.65>
- Chamorro-Atalaya, O., Morales-Romero, G., Trinidad-Loli, N., Caycho-Salas, B., Guía-Altamirano, T., Auqui-Ramos, E., Rocca-Carvajal, Y., Arones, M., Arévalo-Tuesta, J. A., & Gonzales-Huaytahuilca, R. (2023). Gamification in Engineering Education during COVID-19: A Systematic Review on Design Considerations and Success Factors in its Implementation. *International Journal of Learning, Teaching and Educational Research*, 22(6), 301–327. <https://doi.org/10.26803/ijlter.22.6.17>
- Chao, C., Abdul Rahman, N. A., & Soon, G. Y. (2025). A Review on Project Based Learning in Enhancing English Writing Skills. In *Forum for Linguistic Studies* (Vol. 7, Number 1). <https://doi.org/10.30564/fls.v7i1.8106>
- Chen, Y. shan, & Lin, M. F. (2021). Effects of peer collaboration on EFL learners' comprehension of conversational implicatures. *System*, 97, 102441. <https://doi.org/10.1016/j.system.2020.102441>
- Dang, T. N. Y. (2020). The Potential for Learning Specialized Vocabulary of University Lectures and Seminars Through Watching Discipline-Related TV Programs: Insights From Medical Corpora. *TESOL Quarterly*, 54(2), 436–459. <https://doi.org/10.1002/tesq.552>
- El Mortaji, L. (2018). Insight into Gender Effect on EFL Writing Strategies in the Narrative and Expository Genres: A Case Study of Multilingual College Students in Morocco. *International Education Studies*, 12(1), 136. <https://doi.org/10.5539/ies.v12n1p136>
- Graham, M. P., & Oxford, R. L. (1993). Language Learning Strategies: What Every Teacher Should Know. *TESOL Quarterly*, 27(1). <https://doi.org/10.2307/3586958>
- Graham, S., & Harris, K. R. (1996). Self-regulation and strategy instruction for students who find writing and learning challenging. In *The science of writing: Theories, methods, individual differences, and applications*.
- Halim, A., & Hadiyanti, S. U. E. (2021). Metacognitive Learning Approach in Affecting Students' Self-Regulated Learning in Writing Course. *AL-ISHLAH: Jurnal Pendidikan*, 13(2), 1175–1184. <https://doi.org/10.35445/alishlah.v13i2.571>
- Hyland, Ken. (2019). *Second Language Writing* (2nd Edition). Cambridge University Press.
- Kaplan, K., Akeren, Í., & Gülден, B. (2025). The Effect of Self-Regulated Learning-Based Practices on Writing Anxiety: A Curriculum-Focused Mixed Study. *SAGE Open*, 15(3). <https://doi.org/10.1177/21582440251376473>
- Klein, P., Bildfell, A., Dombroski, J. D., Giese, C., Sha, K. W.-Y., & Thompson, S. C. (2022). Self-Regulation in Early Writing Strategy Instruction. *Reading & Writing Quarterly*, 38(2), 101–125. <https://doi.org/10.1080/10573569.2021.1919577>

- Liu, X. (2026). EFL undergraduate thesis supervision: Exploring supervisors' written feedback beliefs and practices. *Language Teaching Research*. <https://doi.org/10.1177/13621688251397580>
- Matikainen, T. (2024). Academic writing in English: Lessons from an EMI-program in Japan. *Journal of English for Academic Purposes*, 68, 101358. <https://doi.org/10.1016/j.jeap.2024.101358>
- Nopmanotham, N. (2016). *A study of writing strategies used by Thai EFL High School students*. Thammasat University.
- Oxford, R. L. (2015). Teaching and Researching Language Learning Strategies: Self-Regulation in Context. In *Annual Review of Applied Linguistics* (Vol. 39, Number 3).
- Petrić, B., & Czár, B. (2003). Validating a writing strategy questionnaire. *System*, 31(2), 187–215. [https://doi.org/10.1016/S0346-251X\(03\)00020-4](https://doi.org/10.1016/S0346-251X(03)00020-4)
- Rizkiawan, M. A., Razali, A. B., & Owen, M. (2025). Stylistic differences in male and female undergraduate narratives: A content analysis in an EFL context. *Scientific English*, 1(1). <https://doi.org/10.58712/se.v1i1.3>
- Shen, B., & Bai, B. (2025). Explorations into EFL learners' self-regulated writing strategy use in writing for scholarly publications: a case study of Chinese PhD students. *Language Awareness*, 1–22. <https://doi.org/10.1080/09658416.2025.2585007>
- Siegel, J. (2020). Effects of notetaking instruction on intermediate and advanced L2 English learners: A quasi-experimental study. *Journal of English for Academic Purposes*, 46, 100868. <https://doi.org/10.1016/j.jeap.2020.100868>
- Stoynoff, S. (1993). Oxford's Language learning strategies: What Every Teacher Should Know (Rebecca Oxford). *Bilingual Research Journal*, 17(1–2). <https://doi.org/10.1080/15235882.1993.10162651>
- Sumarni, S., & Rachmawaty, N. (2019). Gender Differences in Language Learning Strategies. *Ethical Lingua: Journal of Language Teaching and Literature*, 6(1), 13–22. <https://doi.org/10.30605/ethicallingua.v6i1.1169>
- Teng, L. S., & Zhang, L. J. (2020). Empowering learners in the second/foreign language classroom: Can self-regulated learning strategies-based writing instruction make a difference? *Journal of Second Language Writing*, 48, 100701. <https://doi.org/10.1016/j.jslw.2019.100701>
- Wallwork, A. (2022). *Writing an Academic Paper in English*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-95615-8>
- Werdiningsih, I., Marzuki, Indrawati, I., Rusdin, D., Ivone, F. M., Basthomi, Y., & Zulfahreza. (2024). Revolutionizing EFL writing: unveiling the strategic use of ChatGPT by Indonesian master's students. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2024.2399431>
- Wingate, U. (2018). Academic literacy across the curriculum: Towards a collaborative instructional approach. *Language Teaching*, 51(3), 349–364. <https://doi.org/10.1017/S0261444816000264>
- Xu, Z., Zhao, Y., Liew, J., Zhou, X., & Kogut, A. (2023). Synthesizing research evidence on self-regulated learning and academic achievement in online and blended learning environments: A scoping review. *Educational Research Review*, 39, 100510. <https://doi.org/10.1016/j.edurev.2023.100510>
- Zhang, Y. (Olivia), & Hyland, K. (2021). Elements of doctoral apprenticeship: Community feedback and the acquisition of writing expertise. *Journal of Second Language Writing*, 53, 100835. <https://doi.org/10.1016/j.jslw.2021.100835>
- Zhao, W. (2025). Reconstructing stance in EFL doctoral thesis writing through generative artificial intelligence. *Humanities and Social Sciences Communications*, 12(1). <https://doi.org/10.1057/s41599-025-06249-x>