

THE BUSINESS OF LANGUAGE LEARNING: UNPACKING MALE PREFERENCES WITH THE FELDER-SILVERMAN MODEL

K. G. Wijesuriya

Department of Linguistics, Sri Lanka Institute of Information Technology

keshani.w@slit.lk

Abstract

This study investigates the learning style preferences of male students in a business faculty in Sri Lanka, employing the Felder-Silverman Learning Style Model (FSLSM) to explore implications for English Language Teaching (ELT) within an English as a Second Language (ESL) context. A sample of 100 male students was assessed across four FSLSM dimensions: Active-Reflective, Sensing-Intuitive, Visual-Verbal, and Sequential-Global. Results reveal a predominant preference for visual learning (88%) and active engagement (67%), with a balanced distribution in other dimensions—intuitive learners slightly outnumber sensing learners (53% vs. 47%), and sequential and global learners are equally represented (50% each). Notably, most learners exhibited moderate or balanced preferences rather than extreme tendencies, indicating adaptability in their learning styles. These findings highlight the importance of visual aids and active learning strategies in ESL classrooms, especially where the cognitive demands of second-language processing require concrete, accessible instructional materials. The balanced sensing-intuitive and sequential-global preferences underscore the need for varied teaching approaches that integrate practical, detail-oriented instruction with conceptual, holistic learning experiences. Based on these insights, the study recommends incorporating multimodal teaching techniques, including visual materials and interactive activities, to better support male ESL learners in business disciplines. Limitations include the focus on a single gender and faculty and reliance on self-reported data. Future research should expand to include diverse demographics and investigate the relationship between learning styles and language proficiency. This research contributes valuable knowledge for designing learner-centred ELT programs in Sri Lankan higher education contexts.

Keywords: Business Undergraduates, English as a Second Language (ESL), English Language Teaching (ELT), Felder-Silverman Model, Learning Styles

Introduction

The process through which individuals acquire and comprehend language varies significantly due to differences in their learning styles. Recognising and addressing these differences is essential for enhancing educational effectiveness and improving students' ability to grasp complex subject matter. Learning styles influence not only the pace at which learners assimilate information

but also the extent of their understanding, independent of innate ability (Zhang & Sternberg, 2000). Understanding students' preferred learning styles allows educators adopt corresponding instruction, accordingly, fostering more meaningful engagement and deeper comprehension. Scholars emphasise the importance of early identification of learning styles to enable the use of corresponding teaching

methods, which leads to more effective learning outcomes (Dunn & Griggs, 2000; McCarthy, 2012). Moreover, instruction that aligns with learners' sensory preferences: visual, auditory, or kinesthetic, can significantly enhance retention and understanding (Fleming & Mills, 1992). Felder and Spurlin (2005) argue that customised instruction that aligns with individual learning preferences can increase student motivation, engagement, and confidence, especially in language learning contexts. Such alignment creates inclusive learning environments that support diverse student needs (Li et al., 2018).

Gender is another critical factor influencing learning preferences, with studies showing that male and female students often demonstrate distinct learning styles. While some findings indicate minor differences, others report significant gender-based preferences. For instance, research involving first-year Iranian medical students found that male learners preferred kinesthetic styles, while female students favoured auditory approaches (Sarabi-Asiabar et al., 2014). Similarly, a study conducted in Sri Lanka with ESL learners found that males often employed cognitive and compensation strategies, whereas females preferred social and metacognitive strategies (Liyanage & Bartlett, 2012). These findings underscore the importance of considering gender when designing instructional strategies to accommodate learners' unique preferences and enhance academic performance.

The Felder-Silverman Learning Style Model (FSLSM), introduced by Felder and Silverman in 1988, offers a comprehensive framework for identifying and understanding learning preferences. Widely used in technology-enhanced and language-learning environments, FSLSM provides a detailed classification of learners across four dimensions: active/reflective, sensing/intuitive, visual/verbal,

and sequential/global (Graf et al., 2007). Unlike other models that categorise learners into limited groups, FSLSM describes learning styles as tendencies, allowing for variability in behaviour. This nuanced approach enhances its practical applicability and has made it a popular model in diverse educational contexts, including engineering and language education (Al-Jojo, 2012; Wang, 2007).

Each dimension of FSLSM highlights a distinct aspect of learning. Active learners engage directly with material and often prefer collaborative, hands-on activities. Reflective learners, by contrast, process information internally and benefit from independent study. In the second dimension, sensing learners favour concrete facts and practical applications, whereas intuitive learners gravitate toward abstract concepts and theoretical frameworks. As per the third dimension, visual learners retain information more effectively through diagrams, charts, and other visual aids, while verbal learners prefer textual or spoken explanations. Finally, sequential learners prefer logical, step-by-step progression in learning, while global learners focus on understanding the big picture before delving into details (Taheri, 2003; Graf et al., 2007).

Learning preferences are influenced by various factors such as personality, ethnicity, and educational background (Kang, 1999). Gender has received significant attention for its impact on learning styles. However, existing research has largely emphasized gender comparisons rather than focusing solely on male learners. For example, Felder (1996) found that male engineering students commonly preferred active (61%), sensing (63%), visual (82%), and sequential (60%) learning styles while Hernández-Torrano et al. (2017) found that males preferred visual learning modes and females favoured sequential processing in a

study conducted in Kazakhstan. Shuib and Azizan (2015) reported minimal gender-based differences among Malaysian undergraduates. Despite numerous studies exploring gender-based learning style differences using FSLSM, findings remain inconclusive and insufficient when focusing solely on male learners. Further, although these studies provide valuable insights, their applicability to the Sri Lankan context is limited due to cultural and educational differences and thus, findings from other regions may not be directly transferable. Additionally, local research on FSLSM in Sri Lanka is scarce. The only known study (Wijesuriya & Dissanayake, 2021) employed FSLSM to assess learning styles among STEM students, thereby excluding the business education context. Consequently, there exists a critical research gap in examining male learning style preferences in Sri Lanka's business faculties, especially concerning English as a Second Language (ESL) education.

This study holds considerable importance as it addresses a clear gap in the existing literature by focusing exclusively on male students in a Sri Lankan business faculty and their learning style preferences in the context of ESL. While prior research has investigated gender differences in learning, few have concentrated solely on male learners or applied FSLSM within the realm of business education. Understanding dominant learning styles among this demographic can inform the development of tailored instructional strategies that align with students' cognitive preferences, thereby enhancing language acquisition, engagement, and overall academic success. Moreover, this study contributes to the broader field of culturally responsive pedagogy by providing context-specific insights that are essential for shaping effective educational practices. By centering the research within a localized context, the findings can inform institutional strategies aimed at creating inclusive

learning environments that respect and respond to learner diversity.

Despite its relevance and contribution, the study is subject to certain limitations. It was conducted within a single non-state university in Sri Lanka, which may restrict the generalizability of the findings to other institutions, regions, or educational contexts. Furthermore, the focus on business undergraduates means that the results may not apply to male students in other academic disciplines such as humanities or STEM. Additionally, the study employed a cross-sectional survey design, capturing data at a single point in time, thus limiting the ability to observe changes in learning preferences over time or in response to pedagogical interventions.

Given the scarcity of research specifically targeting male learning style preferences within business faculties, particularly in the context of ESL instruction in Sri Lanka, this study aims to fill that gap. The objectives of the study are to identify the dominant learning styles of male business students, analyze the degree of preference (strong, moderate, or balanced) across FSLSM dimensions, and recommend how these preferences could relate to effective English language instruction in an ESL context. These findings are expected to contribute toward more effective, inclusive, and contextually relevant language teaching practices in business education.

Methodology

The participants of this study comprised first-year undergraduate students enrolled in the Business Faculty of a non-state university in Sri Lanka. A total of 100 male students were selected using simple random sampling to ensure unbiased representation. Before participation, informed consent was obtained from all participants after explaining the purpose of the research and ensuring confidentiality.

Participation was voluntary, and students were assured that their responses would be used exclusively for academic purposes.

Primary data for the study were collected using the Index of Learning Styles (ILS) questionnaire, a standardized instrument developed by Felder and Soloman and available online through North Carolina State University's platform (<https://learningstyles.webtools.ncsu.edu/>). The ILS is grounded in the Felder-Silverman Learning Style Model (FSLSM) and assesses learners' preferences across four dichotomous dimensions: active versus reflective, sensing versus intuitive, visual versus verbal, and sequential versus global. The questionnaire includes 44 forced-choice items, with each item contributing to one of the four dimensions. Respondents' answers provide a profile indicating their individual learning preferences, making the ILS a reliable tool for analyzing cognitive styles, particularly in language learning and technology-supported environments.

In addition to primary data, secondary data were gathered from existing literature, including peer-reviewed journal articles, academic books, and credible online sources. These sources provided theoretical support, contextual background, and comparative perspectives that enriched the interpretation of findings and situated the study within the broader discourse on learning styles and gender in higher education.

The ILS questionnaire was administered online, and students were instructed to complete it independently to avoid any influence from peers. The responses were automatically recorded and stored electronically. Data were sorted and analyzed based on gender, with datasets indicating strong, moderate and balanced scores for male participants. For each participant, scores

were calculated about the four FSLSM dimensions, indicating the strength of their preferences.

The numerical data collected were then analyzed to identify any significant male learning-based patterns. Particular attention was paid to the ESL learning context within the business education framework, as the findings aimed to contribute to more effective teaching strategies tailored to male learners' specific needs. Ultimately, the methodology enabled the researchers to propose pedagogical interventions that align with the cognitive tendencies of male students, thereby fostering improved engagement, comprehension, and retention in English as a Second Language instruction.

This research was reviewed by the Ethics Review Committee at the Sri Lanka Institute of Information Technology and was approved under reference number SLIIT/ERC/FH&S/2025/02. The committee concluded that the study did not involve any elements requiring formal ethical clearance. As such, all procedures adhered to the institution's ethical standards for research involving human participants. Moreover, the study did not receive financial assistance from any governmental, private, or nonprofit entities. The authors declare that there are no conflicts of interest related to this research.

Results and Discussion

The scores obtained by male business undergraduates in a non-governmental university were separately recorded under four dimensions with the scores placing them under strong (9-11), Moderate (5-7) and Balanced (1-3). Table 1 depicts the results obtained by Male students for each FSLSM characteristic:

Table 1. Learning Styles of Male Business Students in Four Dimensions

Gender	FSLSM Dimension	Percentage	Strong (9-11)	Moderate (5-7)	Balanced (1-3)
Male	Active	67%	0	22	45
	Reflective	33%	0	6	27
	Sensing	47%	0	13	34
	Intuitive	53%	0	12	41
	Visual	88%	3	51	34
	Verbal	12%	0	4	8
	Sequential	50%	2	6	42
	Global	50%	1	14	35

Source: Author

The Table 1 offers insight into the learning style preferences of male students based on the Felder-Silverman Learning Style Model (FSLSM). Starting with the Active–Reflective dimension, a majority of students (67%) demonstrated a preference for active learning, suggesting that they tend to learn best through engagement, discussion, and hands-on experiences. In contrast, only 33% preferred reflective learning, indicating fewer students favour internal processing or learning through introspection. Notably, no student showed a strong preference in either direction, with most categorised as moderate (28 students) or balanced (72 students), highlighting a general flexibility in learning preference. This suggests that while many male students may lean toward active methods, they are not rigidly fixed and can adapt to reflective tasks when necessary.

In the sensory–intuitive dimension, the group showed a nearly even split, with 53% leaning towards intuitive learning and 47% towards sensing. This balance indicates that male students slightly favour abstract thinking, innovation, and conceptual understanding over factual, detail-oriented learning. The majority of students in this dimension also fell into the balanced or moderate categories (only 25 in the moderate group, and 75 balanced), which reinforces the idea of cognitive

flexibility. Since neither extreme dominates, instructional strategies should aim to incorporate both concrete examples and conceptual explanations to cater to the full range of student preferences.

A particularly clear trend is visible in the visual-verbal dimension. An overwhelming 88% of male students prefer visual learning, while only 12% prefer verbal. This indicates a strong inclination toward learning through images, diagrams, charts, and videos rather than text or spoken language. Among the visual learners, a large portion (51 students) show a moderate preference, and three students even demonstrate a strong preference, making this the only dimension with any students in the strong category. This trend likely reflects the challenges faced by ESL learners in processing large amounts of English-language text, making visual aids an essential component of effective instruction. The minimal representation of verbal learners further emphasizes the need to prioritize visual content in lesson design.

The Sequential–Global dimension reveals a perfectly balanced distribution, with 50% of students preferring sequential learning and 50% leaning towards global learning. This suggests that half the group processes information in a

logical, step-by-step manner, while the other half understands the material better when presented with overarching themes and big-picture concepts. Most students in this category are again either balanced or moderate (only three students show a strong preference), reinforcing the recurring theme of adaptable learning styles. To address this, educators should consider structuring their teaching to include detailed, linear progressions and high-level summaries that help students connect ideas holistically.

Overall, the analysis reveals that while there is some variation across dimensions, male students tend to exhibit moderate or balanced preferences in most cases, with a few distinct trends. The most significant finding is the very strong preference for visual learning, which stands out as a dominant characteristic. Other dimensions, such as Active–Reflective and sensory–intuitive, suggest slight preferences but also reflect a capacity to operate across styles. This adaptability implies that a multimodal approach to teaching—one that includes visual resources, active participation, and a balance between sequential and global presentation—will be most effective for engaging male students in this context, particularly considering their status as ESL learners.

The learning style preferences of male students, when viewed through the lens of English language learning (ELL), offer important implications for instructional design. A clear trend observed in the data is the strong preference for visual learning, with 88% of students falling into this category. In an ELL context, this is particularly significant. Students who are learning in a second language often struggle with long verbal explanations, unfamiliar vocabulary, or abstract linguistic structures. Visual aids—such as charts, infographics, diagrams, videos, and illustrations—help bridge the gap between limited language proficiency and complex

academic content. These tools support comprehension, reduce cognitive load and provide alternative channels for meaning making. The low percentage of verbal learners (only 12%) reinforces the idea that text-heavy and lecture-based instruction may hinder comprehension for many students unless it is supplemented with visual components.

In the Active–Reflective dimension, 67% of male students show a preference for active learning, indicating that they benefit more from interactive and participatory methods. This aligns well with communicative approaches in English language learning, where language acquisition is supported through peer discussion, role-play, group problem-solving, and other forms of collaborative activity. Active learning environments provide opportunities for meaningful language use, which is essential for developing fluency and confidence in English. Although a smaller group (33%) prefers reflective learning, the presence of balanced learners suggests that integrating moments of reflection—such as journaling or silent reading—alongside group work can cater to both learning styles.

In terms of the sensory–intuitive dimension, male students are almost evenly divided, with 53% showing a preference for intuitive learning and 47% for sensing. Intuitive learners favour abstract thinking, theories, and possibilities, which can sometimes pose challenges in ESL settings where unfamiliar vocabulary or grammatical structures can obscure complex ideas. Sensing learners, on the other hand, prefer concrete facts and practical examples, which can provide linguistic scaffolding in the form of familiar, real-world language. For language instruction, this means that educators should provide both practical, real-life communication tasks (for sensing learners) and opportunities for abstract reasoning and conceptual language use

(for intuitive learners), such as in discussions about business models or ethical dilemmas. The large number of balanced learners in this dimension suggests that students are capable of navigating both styles if instruction is appropriately varied.

The Sequential–Global dimension also shows an even split (50% each), indicating that some students process information best in a linear, step-by-step manner, while others prefer holistic, big-picture approaches. For ELL students, sequential instruction can be particularly helpful in developing language skills because it allows for gradual vocabulary building, clear grammar instruction, and structured practice. However, global learners benefit from understanding the broader context and purpose of what they are learning—for example, how a grammar point functions in real-world communication. Teachers of English should therefore blend sequential techniques, such as guided reading and structured writing, with global strategies, such as content-based instruction and thematic units, to meet the needs of both groups.

In summary, the learning style preferences of male students highlight the importance of visually rich, active, and flexible instructional strategies in English language teaching. The dominance of visual and active styles suggests that male ESL learners may engage more effectively with lessons that involve multimedia resources and participatory learning. The relatively balanced distributions in the other dimensions reflect a need for varied instructional methods that accommodate both analytical and holistic processing. These findings underscore the value of adopting a multimodal and learner-centred approach in English language instruction—especially in contexts like Sri Lanka, where language proficiency can vary, and learners may rely on different styles to compensate for linguistic challenges.

Conclusion

This study investigated the learning style preferences of male undergraduates in the business faculty of a Sri Lankan non-state university using the Felder-Silverman Learning Style Model (FSLSM), with a particular focus on implications for English Language Teaching (ELT). The objectives were to identify dominant learning styles, analyze the degree of preference (strong, moderate, or balanced) across FSLSM dimensions, and recommend how these preferences could relate to effective English language instruction in an ESL context.

The findings revealed several important trends. Most notably, a dominant preference for visual learning (88%) was observed among male students, indicating a strong inclination toward visual aids over verbal or text-based input. This visual dominance has also been observed in ESL contexts. For example, Hernández-Torrano et al. (2017) found that males preferred visual learning. According to Oxford (2003), in English language learning settings, especially where learners prefer visual input, the use of visual materials can enhance comprehension and make language learning more effective. Therefore, male students can be effectively facilitated through visual material use. Thus, the strong visual preference observed in this study reflects both disciplinary norms and linguistic needs.

Additionally, a significant preference for active learning (67%) was identified, suggesting that these learners benefit more from interactive and participatory classroom environments. The sensory–intuitive and sequential–global dimensions showed more balanced distributions, with no overwhelming preferences, reflecting cognitive flexibility among students. In almost all dimensions, the majority of learners exhibited moderate or balanced preferences, and very few displayed strong tendencies. This suggests that while there are observable trends, male students

in this context are generally adaptable and can respond positively to a variety of instructional strategies.

Based on these findings, several pedagogical recommendations can be made for ELT practitioners. First, instructors should incorporate visual materials extensively, such as diagrams, infographics, videos, and graphic organizers, to support comprehension and engagement. Given the active learning preference, interactive methods such as role plays, group discussions, simulations, and task-based learning activities are likely to be effective in promoting language use and retention. Since many students display balanced or moderate preferences in other areas, a blended instructional approach is recommended—one that includes both concrete and conceptual content, as well as both sequential instruction and global perspectives. This is particularly crucial in an ESL setting, where students’ learning preferences can impact their ability to acquire and use English effectively.

Further studies could compare learning style preferences across genders, disciplines, or year levels to explore whether trends differ based on these variables. Additionally, incorporating qualitative methods such as interviews or classroom observations could provide deeper insights into how learning preferences manifest in actual language learning behaviour. Longitudinal studies may also help understand how learning preferences evolve, particularly in response to different teaching strategies or levels of language proficiency.

In conclusion, understanding learning style preferences offers valuable insight into how male ESL learners engage with instructional content. By aligning teaching methods with these preferences, especially the strong inclination toward visual and active learning—English

language instruction can be made more effective, inclusive, and learner-centred. As educational contexts become increasingly diverse, such learner-focused approaches are essential in promoting meaningful language acquisition.

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