Gender Representation in Malaysian Textbooks and Assessment: A Bibliometric Analysis

Kumaran A/L Balasundram[1], Mazura Mastura Muhammad[2]*, Jesilin Manjula[3]. Mohamed Tahir Hj A Rahman[4]

[1,2]Faculty of Languages and Communication, university Pendidikan Sultan Idris

[3]Sunway College Malaysia

[4]Mohamed A. Ali & Associates

*Corresponding Author

ABSTRACT

Gender equality remains central to the United Nations' Sustainable Development Goals (SDGs), particularly Goal 5 (Gender Equality) and Goal 10 (Reduced Inequalities). Despite Malaysia's progress in narrowing its gender gap as reflected in the Malaysia Gender Gap Index (MGGI), issues of gender stereotyping and bias persist in various social spheres, including education. Textbooks and assessments are critical components of the educational process, shaping learners' knowledge, values, and perceptions of social roles. However, these materials have long been critiqued for perpetuating unequal gender portrayals. This study employs a bibliometric analysis to examine research activities related to gender representation in textbooks and assessments, with a specific focus on the Malaysian context. Using the Scopus database, two separate queries were conducted: one on textbooks and another on assessments (2015–2020). Inclusion criteria were limited to English-language journal articles, reviews, and conference papers, while editorials and non-education contexts were excluded. Data were analysed using bibliometrix (R) and VOSviewer to identify publication trends, keyword co-occurrence, co-authorship networks, and thematic clusters. The findings revealed that while 589 articles were identified on textbooks, only a small proportion addressed gender issues, with Malaysian-based studies remaining limited. Notably, most research efforts concentrated on curriculum content, text analysis, student development, and cultural representation, with minimal attention given to gender stereotypes. 160 articles were retrieved for assessment analysis. Only five articles explicitly explored gender but none provided Malaysian perspectives. This review highlights a profound research gap in understanding how both textbooks and high-stakes assessments in Malaysia represent gender. It can be concluded that future research should expand assessments and textbooks utilised in Malaysian vernacular and private schools to address hidden gender inequalities. Such efforts are pertinent to determine gender-equitable education that aligned with the SDGs.

Keywords: Gender representation, textbooks, assessment, bibliometric analysis, Malaysia, education, SDGs.

INTRODUCTION

The United Nations' (UN) Sustainable Development Goals (SDGs) 5 and 10 focus on Gender Equality and Reduced Inequalities (United Nations, 2015), respectively. Gender Equality (SDG 5) stresses on women's rights and opportunities, while Reduced Inequalities (SDG 10) concentrates on disparities across age, disability, race, class, ethnicity, religion, and gender. Ultimately, these SDGs address the central role of gender equality in a a progressive society.

In Malaysia, the Malaysia Gender Gap Index (MGGI) gauges equality across four (4) main domains: economic participation and opportunity, educational attainment, health and survival, and political empowerment. It was

determined that between 1980 and 2017, the MGGI recorded a substantial reduction of gender gap and Malaysia was positoned at 75th out of 144 countries (Department of Statistics Malaysia, 2017; New Straits Times, 2018). Despite these accomplishments, gender-related challenges persist in Malaysia and if left unaddressed, will reinforced the risk disadvantaging women across multiple spheres (Nortajuddin, 2020). Nortajuddin (2020) further reiterates that Malaysian women continue to endure systemic inequalities, like stereotyping and sexualisation in media which are often perpetuated by traditions and social structures.

Education is one critical sphere that is not immune to gender bias and stereotyping despite the extensive initiatives to promote equity within the contexts of teaching and learning (Alvarez, 2020; Kollmayer, Schober & Spiel, 2018). Policy documents have reported the urgency of this issue. For example, the Malaysia Education Blueprint 2013–2025 places equity at all national educational reform efforts and explicitly calling for an education system that reflect the diversity of Malaysian learner, including gender. Textbooks are prevailing tools that shape perceptions of the learners on social roles. Studies have revealed that textual and visual content in textbooks often perpetuates the traditional expectations on gender (Sovič & Hus, 2015; Sunderland, 1994; Ullah & Skelton, 2013). In other words, textbooks not only support learning instruction but also transmit implicit messages that can scaffold children's gender identities from a tender age.

Likewise, assessments act as a catalyst that opens and constructs educational opportunities. Interestingly, the alignment of curricula with assessments can inadvertently result in test items that reproduce gender bias (Yang & Yan, 2020). UNICEF Malaysia also highlights that assessments are often shaped by social expectations and boys and girls may experience assessments differently. Besides that, various organisations such as the All Women's Action Society (AWAM) and the Women's Aid Organisation (WAO) have articulated their concerns on the promotion of gender inequality in schools and assessments which reinforce unequal power relations, including disadvantaging girls in STEM-related pathways (AWAM, 2014 and WAO, 2021). Similarly, the Ministry of Education's reports acknowledge the importance of inclusive examination practices, though explicit analyses of gender representation in test items remain minimal (Ministry of Education, 2013). Several international researches highlight the presence of bias in assessments (Mukundan & Nimehchisalem, 2008; Alvarez, 2020; Kollmayer et al., 2018; Crawfurd et al., 2024). However, systematic studies on Malaysian assessment materials remain scarce. There is an absence of local scholarship and this limits our understanding of how high-stakes examinations may perpetuate gendered identities and inequalities.

Taken together, these insights indicate that textbooks and assessments in Malaysia are not neutral. Yet the scholarly examination of this issue remains limited, particularly in Malaysian context. There is, therefore, a pressing need to investigate how both textbooks and high-stakes examinations represent gender, and how these materials may shape learners' perceptions of social roles. Thus, the present study adopts a bibliometric analysis to examine gender representation in Malaysian ESL textbooks and public examinations. Systematic mapping of existing scholarship is pertinent to identify dominant scholarly patterns and highlight research gaps. This study seeks to contribute evidence-based insights to support the development of more inclusive and equitable educational materials and assessments in Malaysia.

METHODOLOGY

Using the Scopus database, a bibliometric analysis was conducted to examine research published between January 2015 and December 2020. The review focused on English-language studies that investigated gender representation, bias, or stereotypes in textbooks and assessments related to the Malaysian school and ESL context.

To identify trends, we analysed the number of studies published each year, the most active researchers and institutions, and the most frequently cited works. We also mapped recurring themes and connections between keywords, authors, and institutions. Separate comparisons were made between research focusing on textbooks and research focusing on assessments.

This analysis provides a clear picture of what has been studied, where the gaps remain, and how research on gender in Malaysian educational materials has developed over time. It highlights the very limited attention

given to gender issues in assessments compared to textbooks, pointing to the need for more systematic investigation in this area.

The study relies on indexed metadata and does not involve human subjects. Findings are bounded by Scopus coverage, English-language restriction, and the operationalisation of search terms and keyword standardisation (Addanan and Abd Aziz, 2025).

FINDINGS

Textbook Analysis

The search query found 589 articles related to textbooks and it revealed that studies related to the representation gender in textbooks are scarce (refer to Figure 1). The research efforts between this study period touched on curriculum, content and text analysis, student learning development, learning activities, reading comprehension skills and education sphere. In addition, research focus was at the school and tertiary levels.

For example, in 2020 Oktavianti et al. (2020) researched on the characteristics and features of conversations in curriculum-based EFL textbooks for senior high schools. These textbooks were then compared with corpus-based English textbooks. The findings revealed that there were mismatches and discrepancies between conversations in EFL textbooks and authentic conversations in which there were lack hesitation devices and varieties in the use of discourse markers. This study highlighted the importance of using authentic conversations to EFL teaching practice in Indonesia (Oktavianti et al., 2020).

Besides that, Song (2019) investigates the strengths and weaknesses of cultural content of Chinese government-authorized English Language Teaching (henceforth, ELT) textbooks used in public secondary schools and universities. Song (2019) adopted the content analysis method which utilized three main coding schemes – general culture, target culture (English) and source culture (Chinese). The findings showed that there was an imbalanced distribution with general culture had the most percentage (68%) as compared to target culture with 46% and source culture (2%). Song emphasized the significance of exploring culture content of textbooks in raising the awareness of the teachers on the importance of intercultural teaching and learning in schools and universities.

The wordcloud of bibliometric analysis on the textbook keyword are highlighted in Figure 1.
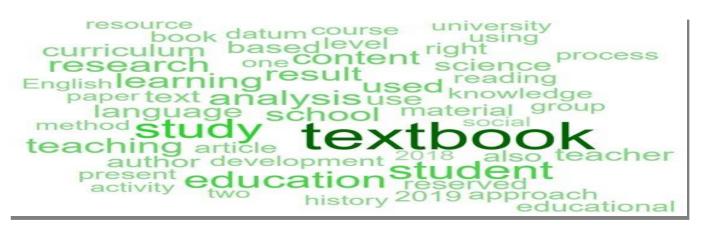

Figure 1: Wordcloud Keyword Analysis of textbook from SCOPUS database

To narrow the research scope, further exploration was conducted. Another bibliometric analysis was done using the SCOPUS database. However, this time the search query focuses on ESL and EFL textbooks and gender. The search query on the keyword ESL and EFL textbooks between the study period of 2015 to 2021 found 287 related articles. Figure 2 shows the wordcloud of bibliometric analysis on ESL and EFL textbooks search query. The research efforts between this study period dwell on discourse, culture, vocabulary, reading, writing, corpus, science, literature and gender. In addition, education is another popular research focus and

research efforts in this area concentrated on lexical, classroom, development education, learner, university, instruction, teaching, student, school, material and teachers.

Figure 2: Wordcloud Keyword Analysis of ESL and EFL Textbooks from SCOPUS database

Out of the 287 articles, only 14 research efforts focused on ESL and EFL textbooks and gender which encompassed 4.88%. In order words, research endeavours related to gender are still minimal. In addition, there were only two (2) researches that involved Malaysian researchers and Malaysian setting – Shamsuddin and Hamid (2019) and Islam and Asadullah (2017).

Islam and Asadullah (2019) analysed government secondary school English language textbooks from Malaysia, Indonesia, Pakistan and Bangladesh using a quantitative content analysis to identify gender stereotypes in these textbooks. The text and pictures analyses revealed that the proportion of female to male characters is balanced in Malaysian and Indonesian textbooks with 44.4% and 44.1% respectively. In Pakistani and Bangladeshi textbooks, the proportion of female to male characters seemed imbalanced with only 24.4% and 37.3% respectively. The research revealed pro-male bias in Malaysian, Indonesian, Pakistani and Bangladeshi textbooks. Based on the cross-country analysis, it is interesting to see that female characters are principally depicted as introverts and passive involving only in domestic and indoor activities with traditional and less prestigious occupations as compared to the male characters (Islam and Asadullah, 2019).

Shamsuddin and Hamid's (2017) study examined gender-stereotyped occupations images in the Malaysian primary school English textbooks. Utilising Social Role Theory and Atlas.ti software, images were analysed to determine the connection of these images with characteristics and meanings. The findings showed that 126 images denoted professional occupations; while non-professional occupations were represented in 81 images. Like the study by Md Mukitul Islam and Niaz Asadullah (2019), male occupational images portrayed with more self-assertive and agentic qualities; while female images embodied more caring and communal qualities. In terms of males are linked with occupations such as architects, and doctors; whereas females are associated with professional occupations such as nurses and teachers. In this study, Shamsuddin and Hamid (2017) suggested that Malaysian textbooks should portray more gender-equitable occupational images with a wider range of portrayals of men and women to communicate positive gender norm to our future generation.

The bibliometric review shows that while research on textbooks is extensive, studies that explicitly examine gender representation remain scarce, especially within the Malaysian context. Out of 287 ESL and EFL textbook-related articles between 2015 and 2021, only 14 (4.88%) focused on gender, and of these, just two addressed Malaysia directly (Shamsuddin & Hamid, 2017; Islam & Asadullah, 2019). This scarcity also highlights our lack of understanding on how gender bias textbooks could affect classroom practice and the learning outcomes of the learners.

Textbooks are introduced to learners at an early age and biases within these textbooks may manifest in classrooms in a subtly yet powerful manner. The study of Shamsuddin and Hamid (2017) for example, identified stereotyped occupational roles for male and female characters in textbooks in which male characters were linked with prestigious professions such as architects and doctors; while women were depicted as nurses or teachers. This can be directly translated into limited career aspirations and pathways among students.

Similarly, research by Islam and Asadullah's (2019) revealed that female characters were often portrayed as introverts and activities are confined to domestic spaces. Hence, educators, utilising these biased textbooks would consciously or unconsciously, reinforce these gender expectations during their lessons, thereby reinforcing these traditional gender doctrines of what constitutes as appropriate roles and occupations for boys and girls (Keresztes & Tóth, 2022).

International research echoes these findings. Crawfurd et al. (2024), for example analysed gender bias school textbooks across 34 nations and the study confirmed that stereotypical gender portrayals are widespread. It was determined that exposure to these biased materials has been linked to differences in classroom engagement, participation and interactions. Boys tend to dominate discussions; while girls' passivity is normalised particularly in in STEM-related subjects (Taylor & Marshall, 2022). Over time, such classroom dynamics will influence learners' performance and subject preference which indirectly contribute to the incessant gender gaps in higher education enrolments and occupational choices (UNESCO, 2023).

In classroom settings, biases embedded in textbooks can also structure teacher instruction. Studies have determined that when a single gender is overrepresent in teaching materials (in the examples, activities or illustrations), teachers tend to focus their questions and activities toward that gender, reinforcing participation inequalities (Liu & Lin, 2021). This suggests that biases in textbooks will not merely stay on the pages, instead it will constantly structure classroom discourse and interactions.

From the perspective of learners, the effects can be profound. Research has found that portrayals of women in secondary roles may result in students internalising or normalising these depictions. This leads to reduced levels of self-efficacy and aspiration amongst girls (Nguyen, 2020). Equally, boys may adopt this inflated dominance roles, which will perpetuate gendered hierarchies within the classroom settings. In Malaysia, where education is a key mechanism of social mobility, such outcomes risk reproducing structural inequalities despite formal commitments to equity in the Malaysia Education Blueprint 2013–2025.

Taken together, these insights indicate that textbook biases are not neutral artefacts of curriculum design. Rather, they have measurable effects on classroom practice—shaping pedagogy, participation, and discourse—and on student outcomes, particularly in terms of aspirations, confidence, and subject performance. The scarcity of Malaysian-focused studies, especially those employing corpus-linguistic methods or exploring vernacular school textbooks, underscores the urgency of further investigation. `

Assessment Analysis

Again, the bibliometric method was applied to explore research endeavours in the sphere of assessment. From the SCOPUS database, a search query on the keyword *assessment* was conducted separately between the study period of 2000 to 2020. The search query identified 160 articles related to assessment and it revealed that studies related to the representation gender in assessment are scarce with only four (5) research efforts.

Figure 3 Word cloud Keyword Analysis of *assessment* from SCOPUS database

Pereira et al. (2017) analysed the fairness and efficacy of learner-centred assessment as compared to the traditional assessment methods in five public universities in Portugal. A set of questionnaires was distributed to 624 tertiary students ranging from 20 to 40 years of age from four different academic programmes; namely, the Portuguese Foundation for Science and Technology were used: Social Sciences and Humanities (SSH), Life and Health Sciences (LHS), Natural and Environmental Sciences (NES) and Sciences and Engineering (SE). Out of the total number of respondents, 405 (65%) of them are female students, while 219 (35%) are male. The findings showed that learner-centred assessment methods are fairer and more effective than the traditional assessment methods. Students' level of confidence increased and performed better in learner-centred methods. From the perspective of gender, the study concluded that female students perceived that learner-centred methods promoted the quality of learning more as compared to male students. In conclusion, tertiary students preferred learner-centred assessment methods.

In the study conducted by Daneshgar (2017) in Tehran, she aimed to measure the literary and linguistics skills of public and private high school students in the academic year of 1992/1993. The study investigated the level of achievement of these students the four skills; namely writing, reading, listening and speaking and additionally, the study also explored the effect of gender and students' fields of study on their performance in these skills. This study also employed library research and cross-sectional survey methods. Findings of the study revealed that the students performed significantly lower than the standard level and comparing the fields of study of the students, the results showed that students from the sphere of science performed better than the rest of the disciplines. The findings also exhibited that female students performed better than their male counterparts.

Lathifi et al. (2016) conducted a study to gauge the fairness of one the main national board examinations in Pakistan - Secondary School Certificate (henceforth, SSC) examinations utilising two independent differential item functioning (DIF) as well as the differential bundle functioning (DBF) procedures. The SSC examinations comprise national qualification tests of various subjects taken by Grade 10 students in South East Asian countries like Bangladesh Pakistan and India. The subjects chosen for the study were English, Mathematics and Physics examinations since they are the most preferred subjects in SSC examinations. Since SSC is a national examination, it is essential that all test items are bias free. The sampling consisted of 103 Grade 10 students who were schooling in affiliated schools in Pakistan. The findings showed that most of the test items did not display DIF and DBF across the three subjects. The psychometric characteristics are also comparable for male and female students across the subjects. In other words, the study proved the test fairness of the SSC examinations.

The study by Houser and An (2015) was conducted with the aim of ascertaining demographic (gender, ethnicity, language and social economic status) and academic (California Standards Test (henceforth, CST) scores in mathematics, science, and ELA; and California High School Exit Exam) variables that could predict the readiness of minority college students in the subject of Mathematics to increase the number of minority students who are college ready in Southern California. 1,700 students and 45 teachers from a Magnet school were selected for this study based on their CST in mathematics, ELA, and science; CAHSEE in mathematics and ELA and EAP mathematics test. The study employed to Regression analysis to predict the students' academic success. The findings showed that students are college ready if they have a conceptual understanding of Mathematics and teachers need to relook at their teaching styles in order to assist the minority students. The study revealed that the readiness among the minority students was very low.

Based on the bibliometric analysis conducted on assessment revealed that research efforts on gender and assessments are scarce and interestingly, none of these research efforts were conducted in Malaysia nor provided Malaysian perspective. In addition, these researchers were carried out between 2015 to 2017. In other words, these researches were not current. This research gap needs to be addressed. Thus, the current study aims to explore gender representation in UPSR English examination.

The research was further narrowed and a separate bibliometric analysis was carried on the SCOPUS database using the search query of *public examination*.

Figure 4 Wordcloud Keyword Analysis of public examination from SCOPUS database

The search query on the keyword public examination between the study period of 2010 to 2020 identified 651 articles. The wordcloud keyword analysis shows that the main focus of researchers is exam, chemistry, perception, achievement, educational, teaching and teacher.   Out of these articles, 45 articles are related to gender representation. For this purpose, further analysis was conducted on these articles.

Table 1Summary of public *examination* search query between the study period of 2000 to 2020

NO	YEAR	NO OF ARTICLES	SUBJECT
1.	2020	7	• Gender inequalities in enrollment of students in secondary school and universities • gender-related achievement gap in math, reading and STEM scores • levels of scientific literacy among students • Gender achievement gap of students in college math and science courses • Knowledge gender gap • gender motivation and engagement in learning science • long-term impact of the COVID-19 pandemic on medical resident education
2.	2019	9	• socio-residential segregation and school segregation • content of the photos posted on medical students' Facebook accounts • gender inequity in the job market • Gendered attrition and academic academic performance, • open appendectomy performed by senior and junior residents • gender bias had played a role in its entrance exam process in Japan • resident performance by gender • causal effects of school type on the student achievement

			• attitudes and opinions of the classroom teachers about the education of the gifted students
3.	2018	10	• the presence of female teachers is positively associated with the performance of girls on math and science exit exams
			• the Principle and Practice of Engineering (PE) pass rates for men and women
			• the relationship between gender violence in schools and teaching and learning processes
			• the long-term effects of early curriculum pair programming on student performance
			• the impact of attendance on exam performance.
			• students from private schools do fare better in medical school than their colleagues from public schools
			• the relationship between selected personal determinants and examination cheating among Kenyan secondary school students
			• gender differences in emotional expressions
			• contributory factors in improving the allocation of new intake student demand
			• the Indonesian state's regulatory practices that focus on migrant conduct
4.	2017	5	• examines the association between jurisdictions' CPA exam educational requirements and exam pass rates, scores, and number of candidates from 2006 to 2013
			• Hispanic accountants' perception of the Certified Public Accountants (CPA) credential.
			• the fairness and effectiveness of the assessment methods and their implications for the learning process
			• the effective education of immigrant and migrant children in New York public schools
			• the literary and linguistic skills of high school graduates
5.	2016	6	• performance depends not only on students' motivation and emotion, but also on classroom learning orientation
			• the effect of the problem-solving abilities of primary school students on their school success, as well as on their motivation for academic preparation for future exams
			• Can the use of targeted discussion improve learning through practical work?
			• test fairness using a national Secondary School Certificate (SSC) examinations
			• key attributes and experiences of young women, who attended government versus private schools at the primary and secondary level
			• gender differences in terms of mathematics self-efficacy, belief about intelligence, and academic achievement
6.	2015	4	• To learn more about learning - what it is and how it works - it is necessary to look inside education in Ireland

			• comprehensive study of the spatial distribution of KCPE exam scores, especially by gender
			• examined how gender; race/ethnicity; language; socioeconomic status; California Standards Test (CST) scores; and California High School Exit Exam mathematics predict college-ready results on the Early Assessment Program (EAP) in mathematics in urban areas of southern California.
			• a parity of men and women among candidates have to pass an entrance exam for an 18 months training program at in INET (National Institute of Territorial Studies)
7.	2014	3	• evaluate how problem-based learning, prior ability and demographic factors influenced student scores on the standardised exam major field test for business
			• Age and gender effect on "Bremen Health Examination"
			• the level of Facebook use in education in one public university located in the middle part of Jordan to communicate with their classmates and the instructor for educational purposes
8.	2013	0	
9.	2012	0	
10.	2011	1	• simple meritocracies that look beyond race, gender, ethnicity or socio-economic to encourage the innate talent of certain individuals
11.	2010	0	

The analysis of 45 articles showed that most research focused on gender effect on *test achievement, test fairness, motivation* and *emotion*, *classroom learning orientation* and *education enrollment*. Interestingly, none of these researches were conducted in Malaysia and more importantly, this detailed analysis showed that none of these researches focused on the analysis of gender representation in public examinations. The bibliometric review confirms that research on gender representation in assessment is both limited and dated, with few studies and none situated in Malaysia.

It should be highlighted that the scarcity of local studies on gender stereotyping does not eliminate the pervasive impact of such biases. Gender stereotyping and bias goes beyond test design. It infiltrates classroom dynamics and affects students' perception of trajectories. Additionally, through washback effects, exam biases will directly influence teaching practices. Educators will naturally align classroom instructions with assessments, thus reinforcing gendered roles and expectations which are embedded in the test items. Recent critiques have highlighted the impact of washback which narrows pedagogy, perpetuates inequities and hinders inclusive learning environments (Hoyos Pipicano, 2024; Muth, 2025).

These insights demonstrate that assessment biases are not merely design flaws. They are are systemic issues that will structure classroom behaviour, learner psychology, and educational aspirations. For Malaysia, where high-stakes assessments carry substantial influence to classroom practices, exploring gender representation in assessments is not only timely but crucial. The current study is key in constructing fairer item and building teacher understanding and capacity toward gender-equitable outcomes.

The detailed bibliometric analysis of both textbooks and assessments clearly highlight a profound research gap in the area of gender representation and studies focusing on the Malaysian context remain scarce, particularly with respect to high-stakes assessments. This gap underlines the significance and timeliness of conducting a bibliometric analysis into how gender is represented in both textbooks and assessments. It is essential that this issue is addressed for informing equitable curriculum design, promoting fair assessment practices, and supporting Malaysia's broader commitment to gender equality in the education sphere.

CONCLUSION

This bibliometric analysis was employed to explore scholarly activities on gender representation in Malaysian textbooks and assessments which is aligned with the United Nations' Sustainable Development Goals on Gender Equality (SDG 5) and Reduced Inequalities (SDG 10). Using the Scopus database, separate queries were conducted for textbooks and assessments (2015–2020). The analysis revealed that while a substantial number of studies exist on textbooks, only a very small proportion address gender-related issues, with even fewer focusing on the Malaysian context. Research on assessments, meanwhile, was both limited in volume and scope, with only a handful of studies engaging with gender, and none offering insights from Malaysia.

The findings highlight two important gaps. First, research efforts on textbooks and gender in Malaysia remain scarce, with only a small number of studies examining stereotyping and occupational roles. These studies demonstrate that male and female characters continue to be portrayed in traditional roles, with women underrepresented in positions of prestige and authority. Second, studies on assessment and gender representation are almost non-existent in Malaysia, with international scholarship largely focusing on fairness, performance differences, and motivation, but not representation in test content.

This study has demonstrated that research on gender representation in Malaysian textbooks and high-stakes assessments remains limited, with especially few studies addressing the assessment context. The bibliometric analysis underscores the need for more systematic, evidence-based approaches to ensure that educational materials reflect gender equity and avoid reinforcing stereotypes.

These insights can assist textbook revision processes, guide publishers and curriculum designers to adopt a balanced and inclusive gender representations. Similarly, findings from this research can be embedded into teacher professional development, equipping educators with essential skills to design unbiased teaching materials and assessment items. With these skills, they will also be able to evaluate resources and assessment materials available in the market before employing them in their classroom instructions. In this way, corpus-informed evidence can move beyond academic discourse and contribute directly to the reformation of classroom practices that are more equitable. Addressing the research gaps identified in this study also calls for stronger collaborative efforts between Malaysian researchers, policymakers, and curriculum specialists. In addition, partnerships with international scholars experienced in gender studies, and educational assessment could foster comparative studies across countries and enhance the international conversation on gender equity in education.

In conclusion, the findings reaffirm the significance of embedding gender-sensitive perspectives into both textbook design and assessment practices. This study highlights the critical knowledge gaps in designing inclusive educational policies to reflect the principles of fairness and equity of our national education agenda and the United Nations' Sustainable Development Goals.

REFERENCES

1. Alvarez, I. (2020). Combating gender stereotypes in the educational system. http://rm.coe.int/1680687d7a
2. Addanan, F. A., & Abd Aziz, A. . (2025). A Systematic Literature Review of the Oral History Used in Education Settings. AJELP: Asian Journal of English Language and Pedagogy, 13(1), 61-74. https://doi.org/10.37134/ajelp.vol13.1.4.2025
3. Athira Nortajuddin, 3 April 2020. The Asean Post. Does Malaysia have a gender stereotyping problem? https://theaseanpost.com/article/does-malaysia-have-gender-stereotyping-problem
4. All Women's Action Society AWAM. (2014). Annual Report 2014. https://www.awam.org.my/wp-content/uploads/2019/11/Annual-Report-2014-Final.pdf
5. Crawfurd, L., et al. (2024). Sexist Textbooks: Automated Analysis of Gender Bias in School Textbooks Across 34 Countries.
6. Daneshgar M. (2017). Literary and lingual skills evaluation (case study: Tehran secondary school students). Language Related Research. Vol 8(8) pp 231-256

7. Department of Statistics Malaysia. (2017). Press release: Statistics on women empowerment in selected domains, Malaysia. Wednesday, 6 December 2017.

a. https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=dHNTVHV0My9QK1MxNHBtSnRucVJqZz09

8. Houser L.C.-S., An S. (2015). Factors Affecting Minority Students' College Readiness in Mathematics. Urban Education. Vol 50(8) pp 938-960

9. Hoyos Pipicano, Y. A. (2024). Exploring standardized tests' washback on learning and educational practice. Cogent Education, 11(1), 2356789. https://doi.org/10.1080/2331186X.2024.2356789

10. Huang, T.-W. (2022). Examination of gender-related differential item functioning using Poly-BW indices in mathematics assessments. Frontiers in Psychology, 13, 821459. https://doi.org/10.3389/fpsyg.2022.821459

11. Inglis, M., Foster, C., & Halford, J. (2022). Gender differences in mathematics self-concept and performance: Evidence from stereotype threat contexts. PLOS ONE, 17(5), e0267699. https://doi.org/10.1371/journal.pone.0267699

12. Islam, K. M. M., & Asadullah, M. N. (2018). Gender stereotypes and education: A comparative content analysis of Malaysian, Indonesian, Pakistani and Bangladeshi school textbooks. PLoS ONE, 13(1), e0190807. https://doi.org/10.1371/journal.pone.0190807

13. Keresztes, T., & Tóth, E. (2022). Gender representation in ELT textbooks: Impacts on classroom discourse and student perceptions. Journal of Language and Education, 8(3), 45–59.

14. Kollmayer, M, Schober, B. & Spiel, C. (2018). Gender stereotypes in education: Development, consequences, and interventions in European Journal of Developmental Psychology v. 15 (4) pages 361-377. https://doi.org/10.1080/17405629.2016.1193483

15. Latifi S., Bulut O., Gierl M., Christie T., Jeeva S. (2016). Differential Performance on National Exams: Evaluating Item and Bundle Functioning Methods using English, Mathematics, and Science Assessments. SAGE Open vol 6(2).

16. Liu, Y., & Lin, C. (2021). The influence of gender representation in textbooks on teacher–student interaction. Language Teaching Research, 25(6), 918–936.

17. Luo, Y. (2024). The impact of math–gender stereotypes on students' performance and engagement. Educational Psychology Review, 36(2), 405–428. https://doi.org/10.1007/s10648-024-09756-9

18. Ministry of Education. (2014). Malaysia Education Blueprint 2013-2025. https://www.pmo.gov.my/wp-content/uploads/2019/07/Malaysia-Education-Blueprint-2013-2025.pdf

19. Mukundan, J. and Nimehchisalem, V. (2008). Gender representation in Malaysian secondary school English language textbooks in Indonesian Journal of English Language Teaching. V. 4(2) page 155-173.

20. Muth, J. (2025). Teaching to the test in the English language classroom: A review of washback effects. Language Assessment Quarterly, 22(1), 56–74. https://doi.org/10.1080/15434303.2025.1923456

21. New Straits Times, November 16, 2018. Malaysia improves ranking in global gender gap report. https://www.nst.com.my/news/nation/2018/11/431681/malaysia-improves-ranking-global-gender-gap-report

22. Nguyen, H. T. (2020). Gender bias in textbooks and its effect on learner aspirations in Southeast Asia. Asia Pacific Journal of Education, 40(4), 456–470

23. Oktavianti, I. N., Prayogi, I., Amal B., M. A., & Pertiwi, R. S. (2020). An Analysis of Conversations in Curriculum-based EFL Textbooks for Senior High School in Indonesia and the Comparison with Corpus-based English Textbooks. Universal Journal of Educational Research, 8(9), 4151–4162. https://doi.org/10.13189/ujer.2020.080941

24. Pereira D., Assunção Flores M., Barros A. (2017). Perceptions of Portuguese undergraduate students about assessment: a study in five public universities. Educational Studies. Vol. $3(4): pp 442-463.

25. Shamsuddin, Chairozila., Keong, Y. Abdul Hamid, Bahiyah. (2016). Gender Stereotyped Images of Occupations in Malaysian Primary English Textbooks: A Social Semiotic Approach. https://www.researchgate.net/publication/323983187_Gender_Stereotyped_Images_of_Occupations_in_Malaysian_Primary_English_Textbooks_A_Social_Semiotic_Approach

26. Song, B. (2019). Exploring the Cultural Content in Chinese ELT Textbooks from Intercultural Perspectives. The Journal of AsiaTEFL, 16(1), 267–278. https://doi.org/10.18823/asiatefl.2019.16.1.17.267

27. Sovič, A. and Husa, V. (2015). Gender Stereotype Analysis of The Textbooks for Young Learners in Procedia - Social and Behavioral Sciences v. 186 (495-501).

28. Sunderland, J. (1994). Introduction. In J. Sunderland, (Ed.), Exploring gender. London: Prentice Hall.

29. Taylor, C., & Marshall, H. (2022). Classroom participation, gender bias, and the hidden curriculum in STEM subjects. International Journal of Educational Research, 113, 101946.

30. Ullah, H. and Skelton, C. (2013). Gender representation in the public sector schools textbooks of Pakistan in Educational Studies v. 39 (2) page 183-194 https://doi.org/ 10.1080/03055698.2012.702892

31. UNESCO. (2023). Cracking the code: Girls' and women's education in science, technology, engineering and mathematics (STEM). Paris: UNESCO.

32. United Nations. Goal 5: Achieving gender equality and empower all women and girls. https://www.un.org/sustainabledevelopment/gender-equality/

33. United Nations. Goal 10: Reduce inequality within and among countries. https://www.un.org/sustainabledevelopment/inequality/

34. Women Aid Organisation WAO. (2021). A Study on Malaysian Public Attitudes and Perceptions towards Violence Against Women (VAW). https://wao.org.my/wp-content/uploads/2021/12/PRINT-WAO_VAW-REPORT_30-NOV.pdf

35. Yang, C. C. R and Yan, T. L. (2020). An analysis of gender representation in territory-wide system assessment Englis.h language papers for primary school students in Hong Kong.. v. 24(1). Pages 1128-1149