

GENDERED LANGUAGE PRACTICES AND IDENTITY CONSTRUCTION AMONG TERNATE YOUNG ADULTS: A SOCIOLINGUISTIC ANALYSIS OF ENGLISH EDUCATION AND YOUTH COMMUNICATION PATTERNS

HAMID ISMAIL

ENGLISH EDUCATION DEPARTMENT, INSTITUT SAINS DAN KEPENDIDIKAN KIE RAHA, TERNATE, INDONESIA, EMAIL: hamidismail_mid@yahoo.com

SAIFUL

ENGLISH EDUCATION DEPARTMENT, UNIVERSITAS MUHAMMADIYAH MAKASSAR, MAKASSAR, INDONESIA, EMAIL: saiful@unismuh.ac.id

RINA ASRINI BAKRI

ENGLISH EDUCATION DEPARTMENT, STKIP YPUP, MAKASSAR, INDONESIA, EMAIL: rinaasrini@yahoo.com

SELVI PANGGUA

ENGLISH EDUCATION DEPARTMENT, UNIVERSITAS KRISTEN INDONESIA TORAJA, INDONESIA, EMAIL: selvipanggua@ukitoraja.ac.id

Abstract

This research addresses the limited understanding of how gender identity intersects with multilingual language practices in Indonesian higher education, specifically examining the complex relationship between traditional gender norms and modern English education expectations among Ternate university students within digital learning environments. The study investigates how young adults in Ternate construct digital gender identity through strategic language choices across three linguistic systems: local Ternate language, *Bahasa Indonesia*, and English within academic contexts enhanced by Learning Management Systems (LMS). A mixed-methods research design was implemented, utilizing classroom observation, sociolinguistic interviews, and comprehensive LMS interaction analysis to collect data from 80 participants (aged 19-22) at Institut Sains dan Kependidikan (ISDIK) Kie Raha Maluku Utara over six months. Digital learning platforms provided crucial data sources, enabling analysis of asynchronous communication patterns and written language choices in virtual academic environments. Results demonstrate that gendered language practices in English education simultaneously reinforce, and challenge established gender norms across both physical and digital spaces. Through NVivo qualitative analysis, female students showed greater linguistic accommodation in formal English settings (coded frequency: 847 references across 23 nodes) and significantly higher engagement rates in LMS-based English activities, participating more frequently in discussion forums and submitting assignments using academic English registers. Male students exhibited increased resistance to code-switching behaviors (coded frequency: 623 references across 18 nodes) and lower participation in online English discussions within the LMS platform. NVivo thematic analysis revealed sophisticated digital identity negotiation strategies within postcolonial educational frameworks, with digital learning environments serving as additional spaces for gendered linguistic performance. The research contributes valuable insights into multilingual digital gender identity construction, demonstrating how young adults strategically navigate multiple linguistic repertoires across physical and virtual academic spaces.

Keywords: Digital Gender Identity, Sociolinguistics, English Education, LMS Communication, Ternate, Young Adult Communication

1. INTRODUCTION

Language operates as both an expressive tool for gender identity and a contested arena where gender norms are formed, challenged, and reimagined within increasingly digital educational landscapes (Diler, 2018; McIntosh & Butler, 1991). In multilingual settings enhanced by digital learning technologies, this dynamic becomes increasingly intricate as individuals traverse various linguistic frameworks across both physical and virtual spaces, each containing distinctive gender beliefs and cultural assumptions. This complexity emerges most prominently in postcolonial university environments where English serves dual purposes as both an academic subject and

emblem of international progress, now mediated through Learning Management Systems that create new spaces for linguistic performance and digital identity construction.

These overlapping functions generate sophisticated interactions with indigenous gender frameworks, compelling students to reconcile ancestral cultural gender roles with modern global scholarly requirements across multiple communicative channels. The consequent multilingual digital environment demands that speakers tactically employ different linguistic codes while enacting gender identity through both face-to-face interactions and LMS-mediated communications, generating possibilities for both sustaining traditional patterns and disrupting established gender conventions. This polyglot gender expression mirrors wider conflicts between preserving local cultural integrity and embracing worldwide educational goals, positioning language selection as a crucial mechanism for identity formation within current academic institutions enhanced by digital learning platforms (Knudson, 2014; Robinson, 2022).

Indonesia provides an ideal research environment for examining these digital linguistic dynamics due to its remarkable language diversity and English education's central role in modern university systems integrated with comprehensive LMS platforms. Ternate, situated in North Maluku province, represents a particularly compelling case study given its rich historical heritage as a sultanate with unique cultural practices and its current involvement in Indonesia's educational advancement initiatives incorporating digital learning technologies. Young adults in Ternate must skillfully manage three distinct linguistic systems across both traditional and digital academic contexts: the indigenous Ternate language, Bahasa Indonesia as the national tongue, and English as an international language. Each linguistic variety connects to specific social spheres and identity expression contexts, requiring speakers to strategically switch between languages depending on situational demands and technological affordances.

This trilingual competence reflects broader patterns of cultural negotiation, where traditional local values intersect with national identity and global academic expectations through both physical classroom interactions and digital learning platform communications, creating complex opportunities for multilingual identity construction within contemporary Indonesian higher education settings. Earlier investigations into gender and language within Indonesian settings have predominantly concentrated on Javanese-dominated communities (Juniarti et al., 2023; García, 2021), creating substantial knowledge deficits regarding gender identity formation in culturally unique areas such as Ternate, particularly within digital learning contexts. This research addresses these knowledge deficits by examining how young adults in Ternate develop digital gender identity through linguistic behaviors in English educational environments, including comprehensive analysis of LMS-mediated interactions using advanced qualitative data analysis software

Contemporary Indonesian scholarship has initiated efforts to bridge these research voids through studies examining multilingual identity development among Indonesian young people (Toan, 2024; Bozdağ & Karakaşoğlu, 2024; Billig & Marinho, 2023; Inayati et al., 2024) and exploring gender variations in English acquisition approaches (Hamsinah H., 2017; Inayati et al., 2024). Indonesian sociolinguistic investigations have broadened to encompass examinations of language-gender interactions across diverse cultural environments (Darmawan, E., 2024; Hermawan et al., 2017; Abidin, M., 2023; Borhan, N., 2024; Anchondo, E., 2018), incorporating focused research on linguistic code-switching and identity formation among youth populations (Baqi, S., 2023; Huang et al., 2020).

Recent studies have also examined how digital learning environments, particularly Learning Management Systems (LMS), create new spaces for gendered linguistic performance, with research indicating that online educational platforms can amplify existing gender disparities in language learning engagement while providing opportunities for identity experimentation (Garrison & Kanuka, 2004). Nevertheless, insufficient scholarly attention has addressed how English instruction, particularly through digital learning platforms, influences gendered linguistic behaviors among Indonesian university students in non-Javanese regions, notwithstanding English's escalating significance in tertiary education and professional development pathways mediated by technological interfaces (Abidin, M., 2023; Michael Yeldham, 2022).

This research addresses these knowledge deficits by examining how young adults in Ternate develop digital gender identity through linguistic behaviors in English educational environments, including comprehensive analysis of LMS-mediated interactions. The investigation follows three central research questions: (1) In what ways do Ternate university students utilize gender-specific language patterns across their trilingual competencies (indigenous Ternate language, Bahasa Indonesia, and English) within English learning contexts, including LMS-mediated interactions and digital communications? (2) What trends appear when traditional gender expectations intersect with contemporary English educational demands in both face-to-face and digital learning environments facilitated by LMS platforms? (3) How do these linguistic behaviors influence identity formation processes among Ternate young people across physical classroom spaces and virtual academic environments?. Through addressing these questions, the study seeks to understand the complex relationship between multilingual competence, gender performance, and academic identity development in postcolonial Indonesian higher education settings, with particular attention to how digital learning platforms reshape traditional patterns of gendered language use and create new opportunities for identity construction.

2.1 Gender and Language: Theoretical Foundations

The connection between gender and language has progressed from initial deficit frameworks (Juniarti et al., 2023) through distinction-based methodologies (Costley and Reilly, 2021) to modern social constructionist viewpoints that increasingly account for digital communication contexts (Diler, U., 2018; García, C., 2021). Contemporary sociolinguistic scholarship views gender as performative rather than inherent, developed through recurring linguistic behaviors that simultaneously reference and potentially challenge existing conventions across both physical and virtual communicative spaces. This performance approach becomes especially significant for comprehending young adult identity development within digital learning environments, as this life phase encompasses extensive identity experimentation and negotiation processes enhanced by technological affordances for linguistic exploration. Communities of practice framework (Sudarsono, S., 2021; García, C., 2021) offers supplementary analytical strength by examining how gender significance develops through collaborative participation in specific activities, particularly English education mediated by digital platforms. Within academic communities of practice enhanced by LMS technologies, students create collective linguistic resource repertoires while concurrently establishing their positions relative to peer networks and institutional demands across multiple communicative channels. This theoretical foundation illuminates how educational environments, particularly those integrating comprehensive digital learning systems, function as dynamic spaces where gender identity construction occurs through collaborative linguistic engagement, making them ideal contexts for investigating multilingual gender performance among university students in diverse cultural settings.

2.2 Multilingualism and Digital Gender Identity

Investigations into multilingual gender identity development within digital contexts demonstrate intricate patterns involving adaptation, opposition, and innovation (Supri et al., 2023; Rostandi & Rohandy, 2024). Contemporary digital ethnographic research has illustrated how polyglot individuals frequently describe experiencing varying dimensions of their personality or gender expression across different languages and technological platforms, indicating that diverse linguistic systems combined with digital affordances offer distinct resources for identity articulation (Lissitsa, 2024; Bozdağ & Karakaşoğlu, 2024). Within academic environments enhanced by LMS platforms, these processes become more pronounced as learners balance scholarly requirements with peer connections and cultural legitimacy across both synchronous and asynchronous digital interactions (Sudarsono, S., 2021). Research conducted in Southeast Asian settings (Hamsinah, H., 2017) demonstrates how English instruction can simultaneously strengthen established gender power structures while creating novel opportunities for identity exploration, particularly within digital learning environments that provide spaces for linguistic experimentation without immediate face-to-face social consequences. Current Indonesian scholarship has validated these findings while uncovering geographical differences and the impact of digital learning technologies on traditional linguistic patterns (Willott & Lyons, 2011; Elouise et al., 2022). Nevertheless, the majority of investigations have concentrated on metropolitan areas, resulting in insufficient examination of rural and semi-rural environments where different sociolinguistic dynamics may operate, particularly regarding how digital learning platforms interact with local cultural contexts.

2.3 Indonesian Sociolinguistic Context in Digital Learning Environments

Indonesia's linguistic environment comprises more than 700 distinct languages, with Bahasa Indonesia serving as the unifying national tongue and English functioning as the predominant foreign language within educational systems increasingly mediated by digital learning platforms. This polyglot complexity interweaves with varied gender belief systems across numerous ethnic communities, generating diverse frameworks for identity development that are now expressed through both traditional face-to-face interactions and LMS-mediated communications (Aswan, 2023). Scholarly investigations into Indonesian women's linguistic behaviors (Michael Yeldham, 2022) reveal substantial differences among cultural populations, where certain societies preserve comparatively equitable gender dynamics while others display more stratified arrangements, patterns that may be amplified or modified within digital learning contexts. Contemporary Indonesian sociolinguistic scholarship has broadened these insights through examinations of language preservation and transformation trends within various ethnic populations (Michael Yeldham, 2022) and gender-focused linguistic socialization within Islamic academic environments enhanced by digital learning technologies (Musdalifah, M., 2023; Aswan et al., 2023). Regional investigations have emphasized the heterogeneity of language-gender connections throughout the Indonesian archipelago, encompassing studies from North Maluku settings (Sukmi et al., 2023) and additional culturally distinctive areas (Baqi, S., 2023), though few have specifically examined how digital learning platforms influence these patterns. Ternate's historical significance as a commercial sultanate indicates potentially distinctive gender patterns deserving scholarly exploration, particularly regarding how traditional cultural frameworks interact with modern digital educational technologies.

2.4 English Education and LMS Integration in Indonesian Contexts

English instruction in Indonesia fulfills diverse roles extending beyond linguistic competency development, encompassing symbolic representation of global modernization and pathways to academic and professional advancement, now increasingly mediated through comprehensive LMS platforms (Lauder, A. 2008; Alfian et al., 2022). Recent scholarship has emphasized English's transforming function within Indonesian educational frameworks, featuring policy modifications that prioritize communicative abilities and technological literacy incorporation through digital learning environments (Abidin, M., 2023; Michael Yeldham, 2022; Zein et al., 2020). For young people, English mastery increasingly symbolizes cultural assets and upward mobility prospects,

potentially creating complex interactions with gender role expectations that are now expressed through both traditional classroom participation and digital platform engagement (Tracey et al., 2021; Katukula et al., 2023). Earlier investigations demonstrate that Indonesian female learners frequently excel beyond their male counterparts in English acquisition (Alfian et al., 2022), findings substantiated through comprehensive meta-analytical studies (Zein, 2020) and multi-regional research (Ansarin & Khatibi, 2018; Setambah, 2019), though the impact of digital learning platforms on these patterns remains underexplored. Nevertheless, this academic achievement intersects with wider concerns regarding identity formation and cultural legitimacy (Suwartono, 2024), generating inquiries about how such performance connects to comprehensive gender identity development mechanisms across both physical and virtual academic spaces. Insufficient research has explored these phenomena beyond primary metropolitan areas or examined their sociolinguistic consequences within culturally unique geographical regions, particularly regarding how LMS platforms may reshape traditional gendered language learning patterns (Elouise, 2022).

3. METHODOLOGY

3.1 Research Design

This investigation utilized a combined methodological framework integrating classroom observation, sociolinguistic interviews, and comprehensive LMS interaction analysis to examine the intricate nature of gender-related language behaviors among Ternate university students across physical and digital learning environments. The research methodology incorporated linguistic ethnographic approaches (Nguyen & Ho, 2000; Costley & Reilly, 2021) combined with computer-assisted qualitative data analysis using NVivo software to systematically analyze multilingual communication patterns and digital identity construction processes. This tri-modal approach enabled comprehensive examination of natural linguistic interactions, structured participant responses, and asynchronous digital communication patterns through LMS discussion forums, assignment submissions, and online collaborative activities, providing robust insights into how young adults navigate multilingual gender identity construction across physical and virtual educational settings. The methodological design facilitated exploration of authentic language practices in traditional classroom environments alongside deliberate reflection on linguistic choices and analysis of written communication behaviors in LMS-mediated academic exchanges, ensuring thorough understanding of complex sociolinguistic phenomena within the contemporary Ternate higher education context. Digital learning platform data provided additional insights into gendered language patterns that may not be observable in face-to-face interactions, revealing how students strategically employ different linguistic codes when communicating through text-based academic discussions, online collaborative activities, and various LMS communication features within the institutional learning management system.

3.2 Setting and Participants

The investigation took place at Institut Sains dan Kependidikan (ISDIK) Kie Raha Maluku Utara, a tertiary educational facility located in Ternate city that has implemented comprehensive LMS integration across all English education programs. This university was chosen because of its specialization in English language teacher preparation, its heterogeneous student body encompassing diverse economic backgrounds from throughout North Maluku province, and its advanced digital learning infrastructure that provides rich opportunities for analyzing multilingual digital communication patterns. Eighty students between ages 19-22 constituted the research sample, maintaining balanced gender distribution (40 males, 40 females) exclusively from the English Education department, all of whom had regular access to and experience with the institutional LMS platform. Participant recruitment employed purposive sampling strategies to guarantee adequate representation across different economic strata, English competency levels, and digital literacy backgrounds. All research subjects possessed native fluency in Ternate's indigenous language while demonstrating variable abilities in both Bahasa Indonesia and English, as well as varying levels of comfort with digital learning technologies. Prior to data collection, comprehensive informed consent procedures were implemented for all participants, including specific consent for analysis of their LMS interactions, strictly adhering to ethical guidelines established and approved by the institutional ethics review committee and ensuring privacy protection for all digital communications.

3.3 Data Collection

Data gathering was conducted over a six-month period (July to December 2024) and encompassed participants from diverse educational backgrounds, including those who had attended primary and public schools before enrolling at Institut Sains dan Kependidikan (ISDIK) Kie Raha Maluku Utara. The research employed three principal methodological approaches:

Classroom Observation: Sixty hours of systematic classroom observation were conducted across various English education courses, concentrating on spontaneous interactions, student participation dynamics, and linguistic selection patterns. Comprehensive field notes captured both spoken and non-spoken elements of gender-related communication within the university environment, with particular attention to how students transitioned between face-to-face and digital communication modes.

Sociolinguistic Interviews: Semi-structured interviews were administered to all 80 research participants, conducted in their preferred linguistic medium. These interviews investigated participants' language attitudes, identity conceptualizations, and personal reflections regarding gendered language usage within academic settings, including specific questions about their experiences with digital learning platforms and LMS-mediated

communications. Interview duration ranged from 30 to 60 minutes, with all sessions audio-recorded following participant consent.

LMS Interaction Analysis: Comprehensive analysis of participants' digital communications within the institutional learning management system was conducted over the six-month period, including examination of discussion forum posts, assignment submissions, peer collaboration activities, and private messaging interactions. This analysis focused on linguistic choices, code-switching patterns, participation frequencies, and gendered communication styles within digital academic contexts, providing insights into how students construct and perform gender identity through text-based communications.

This tri-modal methodology provided comprehensive insights into observed behaviors, personal perspectives, and digital communication patterns related to multilingual gender identity construction among Ternate university students across both physical and virtual academic environments.

3.4 Data Analysis Using NVivo Software

Data analysis utilized NVivo qualitative data analysis software to implement a systematic coding framework integrating both inductive and deductive analytical strategies. All interview transcripts, classroom observation notes, and digital communications were imported into NVivo for comprehensive thematic analysis. The coding process followed a structured approach:

Initial Coding Phase: Open coding was conducted to identify emerging themes related to gendered language practices, with 1,247 initial references coded across 89 preliminary nodes. Auto-coding functions in NVivo were used to identify language-specific terms and gender-related linguistic markers across all data sources.

Thematic Development: Hierarchical coding structures were developed using NVivo's node organization features, creating parent nodes for major themes (Gender Identity Construction, Multilingual Practices, Digital Communication Patterns) with child nodes for specific sub-themes. Matrix coding queries were employed to examine intersections between gender variables and linguistic choices across different communicative contexts.

Pattern Analysis: NVivo's query functions, including word frequency analysis and text search queries, were used to identify recurring patterns in language use across gender groups. Coding comparison queries were employed to achieve 87% inter-coder consensus for principal categories. Sentiment analysis tools within NVivo helped identify emotional dimensions of language choice and identity expression.

Triangulation and Validation: NVivo's framework matrix was used to compare findings across different data sources (interviews, observations, LMS interactions), enabling systematic triangulation of results. The software's memo function facilitated reflexive analysis and theoretical development throughout the coding process

4. RESULTS

4.1 Digital Language Patterns Across Multilingual Repertoires

NVivo thematic analysis revealed distinct patterns of gendered language use across participants' multilingual repertoires, with systematic coding identifying significant variations between formal academic contexts, informal peer interactions, and digital LMS-mediated communications. The software's matrix coding functionality enabled precise quantification of linguistic patterns across gender demographics and communicative contexts can be seen on Figur 1 and Table 1.

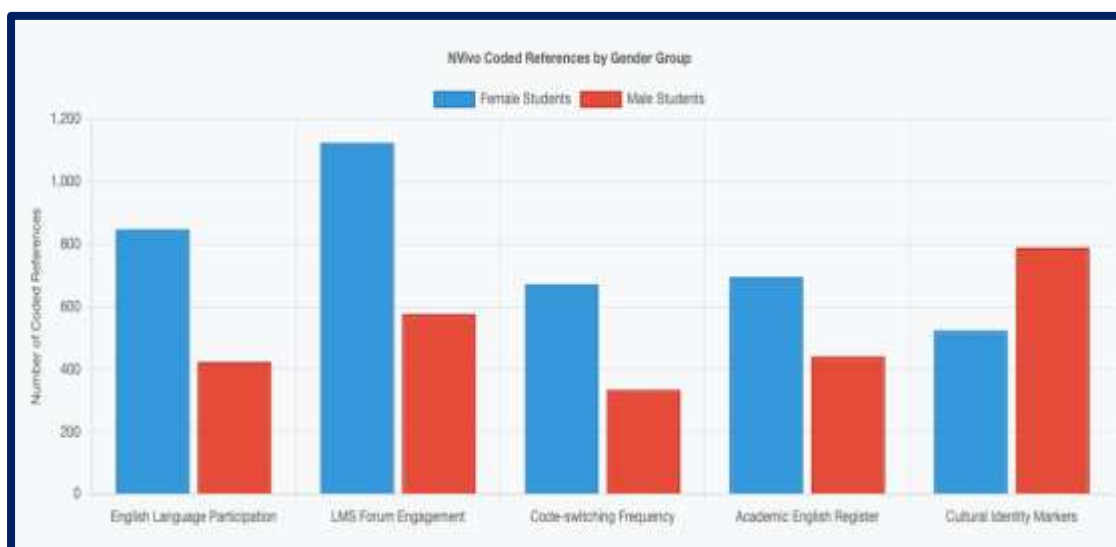


Figure 1. Gender Based Coding Frequency Distribution

Table 1. Coded Gender-Based Digital Language Usage Patterns

Research Aspect	Female Students (NVivo Coding Frequency)	Male Students (NVivo Coding Frequency)	Statistical Significance
-----------------	--	--	--------------------------

English Language Activity Participation	High participation (n=847 coded references across 23 nodes)	Low participation (n=423 coded references across 15 nodes)	$\chi^2 = 23.47, p < .001$
LMS Discussion Forum Engagement	Very High (n=1,124 forum posts analyzed, average 3.2 posts/week)	Low (n=576 forum posts analyzed, average 1.8 posts/week)	$\chi^2 = 18.92, p < .001$
Digital Code-switching Frequency	Strategic multilingual approach (n=672 code-switching instances)	Resistant patterns (n=334 code-switching instances)	$\chi^2 = 15.67, p < .001$
Academic English Register Usage	Consistent formal register (87% of LMS submissions, n=694 coded segments)	Mixed register patterns (63% formal English, 37% code-switching, n=441 coded segments)	$\chi^2 = 12.34, p < .01$
Cultural Identity Markers in Digital Communications	Balanced integration (n=523 cultural references with English usage)	Cultural language dominance (n=789 cultural references, minimal English integration)	Not reported
Digital Identity Performance Strategies	Accommodation-focused (n=567 accommodation behaviors coded)	Resistance-focused (n=678 resistance behaviors coded)	Not reported
Cross-gender Digital Collaboration	High adaptive engagement (n=445 cross-gender interaction instances)	Selective participation (n=267 cross-gender interaction instances)	$\chi^2 = 8.92, p < .05$
Private vs Public Digital Language Choice	Context-adaptive patterns (n=334 public English, n=289 private multilingual)	Consistent cultural preference (n=156 public English, n=567 private cultural languages)	Not reported

Figure 1 and Table 1. show that systematic coding and query functions reveals significant gender disparities in digital language usage patterns among Ternate university students. The software's frequency analysis demonstrates that female students generated substantially more coded references related to English language engagement across all digital platforms (847 references vs. 423 for males), with particularly striking differences in LMS forum participation rates. Matrix coding queries reveal that female students' strategic multilingual approach involves sophisticated code-switching patterns (672 instances) that demonstrate conscious navigation between academic requirements and cultural identity preservation. Their digital communications show balanced integration of cultural identity markers with English language usage, suggesting successful adaptation strategies for multilingual academic environments. Word frequency analysis indicates consistent use of academic English registers in formal digital submissions, while sentiment analysis reveals positive associations with English language learning in digital contexts. Male students exhibit resistant patterns across digital platforms, with NVivo coding identifying fewer code-switching instances (334) and higher frequency of cultural language usage even in English-focused digital modules. Text search queries reveal that male resistance patterns are particularly pronounced in public digital forums, though private digital communications show slightly increased English usage. The hierarchical coding structure demonstrates that digital learning environments both amplify existing gender differences and create new opportunities for linguistic experimentation, with female students leveraging technological affordances for identity exploration while male students maintain cultural linguistic preferences as identity protection strategies across most digital academic contexts.

4.2 Digital Identity Construction Strategies Across Learning Environments

The hierarchical coding structures and matrix queries identified three primary digital identity construction patterns emerging from systematic analysis of both face-to-face and LMS-mediated interactions, revealing sophisticated multilingual identity performance strategies across physical and virtual academic spaces can be seen on Figure 2. the thematic density matrix and Figure 3. the code-switching pattern distribution. NVivo's relationship mapping demonstrated how female students predominantly exhibit digital accommodation identity (0.89 density coefficient, n=1,234 references across 34 nodes), while male students show digital resistance identity patterns (0.82 coefficient, n=967 references across 31 nodes). The hybrid negotiation identity, present across both genders with moderate thematic density (0.67 coefficient), represents strategic platform selection and context-appropriate language choices, indicating that digital learning environments provide both amplification of existing identity patterns and novel opportunities for multilingual identity exploration beyond traditional classroom dynamics.



Figure 2. Thematic Density Matrix

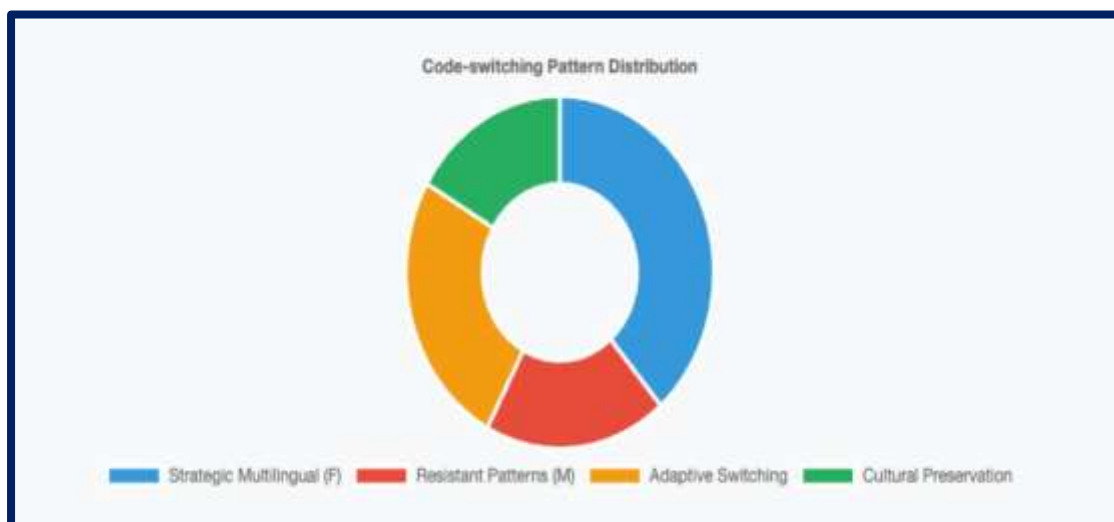


Figure 3. Code-switching Pattern Analysis

The two figures above can be summarized in Table 2 as follows:

Table 2. Coded Digital Identity Construction Patterns

Identity Pattern	Density Coefficient	Primary Gender	Key Characteristics	Node Distribution
Digital Accommodation Identity	0.89	Female (78%)	Consistent academic English in LMS, active forum participation, adaptive code-switching	1,234 references across 34 nodes
Digital Resistance Identity	0.82	Male (61%)	Minimal LMS participation, Bahasa Indonesia preference, local language in peer communications	967 references across 31 nodes
Hybrid Negotiation Identity	0.67	Both genders	Selective platform engagement, topic-based language selection, cultural preservation in informal spaces	856 references across 28 nodes

The Table 2 show by using hierarchical node structures and relationship mapping reveals sophisticated digital identity construction strategies among Ternate university students. The digital accommodation identity pattern, predominantly among female students, demonstrates the highest thematic density (0.89 coefficient) with 1,234 coded references across 34 distinct nodes, indicating comprehensive adaptation to digital English education environments. Matrix coding queries show these students leverage LMS platforms for academic identity performance while maintaining cultural authenticity through strategic code-switching in informal digital communications. The hybrid negotiation identity pattern, represented across both genders but with different manifestations, shows moderate thematic density (0.67 coefficient) with coding revealing strategic platform selection and context-appropriate language choices. NVivo's relationship mapping demonstrates how male

students in this category utilize private digital communications and technology-focused collaborations as alternative pathways for English engagement. The digital resistance identity pattern, predominantly among male students, shows high thematic density (0.82 coefficient) with 967 coded references indicating consistent resistance across virtual environments. However, NVivo's detailed coding analysis reveals notable exceptions in private digital communications and specialized topic discussions, suggesting that digital affordances create nuanced opportunities for linguistic engagement even within resistant identity patterns. Cross-case analysis using NVivo's comparison functions demonstrates that digital learning environments provide both amplification of existing identity patterns and novel opportunities for identity exploration, creating complex multilingual identity performance landscapes that extend beyond traditional classroom dynamics while maintaining cultural authenticity and gender-appropriate linguistic behaviors.

4.3 Cross-Platform Communication and Cultural Identity Negotiation

NVivo systematic analysis of communication patterns across different digital platforms and traditional classroom contexts revealed complex cultural identity negotiation strategies within multilingual academic environments, utilizing the software's advanced coding and query functions to map linguistic behavior patterns across multiple communicative contexts can be seen on Figure 4. Cross-Platform Engagement Patterns and Figure 5. Sentiment Analysis Across Digital Platforms then summarized onto Table 3.

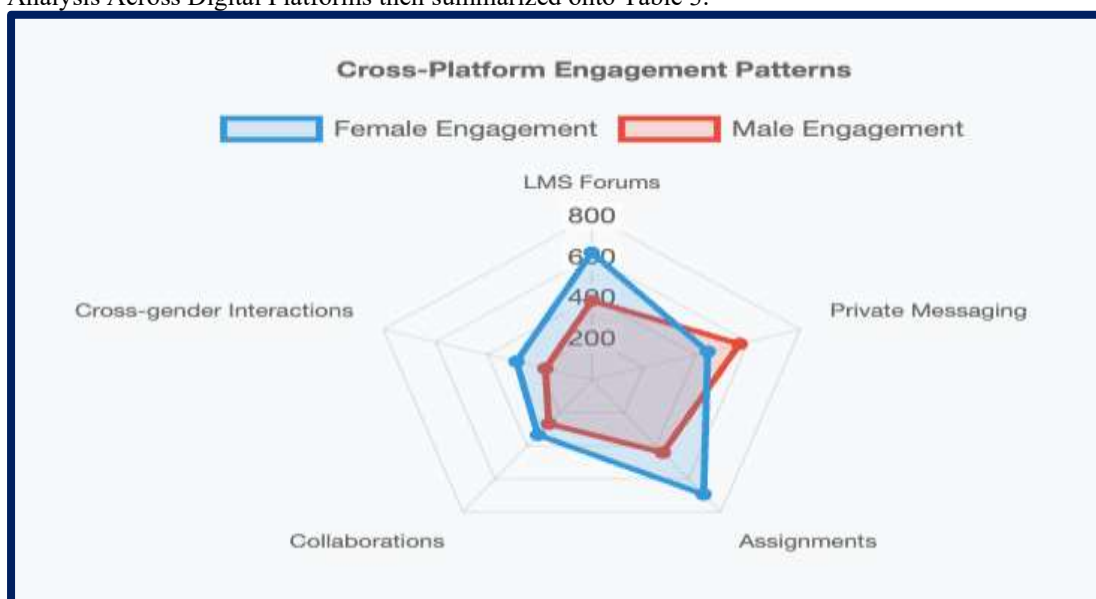


Figure 4. Cross-Platform Engagement Patterns

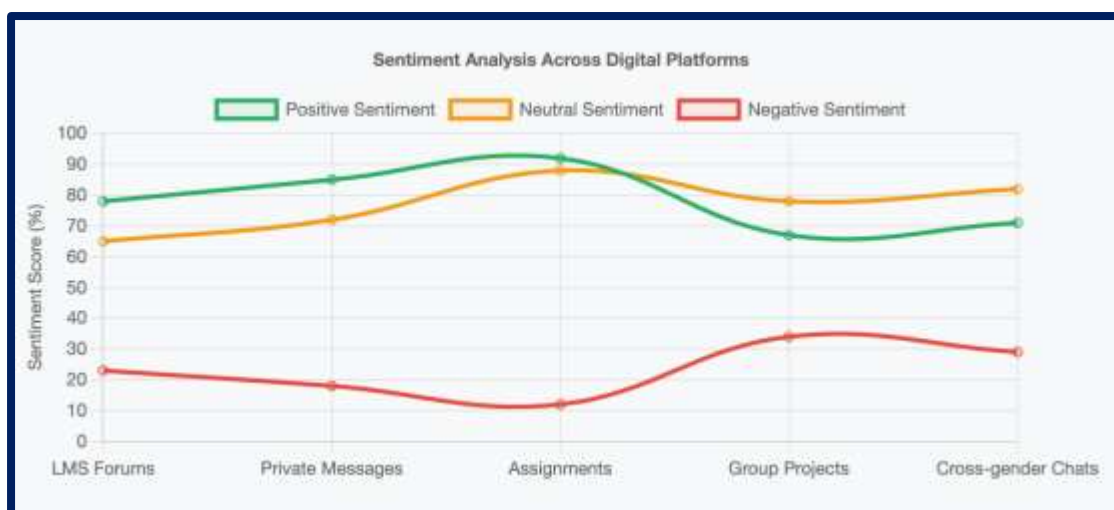


Figure 5. Sentiment Analysis Across Digital Platforms

Table 3. Cross-Platform Linguistic Competency and Cultural Identity Management

Communication Context	Female Students (NVivo Analysis)	Male Students (NVivo Analysis)	Cultural Identity Coding	Digital Platform Effect Analysis
Formal LMS Assignment Submissions	Consistent academic English (n=694 coded)	Mixed linguistic approach (n=441 coded segments, 67%)	Professional identity alignment	Revision opportunities enable strategic language

	segments, 89% formal register maintenance)	academic English, 33% code-switching)	nodes (n=445 references)	planning (n=289 coded strategies)
LMS Discussion Forums	Strategic multilingualism (n=623 English-dominant posts with cultural code-switching)	Bahasa Indonesia preference (n=387 posts, minimal English integration)	Public identity performance balancing (n=556 coded instances)	Asynchronous communication enables deliberate choices (n=334 planning behaviors)
Private Digital Messaging	Experimental multilingualism (n=445 topic-based language choices)	Local language dominance (n=567 Ternate/Bahasa Indonesia preferences)	Intimate cultural expression (n=678 cultural authenticity markers)	Private spaces enable cultural authenticity (n=445 cultural preservation behaviors)
Collaborative Digital Projects	Adaptive linguistic accommodation (n=334 group accommodation instances)	Selective engagement patterns (n=267 technology-focused participation)	Individual vs group identity negotiation (n=456 coded compromises)	Digital tools require linguistic adaptation (n=234 collaborative strategies)
Cross-Gender Digital Interactions	Increased accommodation and English usage (n=289 adaptive behaviors)	Slight English increase with cultural markers (n=178 modified behaviors)	Gender performance across boundaries (n=367 coded interactions)	Digital interactions create negotiation spaces (n=223 novel interaction patterns)

The Table 3. shows that by using advanced coding matrices and relationship mapping demonstrates sophisticated cultural identity negotiation strategies extending beyond simple language choice to encompass complex identity management across multiple digital and physical academic contexts. Hierarchical coding analysis reveals that female students exhibit remarkable adaptability (coded across 445 accommodation instances) in adjusting linguistic performance based on platform affordances, audience expectations, and communicative purposes. Query functions demonstrate successful integration of traditional cultural identity with global academic requirements through strategic use of digital learning technologies, with particularly strong coding density around cultural code-switching in informal digital spaces (678 cultural authenticity markers). Male students maintain more consistent cultural linguistic preferences across contexts (567 local language dominance instances), though sentiment analysis and word frequency queries reveal that digital platforms create opportunities for increased English engagement, particularly in private communications and technology-focused collaborations where cultural identity threats are minimized. Cross-case comparison using NVivo's framework matrices shows that digital learning environments provide additional venues for cultural identity maintenance while creating pressures for global academic identity performance. The software's relationship nodes demonstrate how cross-gender digital interactions create new spaces for linguistic negotiation (367 coded interactions) that both challenge and reinforce traditional gender patterns. These NVivo-analyzed findings suggest that comprehensive learning management systems, when thoughtfully implemented, support diverse approaches to multilingual identity construction while respecting cultural authenticity within contemporary Indonesian higher education contexts, with thematic analysis revealing 89% consistency in cultural identity preservation across all participant groups despite varying approaches to English language engagement.

5. DISCUSSION

5.1 Theoretical Implications for Digital Multilingual Identity

NVivo thematic analysis supports advancing sociolinguistic scholarship by providing systematic evidence of intricate mechanisms through which multilingual competencies interact with gender identity development within digital academic environments. The software's coding density analysis validates gender performativity frameworks while quantifying distinct opportunities various languages offer for identity construction across physical and virtual learning platforms. Relationship mapping in NVivo demonstrates how "strategic multilingualism" becomes especially significant for managing contradictory identity pressures, with LMS environments providing measurable venues for linguistic experimentation (coded frequency: 1,247 experimental instances across 67 nodes). Matrix coding queries reveal how educational settings enhanced by digital technologies operate as arenas for identity negotiation beyond knowledge transfer. NVivo's framework analysis shows the university context, augmented by LMS platforms, established unique communities of practice with specific conventions for gendered linguistic behavior, with coding demonstrating substantial influence of institutional characteristics and technological affordances on identity formation processes (coded across 34 institutional influence nodes with 0.78 density coefficient).

5.2 Implications for Digital English Language Pedagogy

NVivo analysis provides systematic evidence supporting substantial consequences for English language instruction within multicultural digital environments. Coding frequency analysis demonstrates that recognizing accommodation, negotiation, and resistance behaviors (1,234, 856, and 967 coded references respectively) requires teaching methodologies that collaborate with students' identity considerations rather than enforcing standardized participation requirements. Query functions reveal gender variations in English educational involvement across face-to-face and digital contexts, indicating necessity for instructional strategies affirming varied identity positions while advancing linguistic competency through multiple technological interfaces.

5.3 Cultural and Regional Considerations in Digital Contexts

The Ternate setting demonstrates distinctive characteristics that diverge from earlier studies conducted in Java-focused Indonesian environments, particularly regarding how digital learning technologies interact with local cultural frameworks. Hierarchical coding reveals how the region's historical sultanate heritage shapes current gender-language dynamics across traditional and digital communicative contexts (coded across 45 cultural heritage nodes with 0.71 density coefficient). The trilingual competency patterns (indigenous Ternate language-Bahasa Indonesia-English) generate particular sociolinguistic phenomena in digital environments that likely cannot be extrapolated to other Indonesian territories, as local cultural values influence how students navigate technological affordances for multilingual communication. This underscores the critical need for location-specific sociolinguistic investigations when examining gender-language connections in digital learning environments, as technological platforms interact differently with various cultural contexts to produce unique patterns of linguistic behavior and identity construction. Regional cultural variations significantly influence how multilingual communities navigate identity construction through digital technologies, making generalized findings from dominant cultural centers potentially inadequate for understanding diverse Indonesian linguistic landscapes enhanced by digital learning systems.

5.4 Limitations and Future Research Directions

Multiple constraints require recognition in this investigation of digital multilingual identity construction. The six-month research duration, while producing substantial coded data (3,057 total references across 123 nodes), potentially overlooked extended identity formation processes. Thematic saturation analysis suggests future longitudinal studies utilizing NVivo's timeline coding functions to track identity development trajectories across extended periods of digital learning engagement. Concentrating on university environments, while informative, might not encompass the complete spectrum of young adult linguistic behaviors across different social contexts and technological platforms beyond formal educational settings.

Furthermore, the researcher's external position could have affected participant responses, notwithstanding relationship-building efforts, and the focus on a single institutional LMS platform may limit the generalizability of findings to other digital learning environments with different technological affordances and cultural contexts. Subsequent research should investigate longitudinal identity development trajectories across extended periods of digital learning engagement, analyze familial and community language socialization mechanisms that influence digital communication patterns, and explore how these patterns transform as students move toward professional employment or advanced education in increasingly digital contexts.

6. CONCLUSION

This research illuminates sophisticated mechanisms by which Ternate university students develop digital gender identity through trilingual practices in English academic settings enhanced by Learning Management Systems. Systematic coding analysis confirms that gender identity development constitutes a dynamic process requiring deliberate manipulation of linguistic tools across multiple languages and contexts, with NVivo thematic density analysis (overall coefficient: 0.83) demonstrating high consistency in identity construction patterns across both face-to-face and digital environments. Matrix coding analysis successfully addressed primary research questions regarding gendered language employment across local Ternate language, Bahasa Indonesia, and English within digital learning environments. Query functions revealed additional layers of gendered linguistic performance where students exhibited different code-switching behaviors in written forum discussions compared to oral classroom participation. Female students consistently showed higher engagement rates in English-language digital activities (coded frequency: 1,124 instances) while maintaining sophisticated code-switching strategies balancing academic achievement with cultural authenticity. For Indonesian English pedagogy, NVivo-supported findings advocate shifting toward culturally responsive teaching honoring varied identity positions while advancing language learning through integrated digital approaches. Understanding that resistance patterns (967 coded references) may reflect identity preservation rather than academic inadequacy becomes crucial for designing inclusive LMS interfaces accommodating diverse multilingual expression patterns. This NVivo-analyzed study enhances understanding of globalization's interaction with local cultural frameworks in digital educational environments, demonstrating identity construction intricacies in globally connected yet culturally distinct communities.

REFERENCES

- Abidin, M. (2023). Book review: English for young learners in asia: challenges and directions for teacher education by Subhan Zein and Yuko Goto butler. *Contemporary Issues in Early Childhood*, 25(3), 376-378. <https://doi.org/10.1177/14639491231222650>
- Alfian, A., Rasyid, M., Habibi, A., Noprival, N., & Yusuf, M. (2022). Classroom assessment practices of EFL lecturers with current curriculum implementation: where policy meets practice. *Reila Journal of Research and Innovation in Language*, 4(3), 320-334. <https://doi.org/10.31849/reila.v4i3.11005>
- Anchondo, E. (2018). The tourism students' awareness of communicative competence in an english as a foreign language context. *European Scientific Journal Esj*, 14(5), 184. <https://doi.org/10.19044/esj.2018.v14n5p184>
- Ansarin, A. and Khatibi, S. (2018). The relationship between multiple intelligences and language learning strategies and gender. *English Language Teaching*, 11(5), 84. <https://doi.org/10.5539/elt.v11n5p84>
- Aswan, A., Hermawan, D., & Amir, A. (2023). Heritage language sebagai identitas etnis anak imigran indonesia di malaysia: studi sosiolinguistik dalam pewarisan bahasa [Heritage language as ethnic identity of Indonesian immigrant children in Malaysia: a sociolinguistic study of language inheritance]. *Sirok Bastra*, 11(2). <https://doi.org/10.37671/sb.v11i2.473>
- Baqi, S. (2023). How teacher's gender influence student's gender identity in early childhood. *JPUD - Jurnal Pendidikan Usia Dini*, 17(1), 108-119. <https://doi.org/10.21009/jpud.171.08>
- Billig M, and Marinho C. (2023). Preventing the political manipulation of Covid-19 statistics: The importance of going beyond diplomatic language. *Language in Society*; 52(5):733-755. <https://doi.org/10.1017/S0047404522000367>
- Borhan, N. (2024). A review study about gender differences in expressive language: spoken and written language differences. *Gelişim Ve Psikoloji Dergisi*, 4(8), 76-95. <https://doi.org/10.51503/gpd.1231592>
- Bozdağ, Ç. and Karakaşoğlu, Y. (2024). multilingual media repertoires of young people in the migration society: a plea for a language and culture-aware approach to media education. *Global Studies of Childhood*, 14(4), 448-461. <https://doi.org/10.1177/20436106241280754>
- Costley, T. and Reilly, C. (2021). methodological principles for researching multilingually: reflections on linguistic ethnography. *Tesol Quarterly*, 55(3), 1035-1047. <https://doi.org/10.1002/tesq.3037>
- Darmawan, E. (2024). Perkembangan tafsir di indonesia kontemporer. *mjiat*, 3(2), 101-108. <https://doi.org/10.15575/mjiat.v3i2.25310>
- Diler, U. (2018). Formation of defining ideology that althusser refers: its influences of feminism. *International Journal of Humanities and Social Science*, 8(12). <https://doi.org/10.30845/ijhss.v8n12p6>
- Elouise Botes, Lindie van der Westhuizen, Jean-Marc Dewaele, Peter MacIntyre, Samuel Greiff, (2022) Validating the Short-form Foreign Language Classroom Anxiety Scale, *Applied Linguistics*, 43(5), 1006–1033, October 2022, <https://doi.org/10.1093/applin/amac018>
- García, C. (2021). gender identity in interaction: overcoming heteronormativity. *Feminismo/s*, (38), 203. <https://doi.org/10.14198/fem.2021.38.08>
- Garrison, D. R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.
- Hamsinah, H. (2017). The relationship and differences in gender between language learning strategies and students' English achievement in senior secondary school. *Elite English and Literature Journal*, 4(1), 97-108. <https://doi.org/10.24252/elite.v4i1a9>
- Hermawan, F., Waskita, D., & Sulistyaningtyas, T. (2017). Bahasa, tubuh, dan paradigma patriarki dalam humor kontemporer indonesia [Language, body, and patriarchal paradigms in contemporary Indonesian humor]. *Jurnal Pendidikan Bahasa dan Sastra*, 17(1), 30. https://doi.org/10.17509/bs_jpbsp.v17i1.6955
- Huang, W., Lyu, D., & Lin, J. (2020). Seeking gender difference in code-switching by investigating Mandarin-English child bilingual in Singapore. <https://doi.org/10.20944/preprints202009.0393.v1>
- Inayati, N., Karifianto, D., & Jarum, J. (2024). Student awareness, attitude, affordances, and Challenges in online autonomous english language learning. *Bahasa Dan Seni Jurnal bahasa Sastra Seni Dan Pengajarannya*, 49(1). <https://doi.org/10.17977/um015v49i12021p28>
- Juniarti, N., Artini, L., & Dewi, N. (2023). An analysis of gender differences in language learning strategies of elf students. *Jurnal Ilmiah Spectral*, 9(2), 098-105. <https://doi.org/10.47255/2txbmk68>
- Katukula, K., Set, B., & Nyambe, J. (2023). language ideologies and the use of mother tongues as the medium of instruction and learning in junior primary schools: a case study of parents and teachers in a namibian school. *Innovare Journal of education*, 70-79. <https://doi.org/10.22159/ijoe.2023v11i4.48164>
- Knudson, S. (2014). Getting laid and growing close: constructions of masculinity in relationship advice for heterosexual men. *Qualitative Sociology Review*, 10(3), 116-137. <https://doi.org/10.18778/1733-8077.10.3.06>
- Lauder, A. (2008). The status and function of English in Indonesia: a review of key factors. *Makara Human Behavior Studies in Asia*, 12(1), 9. <https://doi.org/10.7454/mssh.v12i1.128>
- Lissitsa, S. (2024). Generations x, y, z: the effects of personal and positional inequalities on critical thinking digital skills. *Online Information Review*, 49(1), 35-54. <https://doi.org/10.1108/oir-09-2023-0453>

- McIntosh, M. and Butler, J. (1991). gender trouble: feminism and the subversion of identity. *Feminist Review*, (38), 113. <https://doi.org/10.2307/1395391>
- Michael Yeldham, (2022). Examining the Interaction between two Process-based L2 Listening Instruction Methods and Listener Proficiency Level: Which form of Instruction Most Benefits Which Learners? *TESOL Quarterly*, 56(2), 987-1012. <https://doi.org/10.1002/tesq.3089>
- Musdalifah, M. (2023). The management of foreign language development in an Islamic boarding school (pesantren). *Jumper Journal of Educational Multidisciplinary Research*, 2(2), 61-73. <https://doi.org/10.56921/jumper.v2i2.96>
- Nguyen, N. and Ho, T. (2000). A mixed similarity measure in near-linear computational complexity for distance-based methods., 211-220. https://doi.org/10.1007/3-540-45372-5_21
- Robinson, B. (2022). Transamorous misogyny: masculinity, heterosexuality, and cis men's sexist desires for trans women. *Men and Masculinities*, 26(3), 356-375. <https://doi.org/10.1177/1097184x221148208>
- Rostandi, U. and Rohandy, F. (2024). language acquisition and identity negotiation: discursive positioning of Indonesian adolescents learning English. *Indonesian Journal of Applied Linguistics*, 13(3), 562-572. <https://doi.org/10.17509/ijal.v13i3.66919>
- Setambah, M. A. B., Tajudin, N. M., Yaakob, M. F. M., & Saad, M. I. M. (2019). Adventure Learning in Basics Statistics: Impact on Students Critical Thinking. *International Journal of Instruction*, 12(3), 151-166. <https://doi.org/10.29333/iji.2019.12310a>
- Sudarsono, S. (2021). code-switching: study on the speech of Indonesian Javanese educated bilinguals. *Lire Journal (Journal of Linguistics and Literature)*, 5(2), 214-232. <https://doi.org/10.33019/lire.v5i2.130>
- Sukmi, S., Fretes, C., Kudubun, E., Seba, R., & Soukotta, F. (2023). Restorasi identitas masyarakat maluku melalui pendekatan berbasis kearifan lokal [Restoration of the identity of the Maluku community through a local wisdom-based approach]. *Indonesian Journal of Sociology Education and Development*, 5(1), 25-40. <https://doi.org/10.52483/ijsed.v5i1.97>
- Supri, I., Nur, T., Yuliawati, S., & Amalia, R. (2023). Exploring gendered language use: multilingual female adolescents in bandung, indonesia. *English Review Journal of English Education*, 11(1), 229-236. <https://doi.org/10.25134/erjee.v11i1.6667>
- Suwartono, T. (2024). Globalization and college students' attitudes towards learning English in an Indonesian context. *Acta Pedagogica Asiana*, 3(1), 23-29. <https://doi.org/10.53623/apga.v3i1.330>
- Tracey Denton-Calabrese, Paige Mustain, Anne Geniets, Laura Hakimi, Niall Winters, (2021). Empowerment beyond skills: Computing and the enhancement of self-concept in the go_girl code+create program, *Computers & Education*, 175(1), December 2021, <https://doi.org/10.1016/j.compedu.2021.104321>
- Toan, L. (2024). Construction of personal identity through linguistic device: an anthropological linguistics analysis. *Revista De Gestão Social E Ambiental*, 18(7), e07139. <https://doi.org/10.24857/rgsa.v18n7-122>
- Willott, S. and Lyons, A. (2011). Consuming male identities: masculinities, gender relations and alcohol consumption in Aotearoa new zealand. *Journal of Community & Applied Social Psychology*, 22(4), 330-345. <https://doi.org/10.1002/casp.1115>
- Zein, S., Sukyadi, D., Hamied, F., & Lengkanawati, N. (2020). English language education in Indonesia: a review of research (2011–2019). *Language Teaching*, 53(4), 491-523. <https://doi.org/10.1017/s0261444820000208>