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AUTHORS' STRATEGIES FOR JUSTIFYING RESEARCH METHODOLOGY IN RESEARCH ARTICLES PUBLISHED IN PRESTIGIOUS JOURNALS

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Abstract
The dependability and validity of research outcomes depend on the quality of the arguments presented in scientific articles' methods sections, which also affects reproducibility. Previous discourse analysis studies have paid little attention to evaluating the importance of methods sections. This research examines how authors in applied linguistics and English education rationalize their methodological selections, concentrating on three main facets: research design, sampling methods, and data analysis. The study analyzed 100 scholarly articles from respected international journals included in Scopus and distributed across four separate regions. Authors typically supported their research design and data analysis by citing methodological literature but used implicit justification when selecting sampling methods. Several articles did not provide clear explanations for their methodological choices, particularly regarding sampling methods. The results reveal a significant gap between the anticipated standards for transparent methodological reporting and the currently observed scholarly practices. Research design and data analysis received frequent justifications, but sampling methods remained poorly explained, thus compromising both transparency and replicability. Researchers need to provide stronger direct justifications for all methodological aspects, according to this study. Novice authors and postgraduate students must carefully adhere to journal guidelines and provide complete and detailed reporting within the methods section.

Keywords: argument, applied linguistics, English education, methods section, prestigious journal

Introduction
The methods section (MS) serves as a fundamental component of research journal articles (JA) because it acts as both a procedural guide and a thorough explanation for the research methods employed (Kallet, 2004; Mackey & Gass, 2021; Martinez, 2017; Paltridge & Phakiti, 2015). Research credibility and reliability depend fundamentally on its role, as demonstrated by various studies

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(Cotos et al., 2017; Day, 2007; Lim, 2006; Smagorinsky, 2008). Kafes (2016) found that the MS remains a significant yet underexplored element in discourse analysis, particularly regarding the complex argumentative methods used by authors.

The field of Applied Linguistics and English Education (AL&EE) renders the MS more important due to its complex nature and dependency on specific contexts. Understanding authors' persuasive argument construction about research methodologies and other aspects reveals field-specific conventions and expectations (Arsyad et al., 2020; Hyland, 2004). This research, therefore, analyzes the rhetorical strategies used in respected journals to develop guidelines for writing effective methods sections.

Research has identified the structural parts of the MS that comprise Moves and Steps, according to Kanoksilapatham (2005). Research into the organization of these elements in AL&EE domains remains incomplete, as comprehensive studies have not yet been carried out. Existing research has highlighted the necessity of describing elements such as participants and instruments in research methodology (Paltridge & Starfield, 2012), but further exploration of authors' reasoning behind their methodological choices remains essential (Arsyad, 2024). The study focuses on analyzing the rhetorical techniques utilized to deliver assertiveness and certainty (Arsyad et al., 2020; Samraj, 2008) while also observing how authors manage the equilibrium between demonstrating confidence and recognizing their study's limitations. Thus, the current research investigates manuscript organization methods utilized by authors by integrating insights from field experts. It also analyzes the typical elements found in manuscripts and explores why authors choose specific research methods. This research specifically works to create comprehensive guidelines that support novice authors and postgraduate students to improve AL&EE research quality.

The scholarly examination of the methods section in academic papers has predominantly focused on its structural components, including organization and basic elements. Lim's (2006) research introduced a basic three-movement structure for methods sections, but later studies, such as those by Pramoolsook et al., revealed its limitations (2015) and challenged its relevance across various disciplines. Peacock (2011) extended his analysis across multiple disciplines and found shared structural features as well as significant distinctions, which challenged the idea of a universal model. Zhang and Wanaruk (2016) identified education-specific features and emphasized the importance of context for determining key components of the methods section. The research reveals a shift towards recognizing the need for adaptable and discipline-specific methods while questioning the fit of previous standardized models and proposing an advanced view on writing the methods section in academic work.

These investigations establish important foundations yet remain centered on the “what” elements of manuscripts without exploring their “how” and “why” aspects. Hyland (2004) reveals the critical role that hedging and boosting techniques play in developing convincing arguments. Authors regularly utilize linguistic techniques to refine or support their procedural statements, according to his observations. Silverman (2015) emphasizes the need for researchers to offer explicit explanations for their research choices to enhance clarity since qualitative research demands thorough methodological examination. Cohen et al. concur (2018) that an effective methodology section needs to provide a detailed description of

research processes as well as logical explanations that resolve any potential reader concerns. The results show a clear need to focus on how writers in applied linguistics and educational evaluation build their arguments while keeping their methods strong and their claims convincing.

The recent study by Arsyad (2024) discovered English Language Teaching articles lacked adequate research methods descriptions and design explanations, with methodological choices frequently missing clear justifications, an issue recognized across academic publications. Hyland (2004) states that reliable results depend on clear and detailed justifications, while Basturkmen (2012) shows how persuasive explanations support methodological choices. Samraj (2008) argues that detailed descriptions in the methods section are required for accurate evaluation and replicability. Arsyad's study highlights openness as key to manuscript credibility while acknowledging a need to investigate how writers substantiate their choices through argumentation. The absence of convincing explanations limits critical evaluation and weakens the manuscripts' persuasive strength.

The present research intends to fill existing knowledge gaps by examining justification methods used by authors in leading AL&EE journals for their research design choices and sampling and data analysis techniques. Prior studies have shown that providing transparent methodological justification improves academic writing credibility (Arsyad, 2024; Hyland, 2004). The study aims to present new insights into the persuasive MS through its analysis of the specific rhetorical strategies and linguistic patterns authors use to justify their academic choices (Lim, 2006; Peacock, 2011). Besides, the study supports demands for specialized academic writing analysis (Basturkmen, 2012; Flowerdew, 2015) by providing practical advice to enhance the clarity and argumentative structure of methods sections across various disciplines. It seeks to answer the following research questions:

1. How do authors in AL&EE published in prestigious journals justify their choice of research design in their article methodology?
2. How do authors in AL&EE published in prestigious journals justify the choice of sampling procedures in their article methodology?
3. How do authors in AL&EE published in prestigious journals justify their data analysis procedures in their article methodology?

Method

Research design

This study employed a content analysis approach as outlined by Drisko and Maschi (2016). As noted by Krippendorff (2013), content analysis serves as a research method aimed at deriving valid and repeatable conclusions from texts or other significant materials in relation to their usage contexts. He also indicates that this technique can effectively assess and document individual behaviors, views, and issues, or those of diverse groups. Nevertheless, Drisko and Maschi (2016) observe that the majority of researchers traditionally apply this method in a descriptive manner, although it can also be utilized to formulate new hypotheses or analyze existing theories. In this research, the qualitative aspect of content analysis was implemented to explore the strategies authors employ concerning research methodology in their journal articles.

Journals and articles selection

A corpus of 100 journal articles was compiled from ten prestigious journals in the fields of AL&EE. One hundred articles are considered sufficient for a qualitative content analysis study on academic discourse analysis. A study by Hassan et al. (2023) about discourse features of methodology sections of research articles used only 10 articles in their corpus. Similarly, Arsyad (2024) included only 60 articles when he analyzed the method section of RAs published in prestigious journals. According to Nwogu (1997), the primary factors that influenced the selection of sources for the texts within the corpus are representativeness, credibility, and availability. Following Nwogu, we considered these three aspects when selecting the journals from which the articles were obtained. The selected journals were 1) TESOL Quarterly, 2) Studies in Second Language Learning and Teaching, 3) RELC Journal, 4) Australian Review of Applied Linguistics, 5) Teaching English with Technology, 6) 3L: Language, Linguistic, Literature, 7) Journal of Asia TEFL, 8) Indonesian Journal of Applied Linguistics, 9) Eurasian Journal of Applied Linguistics, and 10) Asian Journal of Applied Linguistics. A detailed list of the included articles is provided in Table 1.

Table 1. The articles included in this study

Journal	Number of Articles	Code	Quartile	SJR	Country of Publisher
TESOL Quarterly	10	TQ	Q1	1.89	United States/America
Studies in Second Language Learning and Teaching	10	2S2LT	Q1	1.46	Poland/Europe
RELC Journal	10	RJ	Q1	1.33	United Kingdom/Europe
Australian Review of Applied Linguistics	10	ARAL	Q1	0.45	Australia/Australia
Teaching English with Technology	10	TET	Q1	0.38	Cyprus & Polandia (Asia & Europe)
3L: Language, Linguistics, Literature	10	LLL	Q1	0.32	Malaysia/Asia
Journal of Asia TEFL	10	JAT	Q2	0.29	South Korea/Asia
Indonesian Journal of Applied Linguistics	10	IJAL	Q2	0.29	Indonesia/Asia
Eurasian Journal of Applied Linguistics	10	EJAL	Q2	0.28	Turkey/Asia
Asian Journal of Applied Linguistics	10	AJAL	Q2	0.19	China/Asia

Table 1 shows that all journals achieved Quartile 1 or 2 status in 2023 alongside diverse SJR scores and scientific journal rankings (https://www.scimagojr.com/journalrank.php). González-Pereira et al. (2009) describe the SJR as a bibliometric tool that assesses the influence and reputation of scholarly journal articles. A journal that achieves both high SJR scores and quartile values earns the status of a prestigious publication. The selection of these journals depended on their quartile status and SJR scores because these metrics demonstrate

their field authority and influence (Lillis & Curry, 2010; Reuters, 2016). The journals utilize strict peer-review processes to publish research that enhances theoretical and practical knowledge while demonstrating high quality and innovation (Flowerdew, 2015).

Bensman and Harzing (2010) noted that journal selection considered citation frequency and rankings alongside language teaching and applied linguistic theory relevance. Hyland (2006) and Paltridge and Starfield (2013) confirmed that this method produced a comprehensive collection representing scholarly and teaching perspectives. The present research analyzes recent publications from ten leading AL and EE journals to understand the latest developments in the field. Table 1 further indicates that the sources of these articles originate from three distinct geographical areas: Asia, Australia, and Europe and America.

Data collection and analysis procedures

The study developed a framework for analyzing how writers in prestigious AL&EE journals justify their methodological choices based on Lim's (2006) existing model for journal article methods sections. Lim outlines a rhetorical framework for the methodology segment that includes three primary components: The methodology section's framework consists of three main components, which are subdivided into three specific steps: Component 1 covers data collection methods, Component 2 covers variable measurement processes, and Component 3 covers data analysis methods.

The research methodology combined qualitative evaluations of rhetorical methods used in the methods section with quantitative analysis of linguistic patterns that signal justification, according to Peacock's (2011) study. The research combined different strategies to discover both structural justification features and authorial persuasive methods that establish research credibility and dependability as identified by Silverman (2015) and Cohen et al. (2018). The holistic approach offers extensive analysis of how researchers express and validate their methodological choices in academic texts.

Researchers developed a detailed coding framework to systematically examine how authors defend their research approaches. The coding framework classified the justifications into five distinct categories, which were defined below.

S1: Citation of Previous Studies – Authors justify their research design by referencing prior studies that used similar methods.

S2: Citation of Methodological Literature – Authors justify their design by citing methodological textbooks or handbooks, grounding their choices in established literature.

S3: Combination of Previous Studies and Methodological Literature – Authors blend references to prior studies and methodological texts to provide a more comprehensive justification.

S4: Soft Justification/Implicit Referencing – Authors provide general reasoning without direct citations of prior studies or methodological texts.

S5: No Explicit Argumentation – Authors do not explicitly justify their choice of research design.

For the second research question, the MS of the articles addressing sampling procedures were reviewed; these included headings such as "Research Participants," "Sampling," or similar subheadings within the methods sections. Similar to

research design, justifications strategies for sampling procedures were analyzed using the same coding scheme (Strategy 1 to Strategy 5), where the authors either cited previous studies, methodological literature, both, or provided soft justification or no justification at all.

Finally, to answer the third research question, attention was directed to the "Data Analysis" subsections of the articles MS, where authors typically describe how their data were processed and analyzed. Here, the same coding scheme was applied once more to categorize the justifications for the chosen data analysis techniques. The authors' justifications were assessed to see whether they referenced prior studies (S1), methodological literature (S2), a combination of both (S3), provided implicit reasoning (S4), or omitted explicit argumentation (S5).

Inter-coder reliability analysis

In this research, an independent coder was tasked with examining the authors' methodology justification on articles selected at random in order to verify the precision of the study's data. An independent coder, a master's degree-holder in English education with experience in academic discourse analysis was selected for this process. The independent coder was provided with detailed instructions on how to apply the coding scheme, ensuring consistency in the approach (see Appendix 1). A random sample of 20% of the article titles from the dataset was assigned to the independent coder for analysis.

Once the coding was completed, the results of the independent coder and the primary researcher were compared, and Cohen's Kappa coefficient was calculated to quantify the level of agreement. Cohen's kappa is a statistical measure quantifying how well two or more raters agree; it is useful in many fields of research evaluating inter-rater reliability to ensure that results are not biased (Warrens, 2014). Cohen's Kappa values range from 0.00 to 1.00, with higher values indicating stronger agreement. According to Kanoksilapathan (2005), a Kappa score below 0.40 indicates poor agreement, a score between 0.40 and 0.59 indicates fair agreement, between 0.60 and 0.74 indicates good agreement, and a score of 0.75 or above is classified as excellent. Any remaining discrepancies were resolved through discussion and consensus between the researcher and the independent coder, ensuring that all coding was accurate and consistent across the datasets.

Findings and Discussion

Findings

Research design justification strategies

Data analysis results on how authors in prestigious journals of AL&EE justify their choice of research design are presented in Table 2.

Table 2. Research design justification strategies

No	Strategies	Frequency N=100	Total (%)
1	S2: Citation of Methodological Literature – Authors support their methodological choices by citing relevant textbooks on research methodology.	28	28%
2	S5: No Explicit Argumentation – Authors do not provide overt justification for their methodological choices.	25	25%

No	Strategies	Frequency N=100	Total (%)
3	S4: Soft Justification/Implicit Referencing – Authors argue for their methodological choices without explicit references to previous studies or direct citations of methodological textbooks.	21	21%
4	S1: Citation of Previous Studies – Authors justify their methodological choices by referencing previous studies that used similar approaches.	14	14%
5	S3: Citation of Previous Studies and Methodological Literature – Authors combine references to both previous studies employing similar approaches and relevant methodological textbooks to justify their choices.	12	12%
	Total	100	100.00

Table 2 reveals that the most frequently used strategy by authors in prestigious journals of AL&EE to justify their choice of research design was **S2: Citation of Methodological Literature** – where authors support their methodological choices by citing relevant textbooks on research methodology (28%). The following is an example taken from the data of the study.

> **Extract 1**
> *This study used a convergent parallel mixed-methods design (quant+QUAL; Creswell & Plano Clark, 2018) to investigate the teaching practices of highly effective UK and US mainstream teachers of MLLs*. (TQ-6)

Extract 1 was obtained from the article 'Effective Teachers of Multilingual Learners: A Mixed-Method Study of UK and US Critical Sociocultural Teaching Practices' (Flynn et al., 2024). As shown above, the authors explicitly justify the use of the convergent parallel mixed-methods design by referencing Creswell & Plano Clark (2018), which is a well-known methodological book. The citation grounds their design choice in established research methods literature.

The second most common strategy, as shown in Table 2, was **S5: No Explicit Argumentation** – where authors provided no overt justification for their methodological choices (25%). Table 2 further indicates that the third most frequently employed strategy was **S4: Soft Justification/Implicit Referencing** – where authors justify their methodological choices without explicit references to previous studies or methodological textbooks (21%). The following is an example from the data.

> **Extract 2**
> *The first is a longitudinal mixed-methods study on L1 Turkish students studying in a variety of SA contexts, including the ELFSA context as part of their Erasmus sojourn… The second research project from which data are elicited is a longitudinal, mixed-methods study of Swiss international students' language attitudes, practices and competences investigating…* (2S2LT-5)

Extract 2 was obtained from an article titled 'The Learning Potential of English as A Lingua Franca Contexts in The Eyes of Study Abroad Students' by Heinzmann

et al. (2024). As can be seen, the authors used implicit referencing (explaining the alignment of the research design with the goals of the study).

In addition, Table 2 shows that the fourth most common strategy used by authors was **S1: Citation of Previous Studies** – where authors justify their methodological choices by referencing prior studies that used similar approaches (14%). Below is an example taken from the data.

> **Extract 3**
> *We performed a high-level review of the available, relevant information to extract and analyse data to address a specific research question (Schaefer & Myers, 2017).* (TET-3)

Extract 3 was obtained from an article titled 'Apps for English Language Learning: A Systematic Review' by Lim & Weimin (2024). It can be seen that the authors cite previous studies (Schaefer & Myers, 2017) to justify their approach to conducting a review of relevant information. This is why this research design is categorized as using **S1: Citation of Previous Studies** – Authors justify their methodological choices by referencing previous studies that used similar approaches.

Finally, Table 2 indicates that the least commonly used strategy was **S3: Citation of Previous Studies and Methodological Literature** – where authors combine references to both previous studies employing similar approaches and relevant methodological textbooks (12%). An example from the data is given below.

> **Extract 4**
> *This research adopted a quasi-experimental design that replicated earlier empirical research (Hamada, 2016). …To provide validity, this empirical study had to find a balance between providing the best teaching approaches and controlling variables for reliability (Yamamori, 2004).* (JAT-2)

Extract 4 was obtained from an article titled 'The Effect of Post-Shadowing on Listening Skills and Learner Attitudes' by Goto (2024). In the above example, the authors combined Citation of Previous Studies and Methodological Literature to justify their quasi-experimental design.

Sampling procedures justification strategies

Data analysis results on how authors in the methods sections of prestigious journals of AL&EE justify their sampling procedures are presented in Table 3.

Table 3. Sampling procedures justification strategies

No	Strategies	Frequency N=100	Total (%)
1	S4: Soft Justification/Implicit Referencing – Authors argue for their methodological choices without explicit references to previous studies or direct citations of methodological textbooks.	52	52%
2	S5: No Explicit Argumentation – Authors do not provide overt justification for their methodological choices.	18	18%
3	S2: Citation of Methodological Literature – Authors support their methodological choices by	11	11%

No	Strategies	Frequency N=100	Total (%)
	citing relevant textbooks on research methodology.		
4	S1: Citation of Previous Studies – Authors justify their methodological choices by referencing previous studies that used similar approaches.	10	10%
5	S3: Citation of Previous Studies and Methodological Literature – Authors combine references to both previous studies employing similar approaches and relevant methodological textbooks to justify their choices.	9	9%
	Total	100	100.00

Table 3 reveals that the most frequently used strategy by authors in prestigious journals of AL&EE to justify their sampling procedures was **S4: Soft Justification/Implicit Referencing** – Authors argue for their methodological choices without explicit references to previous studies or direct citations of methodological textbooks (52%). The following is an example taken from the data.

Extract 5
The participants comprise 35 male and female students who are engaged in coeducational learning within a shared classroom environment. (IJAL-4)

Extract 5 was obtained from an article titled 'The use of contextual teaching and learning approach on students' analytical exposition writing skills' by Rahman & Maneerat (2024). In the above example, the authors justified their sampling procedure primarily through Soft Justification/Implicit Referencing, as they explained the practical steps of selecting participants without providing explicit theoretical or methodological backing.

The second most common strategy, as shown in Table 3, was S5: No Explicit Argumentation – Authors do not provide overt justification for their methodological choices (18%). Table 3 further indicates that the third most frequently employed strategy was **S2: Citation of Methodological Literature** – Authors support their methodological choices by citing relevant textbooks on research methodology (11%). An example drawn from the data is as follows.

Extract 6
Focusing on the deviant case sampling strategy (Dörnyei, 2007), sixteen participants, studying English at this language institute (all men, aged 17 to 24), were purposefully selected (Glaser & Strauss, 1968). (2S2LT-2)

Extract 6 was obtained from an article titled 'An ecological perspective on the flow of compassion among Iranian learners of English as a foreign language' by Wang et al. (2024). In the above example, the authors explicitly refer to methodological literature, justifying the sampling approach.

In addition, Table 3 shows that the fourth most common strategy used by authors was **S1: Citation of Previous Studies** – Authors justify their methodological choices by referencing previous studies that used similar approaches (10%). The following is an example provided from the data.

Extract 7
These two newspapers are particularly selected as they are issued from the most influential countries in the West, i.e., the USA and the U.K. Besides, both are highly circulated and common in the academic setting (Karolak & Guta, 2020) (3L-1)

Extract 7 was obtained from an article titled 'The Representation of Arab Women in English-Language Newspapers: A Comparative Analysis of Arab and Western Media Post-Arab Spring' by Edam et al. (2024). It can be seen that the authors justified the sampling by citing previous studies to support the choice of the Washington Post and Daily Mail, indicating that these newspapers have relevance and are commonly used in academic contexts.

Finally, Table 3 indicates that the least commonly used strategy was **S3: Citation of Previous Studies and Methodological Literature** – Authors combine references to both previous studies employing similar approaches and relevant methodological textbooks to justify their choices (9%). Below is an example taken from the data.

Extract 8
The study used the Swadesh list of words (Swadesh, 1952, 1955) as the primary source to examine the basic characteristics of the Turkic language lexemes and their historical stability, in the context of the Khoton language… These words were included in the Turkish etymological dictionary (Dybo, 2013), which made the sampling of the words easier. (EJAL-1)

Extract 8 was obtained from an article titled 'The Basic Vocabulary of an Extinct Language: The Khoton Language in Mongolia,' which was authored by Zhakupov et al. (2024). The authors justified their sampling methods by referencing both prior studies and methodological literature sources. The authors referenced the Swadesh list as an established source and used Swadesh's work to underpin their sampling method selection. The authors noted that this list appears in additional scholarly work, including Dybo's Turkish etymological dictionary from 2013.

Data analysis procedures justification strategies

Data analysis results on how authors in the methods sections of prestigious journals of AL&EE justified their data analysis procedures are presented in Table 4.

Table 4. Data analysis procedures justification strategies

No	Strategies	Frequency N=100	Total (%)
1	S2: Citation of Methodological Literature – Authors support their methodological choices by citing relevant textbooks on research methodology.	28	28%
2	S1: Citation of Previous Studies – Authors justify their methodological choices by referencing previous studies that used similar approaches.	27	27%
3	S4: Soft Justification/Implicit Referencing – Authors argue for their methodological choices without explicit references to previous studies or direct citations of methodological textbooks.	23	23%

No	Strategies	Frequency N=100	Total (%)
4	S3: Citation of Previous Studies and Methodological Literature – Authors combine references to both previous studies employing similar approaches and relevant methodological textbooks to justify their choices.	17	17%
5	S5: No Explicit Argumentation – Authors do not provide overt justification for their methodological choices.	5	5%
	Total	100	100.00

Table 4 shows that the most frequently used strategy by authors in prestigious journals of AL&EE to justify their data analysis procedures was **S2: Citation of Methodological Literature** – Authors support their methodological choices by citing relevant textbooks on research methodology (28%). Below is an example extracted from the data.

> **Extract 9**
> *Cued-recall and multiple-choice posttest scores were analyzed separately using mixed-effects logistic regression models in jamovi (version 2.0) with the GAMj module (Gallucci, 2019).* (TQ-3)

Extract 9 was obtained from an article titled 'Clashing Roles and Identities of EL Teachers during Emergency Remote Teaching and Learning' by Morita-Mullaney et al. (2024). It can be seen in the above example that the authors justified their choice of statistical analysis by citing the use of mixed-effects logistic regression models and the jamovi software, along with a reference to a specific methodological source of Galluci (2019).

The second most common strategy, as shown in Table 4, was S1: Citation of Previous Studies – Authors justify their methodological choices by referencing previous studies that used similar approaches (27%). An example of this strategy is presented as follows.

> **Extract 10**
> *Similar to Hamada (2016), a mixed-design of two-way analysis of variance (ANOVA) was employed to ensure methodological consistency and comparability between this study and existing research.* (JAT-2)

Extract 10 was obtained from an article titled 'The Effect of Post-Shadowing on Listening Skills and Learner Attitudes' by Goto (2024). It can be seen that the authors justified the use of mixed-design ANOVA by citing Hamada, ensuring that the methodology aligned with previous studies for consistency and comparability.

Table 4 further indicates that the third most frequently employed strategy was **S4: Soft Justification/Implicit Referencing** – Authors argue for their methodological choices without explicit references to previous studies or direct citations of methodological textbooks (23%). The example below is drawn from the data in this study.

Extract 11
Such a data classification helps to manipulate, track and analyze individual specimens in data. (EJAL-1)

Extract 11 was obtained from an article titled 'The Basic Vocabulary of An Extinct Language: The Khoton Language in Mongolia' by Zhakupov et al. (2024). As seen in the above example, the authors provided a soft justification, explaining the practical benefit of dividing words into three tiers for easier manipulation, tracking, and analysis of individual data specimens, without citing previous studies or methodological literature.

In addition, Table 4 shows that the fourth most common strategy used by authors was **S3: Citation of Previous Studies and Methodological Literature** – Authors combine references to both previous studies employing similar approaches and relevant methodological textbooks to justify their choices (17%). Below is an example taken from the data.

Extract 12
The thematic analysis framework presented by Braun and Clarke (2006) and Creswell (2018) were used for the data analysis of this study. (JAT-1)

Extract 12 was obtained from an article titled 'Utilization of Linguistic Landscape: A Cross-Disciplinary Investigation of Informal English Learning of Iranian University Students' by Ebrahimi and Raqib (2024). As can be seen in the above example, the authors justified the use of the thematic analysis framework by citing Braun and Clarke and Creswell, which provided the foundation for their approach to analyzing qualitative data.

Discussion

The initial research aim is to examine the techniques that writers utilize to defend their selection of research design. The findings indicate that the most commonly used method for supporting research design was referencing existing methodological literature, known as Strategy 1. This likely occurs because well-established research methodology books advocate for a scholarly standard in AL&EE, where writers stress the significance of basing their design decisions on reputable sources. This pattern also aligns with Hyland's (2004) assertion that justifications play a vital role in shaping credible research narratives. The reliance on expert recommendations coincides with what Silverman (2015) refers to as the cornerstone of academic rigor, enhancing the credibility of research design through citations of acknowledged texts.

The frequent implementation of Strategy 5 combined with poor argumentation leads to concerns about research transparency in reporting practices. Research related to English language teaching has been criticized for inadequate methodology explanations in prior studies (Arsyad, 2024). The lack of explicit argumentation suggests researchers may assume methodological choices are self-evident or already acknowledged standards within their field. Hyland (2004) insists that clear and convincing argumentation is necessary for comprehensive assessment because it helps the audience understand and evaluate the rationale behind methodological decisions. Kallet (2004) and Toulmin (2003) pointed out the importance of clear methodological justifications to enable study replication and

ensure research integrity. Swales (2004) asserts that insufficient explanations for research decisions prevent successful study replication and full understanding of research practices while exposing weaknesses in authors' defenses of their research frameworks.

The sparing use of "soft justification/implicit referencing" makes the text even more obscure. Authors who offer ambiguous or indirect explanations assume their audience has enough context to infer their logic, but this implicit method of argumentation reduces the research's transparency and approachability. The research confirms Peacock's (2011) idea that different academic fields use unique rhetorical methods, with applied linguistics showing a preference for implicit argumentation during certain instances. By not citing previous research or integrating earlier studies and methodological texts, the research shows a deficiency in using empirical examples to support methodological decisions, which could obstruct research's comparative and cumulative development.

This research also seeks to understand how authors explain their sampling methods used in these studies' methodologies. The results demonstrate that authors frequently depend on soft justification, or Strategy 3, which involves making implicit references. The findings show a strong reliance on implicit rationalizations, which matches earlier research by Zhang and Wanaruk (2016) about the lack of explicit methodological explanations in educational studies. Authors who choose to support sampling decisions without formal citations demonstrate a potential neglect of sampling's fundamental contribution to research validity and result utility. While implicit references work in certain cases, not providing explicit reasoning makes it difficult to evaluate the appropriate selection of samples.

The second most frequent defense of the sampling approach shows a lack of clear reasoning known as Strategy 5, which resembles similar patterns found in research design justifications. The field faces a significant issue because the use of implicit rationale shows that authors often choose established norms instead of providing transparent explanations that readers need. The work of Cohen et al. (2018) highlighted research method transparency as crucial but suggested it could hinder audience evaluation of sampling strengths. The research suffers from a lack of thoroughness and reproducibility because methodological sources and previous studies are rarely cited, which shows minimal engagement with accepted protocols and empirical benchmarks for sampling.

The third research objective examines how authors defend their data analysis techniques within the Methods sections. Authors show equal use of Strategy 1 by citing methodological literature and Strategy 4 by citing previous studies in their data analysis procedures. This finding indicates that researchers understand the necessity to base their analytical techniques on established research models and historical case studies, demonstrating a thorough and substantiated method for validating their data analysis approaches. Authors follow Hyland's (2004) guidance by explicitly and persuasively arguing their statistical and analytical choices within the Methods Section to ensure clear interpretation of research findings. The limited employment of soft justification or implicit references (Strategy 3) alongside the absence of explicit argumentation (Strategy 5) when authors explain data analysis procedures indicates their strict attention to this part of the methodology.

Authors hold the view that explaining data analysis methods proves essential to show that research procedures followed logical and theoretical frameworks

instead of random choices. The trustworthiness of research outcomes increases when reviewers, readers, and researchers encounter analysis methods that are transparent and well-justified because such disclosure demonstrates researcher competence and methodological integrity. A researcher must provide a clear and persuasive justification for this research component. A clear trend emerges where researchers provide thorough justification during analysis, while other fields frequently use non-explicit argumentation for instruments and sampling. The research findings correlate with Cotos et al.'s (2017) and Martinez's (2017) discoveries, demonstrating that researchers use targeted rhetorical strategies during data analysis to establish credibility and methodological rigor. Research by Arsyad (2024), Kafes (2016), and Zhang and Wannaruk (2016) demonstrates that authors provide more detailed justifications for data analysis procedures compared to aspects like sampling or instrumentation.

The current study reveals how justification approaches display different characteristics across multiple methodological domains within AL&EE. Researchers frequently use authoritative methodological texts for research design and data analysis justification but rely on implicit reasoning when they justify sampling and data collection methods. The prevalent use of implicit reasoning in the context of tools and materials demonstrates a need to broaden methodological transparency. Hyland (2004) states that providing clear and robust explanations that support research findings enhances study reproducibility and comprehension as well as strengthens evaluation processes. Kallet (2004) and Toulmin (2003) emphasize that clear reasoning within the Methods Section provides better insight into major methodological choices, which affect both the integrity and reliability of research results. Swales (2004) highlighted that authors must adhere to genre norms in academic writing to successfully persuade readers about their methodological choices. This study focuses on authorial defense strategies to enhance the quality of MS writing and establish best practices in methodology.

Conclusion

Based on the findings of this study, it can be concluded that authors in AL&EE published in prestigious journals demonstrate variability in how they justify their methodological choices across research design, sampling procedures, and data analysis. The most explicitly justified areas are research design and data analysis where authors frequently rely on established methodological literature, reflecting a commitment to scholarly rigor. However, when justifying sampling procedures and data collection authors commonly use implicit justifications and non-explicit argumentation strategies; this raises concerns about transparency and replicability of the research by other authors. This is because clear and explicit methodological justifications in the MS of journal articles to facilitate critical evaluation and replication is important because they help readers evaluate the validity of the study's results and conclusions. They also help readers understand how the research was conducted and make it possible to reproduce the study.

This study results have practical implications for new authors and postgraduate students. Prior to submitting manuscripts, they should carefully review the author guidelines and study examples of articles published in their target journals, particularly focusing on how research methods and other elements are presented. Different journals may prefer distinct templates and reporting practices,

and understanding these preferences is crucial for increasing the likelihood of manuscript acceptance in high-impact journals. Moreover, recognizing that different research methods require different levels of detail in the MS is essential for ensuring clarity and rigor in scholarly communication.

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