

EXPOSING GAPS IN NICHE ESTABLISHMENT RESEARCH: A SCOPING REVIEW

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Abstract

Research on niche establishment continues to yield new insights into how authors construct the introduction section of research articles. However, previous studies on this topic vary widely in scope and focus, creating a fragmented understanding of how rhetorical styles in niche establishment are developed across different contexts. Consequently, the objective of this paper is to unveil critical gaps in the existing literature to direct the trajectory of future research. This study was designed as a qualitative scoping review utilizing the SPIDER framework (Sample, Phenomenon of Interest, Design, Evaluation, and Research Type). A systematic search of academic databases for articles published between 2016 and 2025 resulted in the selection of 14 articles for review. The analysis reveals a significant dominance of studies focusing on local EFL authors within the discipline of Language and Linguistics, predominantly utilizing Swales' CARS model within a qualitative paradigm. Conversely, there is a notable scarcity of research examining international authors, hard science disciplines (STEM), or employing quantitative approaches. The study concludes that while Indicating a Gap is universally critical, future research must expand beyond the current disciplinary silo to investigate underrepresented fields and adopt more frameworks to fully capture the complexities of academic argumentation.

Keywords: Academic Writing, Indicating A Gap, Niche Establishment, Scoping Review

INTRODUCTION

Niche establishment will always be a concern because it is an important element in writing introduction section of research report and article. Starting from Swales (1990) who promotes Creating a Research Space (CARS) framework, research on niche establishment continues to this day and keeps giving new insight on how different population present their research paper. Niche establishment itself outlines the specific rhetorical steps authors use to indicate a gap, raise a question, or challenge previous findings in the existing literature. Successfully executing this move is the primary justification for the new study which demonstrates to the reader why the research is necessary and how it contributes to the ongoing body of knowledge.

Rhetorical style in introduction section has been studied in many aspects. The writers' moves based on CARS is one of the most studied which focusing on how the rethorical moves are presented from the beginning to the ending of the introduction section. Those research show that rhetorical moves on research article introduction (RAI) based on CARS framework are presented in all articles with some variations depending on the authors' writing style (Arianto et al., 2025; Arono & Arsyad, 2019; Jahromi et al., 2024; Rochma et al., 2020). However, they all agree that move 2 or establishing a niche is the mandatory move in presenting research gap as it is very important to grab reader's attention to read the article further (Amnuai, 2019; Samraj, 2002). Therefore, more research continues to explore deeper into the niche establishment move and its steps to uncover how author may vary or similar ((Boginskaya, 2025; Hidayat et al., 2023; Oktaviani et al., 2024; Suryani et al., 2015).

This continuous and diverse scholarly interest, as highlighted previously, has produced a large and fragmented body of literature. The existing research varies widely in its scope and methodology; some studies focus on specific disciplines such as Environmental Science, Medicine, or Applied Linguistics (Kanoksilapatham, 2005; Samraj, 2002), while others compare the rhetorical strategies of different author populations, specifically between native and non-native speakers (Hirano, 2009; Sheldon, 2011) or novice

versus expert writers (Amnuai & Wannaruk, 2013; Kawase, 2018). As this research accumulates, it becomes increasingly difficult for scholars to gain a clear and holistic view of the current landscape. While individual studies provide valuable insights, there is a lack of a comprehensive synthesis that maps the “state of the art” of niche establishment research. Without such a review, it is challenging to systematically identify which sub-topics have been saturated and, more importantly, which areas remain underexplored.

These research still on going and have been done in many variations, which become important to be reviewed. As author writing style always develop, it will always be important to investigate the research article introduction. Therefore, review on previous studies is needed to expose the gap of knowledge in this topic which is aimed to open further research topic and sub-topic to be held. Considering this consistency on niche establishment studies, it is important to expose what have and have not been studied about this topic. Therefore, this paper will answer: 1) what topic (or sub-topic) in niche establishment that have been studied? 2) what are the gaps among previous studies that can be filled by further studies? By answering the questions, this paper aim to reveal research gaps of previous studies as reference to conduct further researches and finally develop the knowledge of niche establishment.

METHODS

This research is designed as qualitative research utilizing a simple scoping review technique following SPIDER framework of Cooke et al. (2012). The SPIDER framework is considered suitable to fulfill the purpose of this research as it is stand for: (S) sample, (PI) phenomenon of interest, (D) design, (E) evaluation, and (R) research type. The use of this framework allows for flexible literature mapping, especially for qualitative and mixed-methods topics. Specifically, this approach will guide our systematic review of previous studies focusing on niche establishment. By categorizing articles based on the SPIDER components, particularly the (PI) Phenomenon of Interest and (E) Evaluation, we can identify the main focuses and outcomes that have been explored by prior researchers. This analytical process is designed to explicitly expose the existing gaps, thereby facilitating the formulation of original aspects suitable for further research in this field. Further description on how the SPIDER framework is used in reviewing the literature can be seen in Table 1.

Table 1. Reviewing Focus Based on SPIDER

Reviewing Elements	Description
<u>S</u> ample	Shows populations that have been studied
<u>PI</u> henomenon of <u>I</u> nterest	Highlights topic and its aspects that have been explored
<u>D</u> esign	Reveals methodological patterns
<u>E</u> valuation	Shows results and interpretations that have been made
<u>R</u> esearch Type	Shows the type of research dominating in previous studies (qualitative, quantitative, or mixed)

The data collection was conducted through a structured search across prominent academic databases such as Google Scholar, Scopus, and Web of Science. Keywords were strategically chosen to reflect the central themes of the studies, including: Rhetorical Moves, Niche Establishment, or Research Gap Strategy combined with Research Article and Introduction Section. The primary objective was to locate empirical research that examined the moves in research article introduction. To maintain both relevance and rigor, the review applied stringent inclusion and exclusion criteria. Studies were included if they specifically addressed niche establishment within the the research article introduction. In contrast, studies were excluded if they lacked a direct focus on niche establishment, did not provide empirical evidence, were not peer-reviewed, or failed to meet methodological standards.

This review applied a set of selection criteria as can be seen in Table 2, limiting the corpus to peer-reviewed journal articles published in English between 2016 and 2025. The primary topical constraint required that included studies specifically focus on the analysis of the “Create a Research Space” (CARS) model, with a precise emphasis on move 2 (Niche establishment) or its sub-component, move 2 step 1A (Indicating a gap). Consequently, all non-peer-reviewed publications (such as conference proceedings and

non-academic papers), articles published before 2016, non-English texts, and studies with an irrelevant scope falling outside this specific rhetorical focus were systematically excluded from the analysis.

Table 2. Inclusion & Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Peer-reviewed journal articles	Non-peer-reviewed journal articles (proceeding, non-academic paper, etc)
Published between 2016 to 2025	Published before 2016
Written in English	Not written in English
Focused on CARS Moves, move 2 (Niche establishment, or Move 2 Step 1A Indicating a Gap.	Irrelevant scope

Based on the inclusion and exclusion criteria, there are 14 final articles that is included in this review as can be seen in Table 3.

Table 3. Articles Included in the SPIDER Review

No	Author(s) & Year Published	Article Title
1	Boginskaya (2025)	Disciplinary Influences on Research Gap Identification
2	Arianto et al. (2025)	Deviation or Glocalization? Rhetorical Differences in Research Article Introductions Written by International, English FL, and Indonesian L1 Authors
3	Jahromi et al. (2024)	A Genre Analysis of Rhetorical Moves in MA Theses Written by Students of TEFL and Nursing
4	Oktaviani et al. (2024)	Writing Research Gap Strategies in Indonesian Articles Abstracts and Introductions in Accredited National Journals towards International Indexed Publications
5	Hidayat et al. (2023)	Hard and Soft Sciences: How Both Fields Differ in Presenting Research Gaps
6	Arsyad & Zainil (2023)	Research gap strategies in article introductions of different rank applied linguistics journals
7	Amnuai (2021)	A Comparison of Niche Establishments in English Research Article Introductions Published in International and Thai Journals
8	Arianto & Basthomi (2021)	The authors' research gap strategies in ELT research article introductions: Does Scopus journal quartile matter?
9	Arianto et al. (2021)	Previous studies have several limitations ...: Indonesian Doctoral Students', Indonesian Academics', and International Authors' Research Gap Strategies in ELT Research Article Abstracts and Introductions
10	Rochma et al. (2020)	Rhetorical styles of Introduction in English language teaching (ELT) research articles
11	Ankomah & Afful (2019)	Establishing a Niche in Research: Rhetorical Strategies in Undergraduate and Postgraduate Writings in the Department of English, University of Cape Coast

No	Author(s) & Year Published	Article Title
12	Arono & Arsyad (2019)	The Effect of Genre-Based Mentoring on Rhetorical Quality of Research Article Drafts by Indonesian Lecturers in Social Sciences and Humanities
13	Chen & Li (2019)	Chinese learner writers' niche establishment in the Literature Review chapter of theses: A diachronic perspective
14	Parnawati et al. (2017)	Rhetorical Moves in the Introductions of Islam-Related Research Articles

FINDINGS AND DISCUSSION

Sample (S)

Based on SPIDER framework, Sample (S) stands for the group of people being studied. In this case, the sample will be relevant to the authors of research article introduction that were being studied by the previous studies. The result show that previous research was focusing on authors that write their articles in English. Further, the sample can also be categorized as author from a country where English is a foreign language, international author (mixed countries), and comparing local author to international authors. Based on those categories, the result can be presented as follow:

Table 4. Sample (S) of the reviewed articles

Sample	Total	Notes
Local authors	9	Indonesia, Chinese, Ghana, Russian, Iran
International authors	2	-
Local and international authors	3	Indonesian & International; Thailand & International

The dominance of studies focusing on Local Authors (EFL context) indicates a significant trend in the field of genre analysis. The high number of studies from countries like Indonesia, China, and Iran suggests that Niche Establishment (move 2) is considered a particularly challenging rhetorical step for non-native English speakers (Swales, 1990, 2004). Unlike native speakers who may naturally use direct critique to establish a gap, EFL authors often struggle with the linguistic nuances and cultural norms required to “negate” or “question” previous research effectively.

Furthermore, the presence of Comparative Studies (Local vs. International) highlights the researchers' attempt to benchmark local writing against international standards (Hirano, 2009; Sheldon, 2011). These studies generally aim to uncover whether the 'gap' in writing quality is due to linguistic incompetence or cultural rhetorical preferences. Interestingly, the scarcity of studies focusing solely on International Authors implies that the rhetorical patterns of native/international writers are often taken as the established “norm” or “control group”, rather than the primary subject of investigation in this specific subset of literature.

Phenomenon of Interest (PI)

In this context, the Phenomenon of Interest (PI) is interpreted as the academic discipline of the RAI authors. Previous studies have predominantly limited their samples to specific disciplines. These disciplinary focuses are summarized in Table 5.

Table 5. Phenomenon of Interest (S) of The Reviewed Articles

Disciplines	Total	Notes
Language & linguistics	10	-

Religion	1	-
Comparing linguistics & engineering	1	-
Comparing TEFL & nursing	1	-
Multidiscipline	1	Comparing many disciplines at once

Regarding the Phenomenon of Interest (PI), which corresponds to the disciplinary background of the research articles, Table 5 reveals a striking imbalance in the existing literature. The vast majority of the reviewed studies (10 out of 14) focused exclusively on the field of Language and Linguistics. Other disciplines were significantly underrepresented, with only single studies examining Religion, or conducting comparative analyses between Linguistics and Engineering, and TEFL and Nursing. Furthermore, only one study attempted a broad Multidisciplinary approach to generalize findings across various fields.

Design (D)

For this literature review, the Design (D) of the SPIDER framework is focused on what type of framework used in the process of analyzing the RAI. Based on the reviewed articles, there are three main interests of previous researcher which are analyzing the rhetorical move of introduction section as a whole, analyzing only the niche establishment, and analyzing the subcomponent of niche establishment (indicating a gap strategies). The result can be seen in Table 6.

Table 6. Phenomenon of Interest (S) of the reviewed articles

Framework	Total
CARS (based on Swales 1990, 2004)	5
Establishing a niche (Move 2 of CARS)	3
Research Gap Identification (based on Lim, 2012)	4
Research Gap Identification (based on Miles, 2017)	2

In terms of Design (D), which in this case refers to the analytical framework employed to examine the Research Article Introductions (RAI), Table 6 highlights a clear theoretical reliance on established genre-based models. The analysis shows that Swales’ CARS model (1990, 2004) remains the most dominant framework, with 5 studies utilizing the complete model to analyze the introduction section as a whole, and an additional 3 studies focusing specifically on “Establishing a Niche” (Move 2) derived from the same model. Interestingly, the data also reveals a growing trend towards more granular analysis, evidenced by 6 studies that adopted specialized frameworks for Research Gap Identification, specifically those proposed by Lim (2012) (4 studies) and Miles (2017) (2 studies).

The sustained prevalence of the CARS model confirms its status as the standard of genre analysis, providing the foundational vocabulary for understanding how academic writers construct research spaces (Samraj, 2008; Swales, 1990). However, the shift towards using specific frameworks like Lim (2012) and Miles (2017) indicates a critical evolution in the field. While Swales’ model effectively maps the rhetorical movement, frameworks like Lim’s allow researchers to deconstruct the specific linguistic mechanisms such as negation, contrastive markers, and evaluative adjectives which is used to signal a gap (Lim 2012). The recent research of Arianto et al. (2025) even modified the CARS framework and added more steps in move 2 which most of the steps are strategies of indicating a gap. This suggests that current researchers are no longer satisfied with merely identifying where the gap is, but are increasingly concerned with how exactly the gap is rhetorically constructed and validated by authors.

Evaluation (E)

The Evaluation (E) in this context refers to the results and data interpretation of the reviewed articles. Most articles argue that Niche Establishment, especially Indicating a Gap, is the core of the Introduction section. It is universally regarded as the most critical rhetorical move for justifying the necessity of new research. However, while the function of this move is consistent, the reviewed studies highlight significant variations in its execution based on authorship and discipline. For instance, Arianto et al. (2025) found that international authors tend to present more structured and cyclical rhetorical moves compared to local authors, suggesting a more complex and iterative engagement with previous literature.

Furthermore, authors' disciplines seem to also influence these strategies. Notably, Boginskaya (2025) reported that authors in Engineering disciplines employ a wider variety of research gap strategies than those in Linguistics. Meanwhile, Hidayat et al. (2023) also indicates that there are differences in strategy choices of the authors from different disciplines. This finding is interesting as it challenges the traditional view that soft sciences disciplines are more rhetorically elaborate; instead, it suggests that technical fields may require more explicit and diverse argumentative strategies to validate their contributions. Ultimately, these variations underscore that while the goal of establishing a niche is universal, the rhetoric used to achieve it is highly distinctive, reflecting individual writing styles and specific disciplinary norms.

Research Type (R)

In SPIDER framework of literature review, Research Type (R) stands for what kind of research is conducted by the researcher. In this context, the type of research can be defined as qualitative, quantitative, or mixed methods. The review identified a uniform methodological approach across all selected studies. Every article included in this dataset employed a qualitative research design, with no instances of purely quantitative or mixed-method approaches. This absolute dominance of qualitative methodology is largely dictated by the nature of the research topic itself. Analyzing writing style, rhetorical moves, and authorial stance is an inherently subjective and interpretive process that transcends simple numerical counting Swales (1990). While quantitative measures could potentially enumerate the frequency of certain words, they fail to capture the functional nuances and communicative purposes behind those words. Therefore, researchers in this field rely on qualitative inquiry to perform close reading and thick description, allowing them to deconstruct the complex, context-dependent rhetorical choices made by authors in establishing their research niche (Bhatia, 1997; Hyland, 2004).

CONCLUSION

This study has systematically reviewed the existing literature on Niche Establishment through the lens of the SPIDER framework, revealing significant trends and gaps in current genre analysis research. The findings demonstrate that Niche Establishment (move 2) is universally recognized as the most critical yet challenging rhetorical step in writing research article introductions. However, the current body of knowledge is heavily skewed in several dimensions. First, regarding the Sample (S) and Phenomenon of Interest (PI), there is a disproportionate focus on Local/EFL authors within the discipline of Language and Linguistics. While this has provided deep insights into the struggles of non-native speakers, it has resulted in a disciplinary silo, leaving the rhetorical norms of STEM and other non-linguistic fields largely underexplored. Methodologically (Design and Research Type), the field remains firmly rooted in qualitative inquiry, predominantly utilizing Swales' CARS model. However, a notable evolution is observed in the growing adoption of more granular frameworks which focusing on the strategies of Indicating a Gap. Based on these findings, this review identifies two critical gaps that future research should address to advance the field: (1) **Disciplinary Expansion:** There is an urgent need for studies investigating Niche Establishment in hard sciences (STEM) and interdisciplinary fields. (2) **Micro-Linguistic Analysis:** Future studies should move beyond merely identifying the presence of Move 2 and focus on how it is linguistically constructed. By addressing these gaps, future scholarship can provide more comprehensive pedagogical guidelines that assist novice writers across all disciplines in successfully navigating the complex social practice of establishing a research niche.

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