

A Comparative Study on the Evaluation Ability of Chinese L2 Learners - Taking Reporting Verbs in Master's and Doctoral Dissertations as an Example

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Abstract

From the perspective of systemic functional linguistics, projection is regarded as a logical semantic relation, and reporting verbs are one of the important linguistic devices for projection in academic discourse. This study focuses on the evaluative use of reporting verbs in the literature review sections of master's and doctoral dissertations in English language and literature, which aims to explore the similarities and differences between them and their causes. The results show that master's theses tend to use lower-risk reporting verbs to build the foundation of research, while doctoral dissertations use reporting verbs more frequently to carry out critical academic dialogue. These differences are mainly due to differences in research depth and innovation requirements, as well as differences in academic training and ability levels of authors. The present study helps students understand the pragmatic functions of reporting verbs and enhance their interpersonal negotiation and identity-building skills in academic writing. It also provides some pedagogical implications for the teaching of academic English writing.

Keywords

Reporting verbs, Academic appraisal, Academic discourse, Second-language learners

Introduction

In academic writing, the literature review section serves as a cornerstone for constructing the innovation of a study and delineating its research niche within the existing body of knowledge. It not only synthesizes prior scholarship but also strategically positions the present research within ongoing academic conversations. A critical engagement with previous literature is therefore essential for evaluating research value and identifying gaps that warrant further investigation [1]. Among the linguistic resources employed in this process, reporting verbs constitute a central grammatical and pragmatic device for introducing, interpreting, and evaluating others' research findings. They directly reflect the writer's stance, evaluative orientation, and ability to engage dialogically with the scholarly community [2]. Reporting verbs such as arguing, claim, find, and suggest performing more than a merely referential function; beyond reporting propositional content, they encode nuanced attitudinal meanings, signal degrees of epistemic commitment, and shape the interpersonal

dynamics of academic discourse. Consequently, their rhetorical and discursive functions in academic writing - particularly in the literature review section - have attracted sustained attention in the fields of English for Academic Purposes (EAP) and corpus linguistics.

Existing research on reporting verbs has predominantly focused on their use in news discourse and, to a lesser extent, in academic discourse [3]. However, systematic investigations into their deployment within specific sections of academic texts, especially literature reviews, remain relatively limited. Furthermore, many studies concentrate on writing characteristics within a single register or disciplinary context, thereby overlooking developmental and proficiency-related variations among second language writers [4,5]. Comparative research examining the use of reporting verbs in the literature review sections of dissertations produced by Chinese second-language (L2) learners at different levels of academic training is particularly scarce. Given that master's and doctoral students represent distinct stages of

scholarly development, differences in their academic literacy and rhetorical sophistication merit closer examination. This is especially true regarding the strategic use of reporting verbs. In response to this gap, the present study conducts a comparative corpus-based analysis of literature review sections drawn from master's and doctoral dissertations in English language and literature in China. By exploring patterns, frequencies, and evaluative functions of reporting verbs, this study aims to uncover the distinctive features of reporting verb use among advanced L2 academic writers. It also intends to contribute to a more nuanced understanding of developmental trajectories in academic writing.

Review of reporting verbs

In systemic functional linguistics, the ideational function can be further divided into experiential function and logical function. In the logical function, projection, as a logical semantic relation, is one of the important perspectives for studying logical function. Simply put, "projection refers to the linguistic phenomenon where one clause introduces another clause", and the important means to realize this logical semantic relation is the use of reporting verbs [6].

Classification of reporting verbs

Currently, the most comprehensive classifications of reporting verbs in academia are introduced below. One major classification holds that reporting verbs have basic referential meanings and evaluative potential. On the one hand, in terms of referential meanings, participants are divided into original authors and current authors, that is, the cited writers and the citing writers. For original authors, reporting verbs can be classified into three categories: discourse verbs, mental verbs, and research verbs. For current authors, reporting verbs fall into two categories: contrast and theorization. On the other hand, in terms of evaluative potential, three factors are involved: the original author's stance, the current author's stance, and the current author's interpretation. Specifically, the original author's stance can be positive, negative, or neutral; the current author's stance can be factual, counter-factual, or non-factual, and the current author's interpretation is divided into four types: discourse interpretation, action interpretation, status interpretation, and no interpretation of the original author. This classification distinguishes between original authors

and current authors, which may cause confusion when classifying some verbs.

Based on this framework, other researchers have further refined the classification of reporting verbs, but their discussion does not cover evaluative meanings and is therefore insufficient. Building on previous studies, another systematic and applicable classification of reporting verbs has been proposed. This system integrates the referential meanings and evaluative potential of reporting verbs and removes the distinction between cited and citing writers. Reporting verbs are thus divided into three major categories: research verbs, cognition verbs, and discourse verbs. Within each category, specific evaluative potentials are distinguished: (1) Research verbs include results and procedures, with results showing factual, counter-factual, and non-factual evaluation. (2) Cognition verbs involve positive, critical, tentative, and neutral evaluation; discourse verbs include concerned, opposed, and assured evaluation [7].

In summary, the first classification focuses on the stances of both the citing and cited authors, while the second provides semantic and evaluative classifications from the perspective of reporting verb resources. Since second-language learners are less proficient in using English reporting verbs than expert scholars and are still in the early stage of academic writing, this study adopts the latter classification. It investigates the use of reporting verbs in master's and doctoral dissertations in English language and literature, focusing on lexical resources themselves.

Review of the practical application of reporting verbs

Existing scholarship on reporting verbs can be broadly categorized into ontological research and applied research. Ontological studies primarily concentrate on the intrinsic linguistic features of reporting verbs, including their distribution across registers, tense and voice selection, semantic classifications, and functional distinctions. Such research systematically examines the grammatical, lexical, and semantic properties of reporting verbs, clarifying their categorizations (e.g., discourse, cognition, and research verbs) and their interaction with syntactic patterns and evaluative meanings. By delineating the essential attributes and usage regularities of reporting verbs, these ontological investigations establish a theoretical and methodological foundation for subsequent empirical and pedagogical

inquiries.

In contrast, applied research adopts a broader perspective, exploring the use of reporting verbs in diverse communicative and educational contexts. Existing studies have examined variations across disciplines, differences between languages and cultural rhetorical conventions, and the developmental characteristics of writers at different proficiency levels [8,9]. These studies highlight the role of reporting verbs as important rhetorical resources that reflect disciplinary norms, cultural preferences, and writers' academic maturity. Nevertheless, research focusing specifically on L2 learners remains comparatively limited. There is a notable lack of systematic investigation into the deployment of reporting verbs in extended academic genres such as dissertations, where the literature review section demands a high level of critical engagement and evaluative precision. Empirical studies examining the reporting verb use of Chinese L2 learners at different stages of academic training, especially in master's and doctoral dissertations, are even scarcer.

Hence, the present study conducts a comparative analysis of reporting verbs in the literature review sections of master's and doctoral dissertations in the field of foreign language and literature in China. By examining patterns of frequency, semantic categories, and evaluative functions, this study seeks to reveal developmental differences in reporting verb use and to provide further insights into the academic writing competence of advanced Chinese L2 learners.

Research design

Research questions

This study selects international journal papers in linguistics as research objects, attempting to answer the following questions: (1) What are the patterns of type and tense use of English reporting verbs in journal papers by Chinese scholars and English native scholars? (2) Are there significant differences in the type and tense use of English reporting verbs between the two groups of scholars? (3) Is there a correlation between the type and tense of English reporting verbs in the corpus?

Data collection

This study randomly selected the literature review sections from 20 master's theses and 10 doctoral dissertations in English language and literature published

between 2020 and 2024 in the CNKI Master's and Doctoral Dissertation Database. To ensure the representativeness and comparability of the data, only dissertations completed within the past five years were included, thereby reflecting recent trends in academic writing practices among Chinese L2 learners. The selected texts were carefully extracted, cleaned, and standardized to remove non-textual elements (e.g., tables, references, appendices), so as to enhance the reliability of subsequent corpus analysis.

Based on the collected data, two specialized corpora were constructed. One is the Corpus of Master's (COM) theses in English language and literature, comprising 66,977 tokens and 7,619 types. The other is the Corpus of Doctoral (COD) Dissertations in English language and literature, comprising 134,694 tokens and 10,253 types. The size difference between the two corpora reflects the generally greater length and lexical diversity of doctoral dissertations. Together, these two corpora provide a structured and comparable dataset for examining the frequency, distribution, and functional characteristics of reporting verbs in the literature review sections of master's and doctoral academic writing. This enables a systematic comparison of reporting verb use across different stages of academic development.

Research procedure

The identification criteria for reporting verbs in the present study are based on established criteria, namely that reported information must be introduced by explicit reporting verbs, with a clearly identifiable source indicated in the immediate context. Instances of self-reporting (e.g., references to the author's own study) and non-finite participial structures introduced by were excluded to ensure analytical consistency and to avoid inflating the frequency of reporting expressions that do not perform a prototypical citation function. This operational definition helps to delimit the scope of analysis and enhances the reliability and replicability of the data coding process.

Following the establishment of the identification criteria, a comprehensive reporting verb list was compiled drawing on the classifications and verb inventories proposed. By integrating and refining these existing frameworks, the study generated a word list comprising 278 reporting verbs, covering a wide range of semantic categories such as research acts, discourse acts, and

cognitive acts. This integrative approach ensured both solid theoretical grounding and comprehensive lexical coverage, thereby strengthening the validity of the corpus retrieval process. [10,11].

With the assistance of the corpus analysis software AntConc 4.3.1, all candidate reporting verbs were retrieved from the two corpora. Each occurrence was then manually examined in its sentential context to verify whether the verb indeed functioned as a reporting verb according to the predefined criteria. This combination of automated retrieval and manual verification minimized false positives and enhanced the accuracy of the dataset. Subsequently, chi-square tests were performed on the overall frequency and high-frequency reporting verbs in the two corpora to determine whether statistically significant differences existed in their distribution. In addition, the semantic categories of reporting verbs were comparatively analyzed to explore potential differences in functional preferences between master's and doctoral writers. This sheds light on variations in evaluative stance and rhetorical sophistication across different stages of academic development.

Results and discussion

Overall distribution of reporting verbs

Table 1. Overall distribution of reporting verbs in the two corpora.

Category	COM	COD
Raw frequency/Word forms	333/85	660/114
Standardized frequency (per 1000 words)	5.0	4.9
Mean frequency per thesis	16.65	66.00
Total tokens	66,977	134,697

As shown in Table 1, the COM corpus contains 66,977 tokens, with reporting verbs appearing 333 times. In the COD corpus, there are 134,697 tokens, with reporting verbs appearing 660 times. Data standardization is required, and the calculated occurrence frequency per thousand words in the two corpora is 5.0 and 4.9 times per thousand words, respectively. This may be because the corpus selected in this paper is the literature review section of articles, where citations are relatively concentrated and the frequency of reporting verbs is higher. The former studies focus on the full text of journal articles, so the standardized frequency is lower. Specifically, the standardized frequency of COM is

slightly higher than that of COD. This may be because the literature review section of doctoral dissertations contains a certain amount of commentary and unique insights, while such content is obviously less in master's theses. In conclusion, the use of reporting verbs in master's theses is already relatively mature, so this paper continues to examine the similarities and differences between the two corpora in other aspects.

There are 85-word forms of reporting verbs in COM and 114-word forms in COD, indicating that doctoral-level L2 learners have a relatively higher mastery of reporting verbs and possess certain experience in writing and publishing high-level papers. Regarding the top ten most frequently used reporting verbs in the two corpora (see Table 2), it can be found that there are four identical words in both corpora: believe, propose, investigate, point out, and conduct. The remaining five high-frequency reporting verbs are unique to COD. Specifically, "suggest" and "argue" in the top five high-frequency words of COD are reporting verbs frequently used by native scholars, and these two high-frequency words do not appear in COM. This also shows that master's-level L2 learners still need to strengthen their ability to use reporting verbs, while doctoral-level L2 learners have approached the reporting verb usage ability of English native speakers to a certain extent.

Table 2. Top 10 most frequently used english reporting verbs.

Rank	COM	Freq	COD	Freq
1	Analyze	26	Point Out	52
2	Believe	26	Suggest	31
3	Propose	20	Propose	29
4	Discuss	17	Investigate	28
5	Explore	15	Argue	26
6	Investigate	15	Believe	24
7	Conduct	12	Find	23
8	Point Out	11	Report	22
9	Agree	8	Conduct	21
10	Hold	8	Observe	21
	Total	158	Total	277

As shown in Table 2, the two most frequent reporting verbs in COM are "analyze" and "believe", whereas those in COD are "point out" and "suggest". A closer examination reveals that the high-frequency verbs in

COM mainly fall into research-type and cognition-type categories. These verbs are typically used to describe the concrete research actions of cited scholars or to present their mental positions and viewpoints. In contrast, the most frequent verbs in COD belong predominantly to discourse-type reporting verbs, which play a particularly salient role in the construction and negotiation of knowledge in the humanities. Compared with research-type verbs that emphasize procedural actions, discourse-type verbs foreground the propositional content of the cited claim. They highlight the interpersonal dimension of academic argumentation, thereby signaling the citer's evaluative engagement with prior scholarship.

Example (1): Some scholars analyze the textual features of reported speech in court discourses (COM).

Example (2): Some scholars believe there needs to be a rethinking on the universality of grammaticalization theory, holding that “no matter how extensive the evidence of unidirectionality is, it should not be purely considered as an absolute principle” (COM).

Example (3): Some scholars pointed out that the upward or downward articulatory motions of eyebrows may be associated with the raising or lowering of vocal pitch (COM).

Example (4): Some scholars suggested that listeners would go through “an inferential process based on the perception of several cues” when understanding spoken language (COM).

In example (1), “analyze” functions as a research verb that foregrounds the procedural activity undertaken by the cited authors. The writer's primary intention is to objectively describe the research focus and contribution of relevant studies, rather than to overtly evaluate their claims. By positioning themselves as a neutral reporter of established findings, the citer adopts an authoritative and seemingly impartial stance, while simultaneously drawing on prior research to justify the necessity of further investigation into “reported speech”. The verb choice thus reflects a descriptive and information-transmitting orientation typical of less evaluatively marked literature review writing.

In example (2), “believe” is categorized as a cognition verb, directing attention to the cited scholars' internal stance, judgment, or theoretical commitment. By attributing the call for rethinking the universality of grammaticalization theory to previous scholars through

the positively oriented verb “believe”, the writer implicitly aligns with this perspective. Instead of directly asserting their own evaluation, the author strategically invokes the authority of established scholars to legitimize the need for further research. This indirect alignment suggests a reliance on authoritative voices to strengthen argumentation, rather than engaging in explicit critical negotiation.

By contrast, the verbs in COD demonstrate stronger evaluation and dialogic orientation. In example (3), “pointed out” is a discourse-type verb that not only introduces the cited proposition but also implies that the observation is noteworthy and valid. The use of this verb conveys a degree of endorsement, signaling the citer's recognition of the significance and reliability of the relevant findings. In this way, the cited viewpoint is integrated into the writer's own argumentative framework as credible support, reinforcing the rationality and necessity of further in-depth research.

Similarly, in example (4), “suggest” functions as a discourse verb with a modalized and tentative nuance. Unlike more assertive verbs such as “demonstrate” or “prove”, “suggest” encodes epistemic caution and acknowledges the provisional nature of knowledge claims. By employing this verb, the writer implicitly signals a critical distance from the model of the “inferential process”, indicating that the explanation may be open to alternative interpretations. This careful calibration of stance reflects academic rigor and an awareness of the need to evaluate, rather than merely reproduce, prior scholarship.

In summary, the analysis of high-frequency reporting verbs in the two corpora reveals clear differences in rhetorical preference and evaluative sophistication. Doctoral literature review sections show a greater tendency to employ discourse-type reporting verbs, which carry stronger evaluative potential and facilitate critical engagement with previous studies. This pattern reflects doctoral students' more advanced academic literacy, particularly their ability to negotiate stance and construct knowledge dialogically. In contrast, master's theses rely more heavily on research-type and cognition-type verbs, emphasizing the reporting of research activities and scholars' viewpoints, with comparatively less explicit evaluative positioning. These differences suggest a developmental trajectory in the use of reporting

verbs, corresponding to increasing critical awareness and rhetorical maturity at higher levels of academic training.

Similarities and differences in the use of different types of reporting verbs

(1) Research reporting verbs

As shown in Table 3, the overall distribution of research reporting verbs in COM and COD exhibits broadly similar patterns, with no statistically significant difference at the macro-level ($p > 0.05$). In both corpora,

Table 3. Distribution and frequency of research reporting verbs in COM and COD.

Research	COM Raw	COM Std	COM (%)	COD Raw	COD Std	COD (%)
Results: Factual	24	0.36	14.72%	76	0.56	25.50%
Results: Counter-factual	1	0.01	0.61%	2	0.01	0.67%
Results: Non-factual	9	0.13	5.52%	33	0.24	11.07%
Process	129	1.93	79.14%	189	1.39	63.42%
Total	163	2.43	100.00%	298	2.21	100.00%

Nevertheless, closer examination reveals meaningful differences in the internal distribution of research verb subcategories. Notably, the proportion of result-type verbs in COD is relatively higher (37.24%) than in COM, indicating that doctoral writers place greater emphasis on reporting and evaluating research findings rather than merely recounting research procedures. This tendency aligns with what has been described as “the inclination of international scholars to directly express their stance toward cited research”, suggesting that doctoral literature reviews demonstrate a stronger orientation toward evaluative positioning and knowledge construction [12]. Statistical analysis further confirms these distinctions. A significant difference is observed in the use of factual verbs ($\chi^2 = 7.21$, $df = 1$, $p < 0.01$), with COD employing significantly more factual result verbs than COM. In contrast, no significant difference is found in the use of counter-factual verbs ($\chi^2 \approx 0.00$, $df = 1$, $p > 0.01$). For non-factual verbs, the difference reaches statistical significance ($\chi^2 = 3.95$, $df = 1$, $0.01 < p < 0.05$), while process verbs display a highly significant difference ($\chi^2 = 13.13$, $df = 1$, $p < 0.001$), with master’s theses relying more heavily on this category.

Factual verbs typically convey affirmation and recognition of cited conclusions. The higher frequency of such verbs in COD indicates that doctoral students are more inclined to foreground findings that have gained relative consensus within the field, thereby reinforcing the rationality and theoretical grounding of their own

process verbs account for the largest proportion, followed sequentially by factual, non-factual, and counter-factual verbs. This shared tendency suggests that master’s and doctoral students’ focus on what prior scholars did, not their conclusions, when citing literature. This reflects the literature review’s core role in summarizing earlier research trajectories and establishing the intellectual foundation for subsequent inquiry.

research.

Example (5): Related experimental studies also show that participants can easily infer related conceptual metaphors from poems. As illustrated in example (5), the writer invokes existing experimental results to substantiate the claim that “novel metaphor” does not necessarily entail genuinely new conceptual mappings. By explicitly presenting prior findings as empirically supported and reliable, the doctoral writer strengthens the legitimacy of applying conceptual metaphor theory in the present study. This practice reflects a more strategic and confident engagement with the literature, whereby affirmative evaluation is used to construct academic consensus and enhance argumentative coherence. In contrast, master’s students appear to engage less frequently in such explicit endorsement, which may suggest a comparatively limited depth of critical synthesis.

Non-factual verbs, by comparison, encode epistemic caution and neutrality, signaling that the cited conclusions are tentative, debatable, or open to interpretation. The relatively more nuanced use of non-factual verbs in COD suggests that doctoral writers are more adept at distinguishing between established findings and contested viewpoints, deploying modalized reporting verbs to position themselves critically within ongoing scholarly debates. Such usage reflects a more sophisticated awareness of the dialogic and provisional nature of academic knowledge.

Process verbs, which primarily denote research activities

rather than evaluative stances, are used more extensively in master's theses. This pattern indicates that master's literature reviews tend to prioritize the recounting of methodological procedures and research designs. Doctoral writers, in contrast, allocate comparatively less emphasis to process description and more attention to synthesizing and evaluating research outcomes and theoretical implications. This divergence may reflect differing focal orientations: master's students appear to concentrate on "what was done", whereas doctoral students focus more on "what was found" and "what it means".

Overall, comparative analysis reveals a developmental trajectory in academic stance construction. Doctoral writers demonstrate greater proficiency in using reporting verbs to calibrate certainty, express evaluative positioning, and integrate prior research into a coherent argumentative framework, thereby exhibiting stronger critical thinking and rhetorical control. Master's writers, by contrast, display a more descriptive, process-oriented approach, characterized by cautious evaluation and less explicit affirmation. The shift from master's to doctoral

writing thus reflects a movement from primarily summarizing previous research toward critically evaluating it and strategically incorporating it into the construction of one's own scholarly contribution.

(2) Cognition reporting verbs

As indicated in Table 4, the overall frequency of cognition reporting verbs in COD is significantly lower than that in COM ($p < 0.01$), suggesting a reduced reliance on mental-process attribution in doctoral literature reviews. In other words, doctoral writers appear less inclined to frame cited propositions primarily in terms of scholars' internal beliefs or cognitive states. However, when the subcategories of cognition verbs are examined in detail: positive, neutral, tentative, and critical - no statistically significant differences are found between the two corpora (positive: $\chi^2 = 0.98$, $df = 1$, $p > 0.05$; neutral: $\chi^2 = 2.46$, $df = 1$, $p > 0.05$; tentative: $\chi^2 = 2.37$, $df = 1$, $p > 0.05$; critical: $\chi^2 = 2.40$, $df = 1$, $p > 0.05$). This indicates that, although the overall frequency differs, the proportional distribution across evaluative orientations within the cognition category remains broadly comparable.

Table 4. Distribution and frequency of cognition reporting verbs in COM and COD.

Cognition	COM Raw	COM Std	COM (%)	COD Raw	COD Std	COD (%)
Positive	18	0.27	27.27%	16	0.12	20.25%
Neutral	14	0.21	21.21%	26	0.19	32.91%
Tentative	30	0.45	45.45%	26	0.19	32.91%
Critical	4	0.06	6.06%	11	0.08	13.92%
Total	66	0.99	100.00%	79	0.59	100.00%

Despite the absence of statistically significant differences at the subcategory level, certain qualitative tendencies are observable. Master's literature reviews demonstrate a relatively higher frequency of positive and tentative cognition verbs, suggesting that master's L2 writers tend to express general agreement with cited research while simultaneously avoiding overtly strong or confrontational evaluations. Example (6): Combing the monosemantic and polysemantic approaches together, some scholars hold that the boundaries between modalities are fuzzy (COD). As illustrated in example (6), the verb "hold" attributes a theoretical stance to Goates and other scholars, presenting their position on modality boundaries as a reasoned and authoritative viewpoint. By invoking this cognition verb, the writer constructs alignment with established scholarship and uses it to

legitimize the subsequent adoption of the "meaning space" model. The reporting strategy thus functions to reinforce the reliability and theoretical grounding of the author's argument, while maintaining a cautious and deferential tone toward prior authorities.

In contrast, although doctoral students also employ positive and tentative cognition verbs, their distribution shows relatively higher proportions in neutral and tentative categories. This pattern reflects a more calibrated and moderated evaluative stance. Doctoral writers appear more capable of introducing prior viewpoints in an ostensibly objective manner while simultaneously signaling epistemic reservation. Example (7): some scholars believe that when the speaker uses a metaphorical utterance, he intends to classify a certain entity into a certain category, and the purpose is to attach

some temporary features to the metaphorical topic (COD). In example (7), the verb “believe” attributes the interpretation of metaphorical utterance to a particular cognitive perspective rather than presenting it as an established fact. By framing the proposition as the scholars’ belief, the writer avoids absolute endorsement and leaves interpretive space for alternative perspectives. Such usage sustains the dialogic nature of academic discourse, acknowledging that the cited claim represents one possible interpretation rather than a definitive conclusion.

From a functional linguistic perspective, cognition verbs realize mental processes within the transitivity system, encoding experiences of thinking, knowing, or perceiving. They thus project the “inner world” of the cited scholar and foreground subjectivity rather than empirical finality. Comparing COM and COD, it can be observed that master’s writers slightly more frequently construct and evaluate this inner cognitive space, emphasizing what previous scholars *think* or *believe*. Doctoral writers, by contrast, rely somewhat less on such mental-process attribution and may prefer discourse or result-oriented verbs that foreground propositional content over personal cognition.

At the same time, the relatively low frequency of explicitly critical cognition verbs in both corpora suggests that neither group demonstrates extensive use of overtly evaluative or confrontational stance-taking through mental-process verbs. Even doctoral writers, while displaying greater moderation and dialogic awareness, do not frequently employ cognition verbs to challenge or problematize prior claims directly. This may

indicate a shared tendency among Chinese L2 academic writers to maintain interpersonal harmony and rhetorical caution in literature review writing.

In summary, no statistically significant differences emerge in the internal distribution of verb cognition subcategories. However, the overall lower frequency of such verbs in COD, combined with qualitative differences in evaluative calibration, suggests a developmental shift. Master’s writers tend to rely more heavily on cognition verbs to express alignment and cautious endorsement, whereas doctoral writers demonstrate a more restrained and dialogically oriented use of mental-process reporting. This developmental progression reflects increasing awareness of epistemic positioning and the need to balance attribution, evaluation, and critical engagement in advanced academic writing.

(3) Discourse reporting verbs

As shown clearly in Table 5, the overall frequency of discourse reporting verbs differs markedly between COD and COM, with a highly significant difference ($p < 0.001$). This indicates that doctoral and master’s writers diverge more substantially in their use of discourse-type verbs than in research or cognition verbs. At the subcategory level, a significant difference is observed in doubt-type verbs ($\chi^2 = 11.80$, $df = 1$, $p < 0.05$) and assurance-type verbs ($\chi^2 = 4.83$, $df = 1$, $p < 0.05$), whereas **there is** no significant difference found in opposition-type verbs ($\chi^2 = 1.72$, $df = 1$, $p > 0.05$). These results suggest that the most salient contrasts between the two groups lie in how they express uncertainty and certainty through verbal processes.

Table 5. Distribution and frequency of discourse reporting verbs in COM and COD.

Discourse	COM Raw	COM Std	COM (%)	COD Raw	COD Std	COD (%)
Doubt	4	0.06	3.85%	33	0.25	11.66%
Opposition	5	0.07	4.81%	5	0.04	1.77%
Assurance	95	1.42	91.35%	245	1.82	86.57%
Total	104	1.56	100.00%	283	2.11	100.00%

From the perspective of Systemic Functional Linguistics, discourse reporting verbs are rooted in the verbal process within the transitivity system. Verbal processes occupy an intermediate position between material and mental processes: They represent observable linguistic acts that often externalize internal cognitive activity. Compared with cognition verbs, which foreground

subjective mental states, discourse verbs are relatively more intersubjective and dialogic, as they explicitly enact the exchange of propositions within academic communication. Therefore, variation in discourse verb usage directly reflects differences in stance-taking strategies and rhetorical negotiation.

More specifically, doubt-type discourse verbs encode

epistemic uncertainty, speculation, or provisionally regarding cited claims. The significantly higher frequency of such verbs in COD suggests that doctoral writers are more inclined to question, hypothesize, or critically reinterpret prior research. This pattern indicates a stronger awareness of the provisional and contestable nature of academic knowledge, as well as a greater willingness to open discursive space for reinterpretation. By contrast, the lower proportion of doubt-type verbs in COM implies a comparatively cautious or deferential stance toward established scholarship.

Opposition-type verbs, which express explicit disagreement or refutation, are relatively rare in both corpora and show no statistically significant difference. As these verbs represent high-confrontation rhetorical moves in academic discourse, their limited use may reflect a shared tendency among L2 writers to avoid overtly adversarial positioning. Interestingly, master's theses display a slightly higher proportion of opposition-type verbs. This may be attributable to a preference for more direct and lexically explicit expressions of disagreement, whereas doctoral writers might adopt more nuanced or mitigated strategies to articulate critical distance without appearing overly confrontational.

Assurance-type verbs constitute the most dominant subcategory in both corpora, particularly in COM, where they account for an exceptionally high proportion. This heavy reliance on assurance verbs in master's literature reviews suggests a strong orientation toward certainty and authority in citation practices. Master's writers tend to present prior research as stable, authoritative knowledge, thereby reinforcing the legitimacy of their own arguments. However, such a pattern may also indicate limited flexibility in evaluative stance, as the overuse of assurance verbs reduces opportunities for nuanced negotiation and critical engagement. Although doctoral writers also employ assurance verbs extensively, their relatively lower proportion reflects a more diversified evaluative repertoire and a greater capacity to calibrate certainty in accordance with the epistemic status of cited claims.

The presence of doubt- and opposition-type discourse verbs in the COM corpus might appear to suggest a degree of evaluative awareness among master's writers. However, the appropriateness of their usage warrants closer scrutiny. Example (8): They propose that

complement receivers should be engaged in the research so as to learn how they construe compliments (COM). Example (8) illustrates a potential mismatch between verb choice and rhetorical intention. The verb "propose", categorized here as expressing doubt or tentativeness, signals that the cited claim regarding "complement receivers" remains hypothetical or exploratory. Yet, in the subsequent discussion, the writer draws on additional studies to support and reinforce the necessity of including complement receivers in research. In this context, the author's overall evaluative orientation toward the cited claim is positive and supportive. Therefore, an assurance-type discourse verb (e.g., argue, demonstrate, or show) would more accurately align with the intended endorsement. The selection of a doubt-oriented verb in such a context weakens the interpersonal force of the citation and may hinder the effective social construction of knowledge. As noted in previous research, inappropriate reporting verb choice can limit the citation's role in interpersonal negotiation and reduce its persuasive impact.

In summary, the comparative distribution of discourse reporting verbs reveals a clear developmental trend. Doctoral writers demonstrate greater rhetorical sophistication in balancing assurance and doubt. They employ a wider range of evaluative resources to negotiate stance and construct dialogic space. Master's writers, while heavily relying on assurance verbs to project authority, occasionally exhibit mismatches between verb semantics and evaluative intention. This progression from relatively monolithic certainty to diversified and strategically calibrated stance-taking reflects the evolution of academic literacy from master's to doctoral levels. It highlights the increasing importance of nuanced interpersonal negotiation in advanced scholarly writing.

Discussion

In summary, the comparative analysis of master's and doctoral dissertation literature reviews reveal both shared conventions and developmental distinctions in the use of reporting verbs. At a general level, the two groups exhibit similar academic writing tendencies. They rely heavily on process-type verbs within the research category. They rarely employ reporting verbs with strong oppositional potential across research, cognition, and discourse domains. This shared pattern suggests that Chinese scholars in English linguistics tend to adopt a descriptive,

process-oriented approach to literature reviewing, foregrounding what previous researchers have done rather than explicitly challenging what they have claimed. It also reflects adherence to relatively conservative norms of academic politeness, whereby direct confrontation or sharp evaluative criticism is mitigated in favor of harmonious scholarly interaction.

Such tendencies can be interpreted within a broader socio-cultural context. Previous research has noted that Chinese students may be less inclined to initiate explicit criticism in academic discourse and often prioritize group harmony in scholarly communication [13]. When engaging with high-status or authoritative scholars, both master's and doctoral writers position themselves as learners within an established academic hierarchy, thereby moderating direct evaluative challenges. This rhetorical caution, while maintaining interpersonal harmony, may partially constrain the dialogic and critical functions that literature reviews are expected to fulfill. Nevertheless, the findings suggest that with the deepening of academic training, doctoral students demonstrate an increased willingness to employ mild or strategically limited opposition-type reporting verbs. This signals their gradual development toward more critical engagement.

Beyond these shared features, important developmental differences emerge in stance construction and identity negotiation. In master's literature reviews, writers tend to construct a cautious learner identity. Their heavy reliance on process-type research verbs and assurance-type discourse verbs reflects a relatively homogeneous evaluative repertoire. By emphasizing research procedures and presenting cited conclusions as authoritative and stable, master's writers seek to integrate harmoniously into the academic community. Reporting verbs are primarily used to legitimize and support their own work through alignment with established scholarship. This pattern suggests that their academic confidence and critical literacy are still in formation; evaluation is present but often restrained, and endorsement tends to outweigh interrogation.

In contrast, doctoral literature reviews more frequently construct the identity of active academic participants and evaluators. The greater use of factual research verbs indicates a stronger orientation toward consolidating disciplinary consensus and foregrounding empirically

supported findings as a foundation for new inquiry. Simultaneously, the increased use of doubt-type discourse verbs demonstrates a heightened awareness of the provisional and contestable nature of knowledge. Through these linguistic choices, doctoral writers move beyond merely reporting prior studies to critically positioning themselves within ongoing scholarly debates. This shift reflects a transformation from knowledge recipients to dialogic contributors and emerging theory constructors. Doctoral writers strategically employ factual verbs to establish authoritative grounding, thereby strengthening the legitimacy of their research agenda. At the same time, they create rhetorical space for innovation by deploying carefully calibrated negative or tentative reporting verbs to question, reinterpret, or problematize existing perspectives. Their stance may be characterized as one of "critical inheritance": they inherit and acknowledge established scholarship while selectively evaluating and extending it. In doing so, they actively participate in the co-construction of disciplinary knowledge rather than simply summarizing it.

Overall, the progression from master's to doctoral writing demonstrates an evolving trajectory in academic stance and identity construction. While both groups remain influenced by culturally embedded norms of moderation and politeness, doctoral students display greater evaluative flexibility, epistemic calibration, and dialogic awareness. This developmental pattern underscores the importance of advanced academic training in fostering critical engagement, diversified stance-taking strategies, and the confident construction of scholarly voice within the literature review genre.

Conclusion

This study examines the use of reporting verbs in the literature review sections of master's and doctoral dissertations in English language and literature, aiming to identify developmental differences in stance construction among Chinese L2 writers. Although no significant difference is found in the overall frequency of reporting verbs, more detailed analysis reveals significant differences in high-frequency items and in the distribution of semantic categories. Doctoral dissertation literature reviews display patterns that more closely resemble those of native English-speaking scholars, indicating greater rhetorical maturity and disciplinary

alignment.

In terms of reporting verb types, master's students rely more heavily on research-type verbs, especially process-oriented verbs, reflecting a descriptive and relatively low-risk reporting strategy. They also use more cognition-type verbs and fewer discourse-type verbs than doctoral students, suggesting a tendency to frame cited knowledge in terms of scholars' mental states rather than engage in explicit academic interaction. By contrast, doctoral students employ more discourse-type verbs and a more diversified evaluative repertoire, demonstrating stronger dialogic awareness and a greater ability to negotiate stance in relation to prior research.

Overall, master's literature reviews tend to construct the identity of a cautious, description-oriented learner. In contrast, doctoral literature reviews project the image of an emerging researcher who actively participates in academic dialogue and critically engages with existing scholarship. Focusing on English language and literature, this study provides pedagogical implications for academic writing instruction and highlights the need to guide L2 learners toward more critical and rhetorically sophisticated use of reporting verbs. Future research may extend the analysis to additional disciplines to obtain more comprehensive insights into reporting verb use in L2 academic writing.

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Conflicts of Interest

The author declares no conflict of interest.

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