
Functions Of Reporting Verbs in The Literature Review of Master's Theses in The Discipline of Economics

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Abstract

Citation practices are realised through the use of reporting verbs which act as persuasive devices to achieve rhetorical impacts. Several studies have investigated citation practices in several disciplines in different contexts, with little done on the discipline of Economics. The study aimed at exploring the citation practices in the literature review sections in master's theses published in the Economics discipline. Using Hyland's (2002) classification of reporting verbs, fifteen (15) literature review chapters were extracted from fifteen Economics master's theses and analysed with AntConc software. Following the results of the study, it was revealed that all three types of reporting verbs were employed varying in the theses. Denotatively, the Discourse Acts was the frequently used category of the reporting verbs as compared to the Research Acts and Cognition Acts. On the evaluative function, findings and assurance verbs were employed frequently. While the study contributes to existing literature, it guides the practice of appropriate use of reporting verbs in academic writing.

Keywords: *academic writing, citation, economics, literature review, reporting verbs*

INTRODUCTION

The significance of citation practices as a means of arguing, reviewing previous studies and expressing opinions in academic writing is widely recognised (Agbaglo, 2017; Barghamadi, 2021; Hyland 2008). Citation allows writers to acclaim their credibility and persuade readers (Hyland, 2002; Swales, 1990). Linguistically, this purpose is attained thanks to reporting verbs (Hyland, 2002; Liu & Wang, 2019). Rhetorically, reporting verbs serve as linking ties between ideas and signal the writer's attitudes, whether positive, neutral or negative, towards the reported information (Afful, 2007; Hyland, 2000; Swales, 1990; Thompson & Ye, 1991). Examples of reporting verbs are *reported*, *reveal*, *examine*, *argue*, *highlight*, and *state*.

Since academic writing is reflective of disciplinary norms and epistemological assumptions, the forms and functions of reporting verbs also vary across academic disciplines such as Philosophy, Sociology, Marketing and Physics (Hyland, 2008). Similarly, various academic genres such as examination scripts, articles, term papers, laboratory reports and theses also employ varying forms and uses of reporting verbs (Mahama, 2012). In particular, theses are widely recognised as important documents in post-graduate pedagogy across the globe. In theses writing, students demonstrate their understanding of key theoretical,

conceptual and empirical issues on a chosen topic as well as their ability to adhere to disciplinary conventions in communicating their findings (Afful, 2012; Agbaglo, 2022).

Like most voluminous academic genres, the thesis is divided into part genres or chapters, such as the Introduction, Literature Review, Methods, Findings and Discussion, and Conclusion. Of all these chapters, it is in the Literature Review that writers significantly present the views and findings of previous studies (Bitchener, 2010; Loan & Pramoolsook, 2015). More importantly, writers also critique such views and present their own opinions. For this reason, the Literature Review chapter is replete with reporting verbs which are used to communicate tentativeness, neutrality, as well as positive and negative stance (Bloch, 2010; Soler-Monreal & Gil-Salom, 2011).

The upsurge of research in academic genres in the past few decades has seen volumes of scholarly research on the research article as a whole and its part genres. However, the same cannot be said of the thesis/dissertation. In particular, researchers shy away from the Literature Review chapter of the thesis because of its volume and the stress involved in its analysis (Bunton, 2002). Additionally, some disciplines are overly represented in previous studies on academic genres, while others are underrepresented (Swales, 1990). The discipline of Economics is one of the underrepresented disciplines (Blackhouse, Dudley-Evans, & Henderson, 2017; Ngula, 2015). With a focus on reporting practices in academic writing, the discipline of economics has hardly benefitted from any study. The present study investigates the kinds and frequency of reporting verbs in the literature review of theses in the discipline of Economics. The study is guided by two research questions:

1. What is the frequency of the categories of reporting verbs used in the literature review of master's theses in Economics discipline?
2. What functions do reporting verbs serve in the literature review of master's theses in Economics discipline?

The study is significant because it has implication for English language pedagogy and academic writing. While the study uses master's dissertations, the findings are extendable to undergraduate and doctoral students in the discipline. This can be practised frequently to ensure that the rising concerns about plagiarism are minimized (Hu & Lei, 2016). In this regard, the students, particularly at the postgraduate level, will be knowledgeable about presenting convincing literature rather than mere mechanics and necessities. This can equip master students with appropriate use of reporting verbs and improve their academic writing in higher education such as the PhD. Instructors, supervisors, and teachers should introduce the students to the functions and rhetorical effects of the verbs to ensure their suitable uses. English for Academic Purposes practitioners and scholars will also find the findings of the study insightful, as they can serve as a basis for the production of teaching and learning materials. This is significant since the verbs investigated are English verbs.

Conceptual thrust

While citation is “central to social context of persuasion” (Hyland, 1999:342), it is an “attribution of propositional content to another source” (Hyland, 2002:115). The attribution is made explicitly through the use of reporting verbs. Hyland (2002) notes that citation is a unique feature in academic writing such as theses and it is used to express thoughts and opinions, with the aim of creating a research space (Swales, 1990). Swales (1990) distinguishes between integral and non-integral citations, where in the former, the author is cited in the sentence and in the latter, the author is placed in parentheses. Following Swales's (1990) extensive exploration of citation, scholars have given considerable research attention to citations. In citation, reporting verbs locate the writer in a disciplinary context (Myers, 1990), revealing gaps in the literature (Swales, 1990) that informs the work.

Frameworks for analysing reporting verbs have been popularized in the literature. Amongst these are Swales and Feak's (2004) typology of reporting verbs, Hyland's (2002) classification of reporting verbs, Thomas and Hawes's (1994) model, Thompson and Ye's (1991) model, and Coffin's (2009) model. Each of these models has been applied to studying reporting verbs in a single discipline, across disciplines, and across cultures. However, the study adopts Hyland's (2002) classification of reporting verbs as the framework for the study. This framework is chosen based on its convenience, comprehensiveness (Pramoolsook, 2015), applicability and effectiveness in classifying reporting verbs. Also, it has been popularized in the literature, given that it has produced suitable results for studies in native and non-native contexts. It is explanatory and provides a fundamental description that categorises reporting verbs based on their function.

Previous studies

The literature on citations and reporting verbs has focused on research articles (Agbaglo, 2017; Hyland, 1999, 2000, 2002; Hyland & Jiang, 2017; Hu & Wang, 2014) and theses (Nguyen & Pramoolsook, 2016; Samraj, 2013; Santos, 2018; Thompson, 2005). Scholars have focused on single disciplines (Thompson, 2001; Un-udom & Un-udom, 2020), multiple disciplines (Charles, 2006; Hu & Wang, 2014; Hyland, 1999, 2000; Manan & Noor, 2014; Thomas & Hawes, 1994) and between experts and novice writers (Mansourizadeh & Ahmad, 2011) hoping to identify variations. Aspects of citation have also received the attention of scholars: types of citation (Swales, 1990); tense (Hyland & Jiang, 2017; Thompson & Ye, 1991); across genres (Harwood, 2009; Hyland, 2000). Citation practices in individual disciplines have attracted considerable scholarly attention over the years (Agbaglo, 2017; Loan & Pramoolsook, 2015; Nguyen & Pramoolsook, 2016; Santos, 2018). So far, disciplines that have been the focus of such studies include English Language Studies (Agbaglo, 2017), TESOL (Nguyen & Pramoolsook, 2016) and Political Science (Santos, 2018). In his study, Agbaglo (2017) investigated the use of reporting verbs in research articles written by lecturers in the Department of English at the University of Cape Coast. Using Hyland's (2002) framework, he reports that the Discourse Acts type of reporting verbs are most used by lecturers compared to the Research and Cognitive Acts category of reporting verbs. Nguyen and Pramoolsook (2016) identify the limited use of reporting verbs in theses. Santos (2018) found that out of the fifty-two (52) reporting verbs, twenty-seven (27) were objective and twenty-five (25) were evaluative. He finalizes that reporting verbs establish a connection between a present study and previous works.

Studies that adopted cross-disciplinary lens have focused on Applied Linguistics and Medicine (Hu & Wang, 2014), soft and hard disciplines (Hyland, 2000), Accounting, Medicine, Applied Linguistics and Engineering (Uba, 2020), Applied Linguistics and Nursing (Barghamadi, 2021), as well as Applied Linguistics and Electrical Engineering as compared to Sociology and Biology (Hyland & Jiang, 2017). Hu and Wang's (2014) study identified differences in the pattern of citations in 84 English-medium and Chinese-medium journals in Applied Linguistics and Medicine RA. Significantly, Hu and Wang reveal the essence of cultural practices in citations in specific disciplines. In a similar vein, Atkinson (2004) drew attention to how culture, whether big (national) or small (disciplinary), influences aspects of citation.

In a study that compared citation practices across soft and hard discipline, Hyland (2000) found that there was a critical writer stance expressed through the reporting verbs in the soft discipline as compared to the hard discipline. Uba (2020) also reported that there is a high frequency of reporting verb use in Accounting and Applied Linguistics as compared to Engineering and Medicine disciplines. Barghamadi (2021) used 60 within five (5) years period

(2015-2019) RA from Applied Linguistics and Nursing and Midwifery disciplines. He adopted Hyland's (2002) framework and reported a high frequency of reporting verbs in Applied Linguistics than in Nursing and Midwifery, which highlights a clear preference. Similarly, Hyland and Jiang (2017) find more frequent use of citations and reporting verbs in Applied Linguistics and Electrical Engineering as compared to Sociology and Biology.

From the review of previous studies, Hu and Wang's (2014) claim that "citation density is indicative of the heteroglossia of academic discourse or the extent to which a scholarly text engages with the knowledge-making work of other texts" (p. 15) is suitable in all discourse communities. Reporting verbs indicate the author's attitude toward the reported study (Swales, 1990). In this regard, the study's exploration of the kinds and frequency of use of the category of reporting verbs promises to reveal interesting characteristics about the literature review section of theses in Economics.

METHOD

Research approach

The study integrates a corpus-based approach into text analysis. The corpus-based approach offers information on statistics such as frequencies, percentages, and concordances of the reporting verbs as well as the text analysis of their discursual functions. The corpus-based method saves time and ensures the accuracy of the results (Wen & Pramoolsook, 2021). The corpus analysis is based on 'real data', given that the theses that compose the data were actually written and not contrived by the researchers.

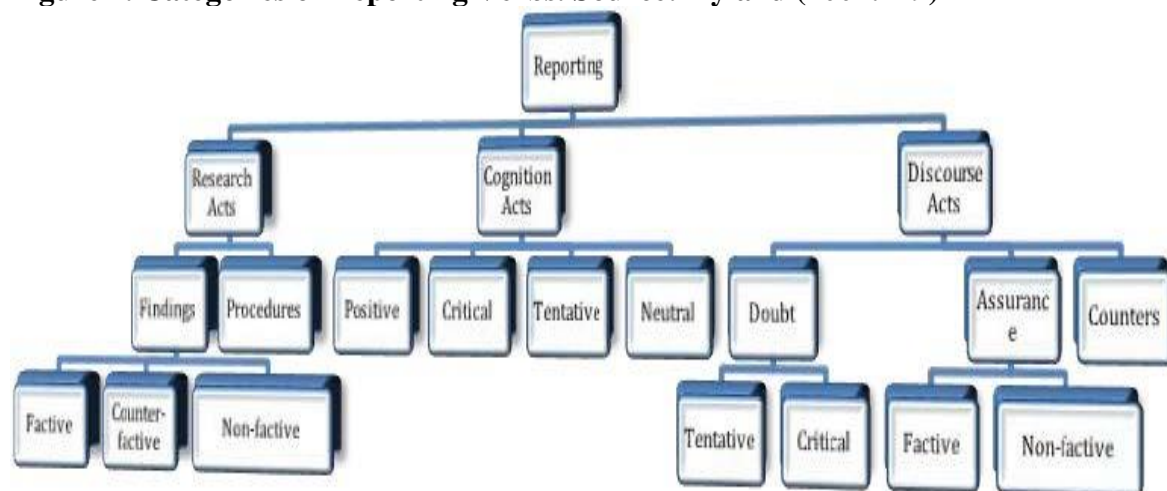
Source of data and context

The theses for the study were downloaded from the theses repository of the Department of Economics, University of Ghana (<http://ugspace.ug.edu.gh/handle/123456789/4899>). It is the first university in Ghana, established in 1948. The university credits itself with the largest population of students in Ghana. The university uses the English language as the language of instruction.

The quantity of data from the university's website was fifteen (15), which according to Thomson (2011), falls within the optimum range for inferences. The theses were chosen from 2018 to 2021. This particular range was chosen because it reflects the currency in the data. This range did not affect the data since the chosen department is resourceful in their repository of theses. That said, specifically, the data for the study include the literature review section of Economics theses. The literature review section is chosen for two primary reasons. First, as noted by Hartley (2008), "it integrates and synthesizes works from different research areas, evaluates the current state of evidence for a particular viewpoint, reveals inadequacies in the literature and points to where further research needs to be done" (p. 87). Secondly, the literature review provides extensive information which demands the use of reporting verbs. To this, Thompson (2005) states that the literature review contains more citations. It, therefore, becomes a rich source of data for the study.

Analytical framework

The analytical framework adopted for this study is Hyland's (2002) category of reporting verbs. The framework is presented in Figure 1.

Figure 1. Categories of Reporting Verbs. Source: Hyland (2002:119)

Hyland (2002) categorizes reporting verbs into three main types (Research Acts, Cognitive Acts, and Discourse Acts) based on their functions. Research Acts verbs are used to show acceptance, portray judgements and comment on research findings. This category is divided into findings and procedures, where in the findings act, the writer employs factive verbs (*show, demonstrate, confirm*) to accept reports, employs counter-factive verbs (*overlook, ignore, fail*) to reject results, and non-factive verbs (*find, observe, acquire*) to demonstrate neutrality (Hyland, 1999, 2002). With the procedures act, verbs do not carry any evaluative function but present methods used in a work such as *explore, examine, and analyse*.

Discourse Acts verbs are used to evaluate citations by “taking responsibility for an interpretation or attributing a qualification to the author” (Pramoolsook, 2015:199). The Discourse Acts is divided into doubt, assurance, and counters. The doubt sub-category is expressed using tentative verbs (*indicate, suggest*), and critical verbs (*not account, exaggerate*). Assurance is reported by using non-factive verbs such as *state, describe, define, summarize* and *report*; and factive verbs such as *explain, affirm, and argue*. With the last sub-category, counters, doubt verbs are used to reserve or object to a citation in the work. Hyland (2002) states *deny critique, challenge* and *question* as some of the examples of this category.

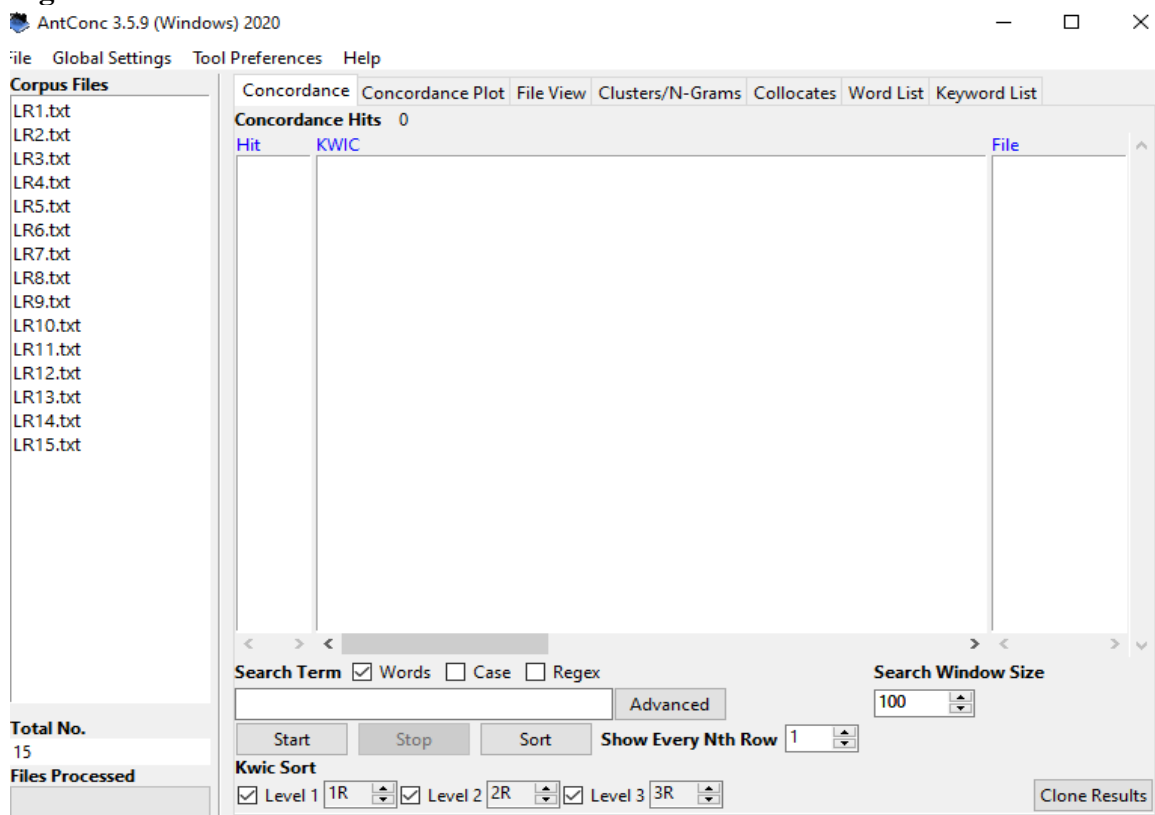
The next category of reporting verbs is the cognition verbs, which “portray the cited work in terms of mental process, are found to handle evaluation rather differently” (Pramoolsook, 2015:199). Here, the author uses reporting verbs in this category to express an attitude towards a reported statement. It has four sub-categories: positive attitude verbs are used when authors accept information (*agree, concur, understand*); tentative attitude (*believe, doubt, suppose*); critical stance (*dispute, not think, disagree*); and neutral attitude (*reflect, anticipate, conceive*). Figure 1 illustrates Hyland’s (2002) framework for examining reporting verbs. Following this, a checklist of reporting verbs was written down to guide the study in focusing on important aspects of the reporting verbs.

Data analysis procedure

Particular attention was paid to the citation of the reporting verbs through co-text and contexts to ensure that each occurrence was a reporting verb. This is because reporting verbs such as *report, claim, and state* could be identified as nouns in certain contexts. As such, it was mandated that all the reporting verbs must show citation, whether the integral or non-integral pattern (Swales, 1990), to be considered. The literature review sections were extracted to Microsoft Word 2019. Word 2019 was used to count the total number of words, which was 79,393. The extracted data were tagged as LR1 to LR15. This was done for easy identification

and to provide the writers with anonymity. Figures, tables, graphs, and diagrams in the literature review section were excluded from the data since they barely contain words. The data were formatted to ensure consistency among all of them. The data were converted from .doc to .txt, which is a plain text format for machine-readable AntConc (AntConc, 2020). The software has been used in several studies (Loan & Pramoolsook, 2015; Un-udom & Un-udom, 2020) and has proven reliable. Figure 2 illustrates the software loaded with the data for the study.

Figure 2. A screenshot of AntConc 2020 loaded with the data



RESULTS AND DISCUSSION

Frequency of reporting verbs

The summary of the frequency of the categorical kinds of reporting verbs is presented in Table 1. A total of 378 reporting verbs were recorded. (The percentages were run to the nearest two decimal places).

Table 1. Frequency of Reporting Verbs

Acts	Sub-categories (%)	Sub-division (%)	Total (%)
<i>Research</i>	Findings 90 (23.80)	Factive 30 (7.94)	120 (31.74)
		Counterfactive 42 (11.11)	

		Non-Factive (4.75)	
	Procedures 30 (7.94)		
<i>Cognition</i>	Positive 43 (11.37)		102 (26.99)
	Critical 11 (2.92)		
	Tentative 18 (4.76)		
	Neutral 30 (7.94)		
<i>Discourse</i>	Doubt 48 (12.70)	Tentative 30 (7.94)	156 (41.27)
		Critical 18 (4.76)	
	Assurance 90 (23.80)	Factive 66 (17.46)	
		Non-Factive 24 (6.34)	
	Counters 18 (4.77)		

Table 1 reveals the frequency of the reporting verbs in the data. From Table 3, the Discourse Acts category had the highest frequency of 156 occurrences, representing nearly half (41.27%) of the total data. Following the Discourse Acts is the Research Acts which chalked 120 occurrences, representing 31.74% of the data. The Cognition verbs had the least frequency of 102 identified in the corpus. The Cognition Acts represented more than a quarter of the data (26.99%). In the evaluative categories, Findings and Assurance categories were employed the most concerning Research Acts and Discourse Acts respectively. Each had a frequency of 90 with a 23.80%. That is, in the Economics discipline, attention is paid to reporting research findings and expressing a factive stance. The procedures had a frequency of 30 (7.94%). Within the findings category, counter factive verbs were mostly used (11.11%), as compared to factive (7.94%) and non-factive (4.75%). Within the Assurance category which had the highest percentage (23.80%), as compared to Doubt (12.70%) and Counters (4.77%), the factive verbs recorded 66 occurrences of reporting verbs representing 17.46%. The non-factive verbs occurred 24 times with a 6.34%. Finally, the Doubt verbs expressed through tentativeness was 7.94%, while expressing criticality was 4.76%.

Functions of frequently used reporting verbs in the literature review

There were several kinds of reporting verbs from the data. Hyland (2002) contends that there are over 400 reporting verbs in the English language. In the same line, Thompson and Ye (1991) point out the variety of reporting verbs at the disposal of writers in their theses development. Table 1 presents some of the reporting verbs identified from the data and

categorises them into their functions. To ensure consistency in the results, the reporting verbs are presented in the present tense form.

Table 2. Kinds of Reporting Verbs

Reporting Verbs
comment, conceive, summarise, support, doubt, agree, argue, anticipate, answer, assert, confirm, conceptualise, assume, believe, attack, challenge, claim, demonstrate, contend, declare, explain, define, deny, describe, emphasise, establish, exaggerate, disagree, discuss, dispute, find, fail, hold, explore, highlight, identify, imply, ignore, indicate, intimate, maintain, know, mention, not account, condemn, not provide, misunderstand, overlook, note, observe, solve, reflect, point out, postulate, propose, put forward, question, report, nullify, show, state, critique, suggest, suppose, think, caution, understand.

Source: *Corpus data*

Using Hyland's (2002) analytical model, we categorized the reporting verbs into their respective categories. Each of the categories of the reporting verbs is discussed and exemplified with extracts relating to the sub-categories.

Research Acts

Hyland (2002, p. 6) explains that these verbs “represent experimental activities carried out in the real world”. They report findings or procedures in research. From the framework used, the findings are further subcategorized into factive, counter factive, and non-factive. From the data collected and analysed, the categories and sub-categories were evidenced. Illustrations are provided in Extracts 1 to 4.

Extract 1

For instance, Tobin (1972) **observed** that inflation lubricates the economy such that in situations where firms, for instance, are unable to reduce wages in higher inflation environments, real wages can make necessary modifications in minimizing adverse shocks on firms. [LR4]

Extract 2

Hijzen et al. (2017) **explored** the impact of employment protection on temporary employment in Italy at the firm level and concludes that employment protection laws increase worker turnover. [LR5]

Extract 3

Politi et al. (1995) **ignored** the individual country characteristics which are unique to each country, thus assumed that all the developing countries studied are the same but we cannot conclude on that with ease. [LR12]

Extract 4

Kydland and Prescott (1977) **show** that the inability of policymakers to commit themselves to such a low-inflation policy can lead to the overshooting of targets. [LR4]

Extracts 1 to 4 are examples of the Research Acts used in the corpus. In Extract 1, the reporting verb *observed* is used to denote the category of procedures in the Research Acts. The procedures category is used to present methods or approaches in the research. Such meaning is evident in *observed*. Likewise, *explored* is used as a procedure category. It reports the research

approaches adopted by the authors. Other procedure Research Act verbs found in the data include *analyse*, *answer*, *explore*, *examine*, *observe*. *Ignored* and *show* are verbs found within the findings category. The findings category are used to report the results of studies. However, *ignored* is used counter factively to judge the study of *Politi et al. (1995)*. In the data analysed, other verbs used counter factively were *attack*, *deny*, *fail*, *ignore*, *condemn*, *dispute*, and *misunderstand*. *Show* is used factively to accept the claims or conclusion of the authors in Extract 4. Other research acts verbs used factively in the data were *demonstrate*, *establish*, *show*, *confirm*, and *solve*.

Cognition Acts

Cognitive Acts represents the mental processes that the author uses in his academic writing. Examples include *believe*, *conceptualise*, and *assume*. There are four sub-categories under this type as well. They can attribute a particular attitude to an author rather than take a personal stance. Extracts 5 to 8 presents some illustrations to support this category.

Extract 5

Alesina and Barro (2000) **contend** that forming a currency union involves trading off the benefits of a commitment to price stability against the loss of independent stabilization policy. [LR15]

Extract 6

Buckley and Casson (1976) **believe** it is responsible for MNEs engaging in FDI. [LR3]

Extract 7

Clément (2011), on Tajikistan, also **supports** the view that remittances are not used productively. [LR7]

Extract 8

Bardhan (1997) **pictured** bribe as a Coasean bargaining process between a bureaucrat (person who sells public resource in the form of permits and licenses illegally) and the private agent (for example, a foreign investor) that may lead to an efficient outcome. [LR3]

In Cognition Acts, citations through reporting verbs are carried out in the form of a mental process. Reporting verbs in this category are used to express attitudes towards research claims and statements as well. It is sub-categorised into positive, critical, tentative and neutral. Extracts 5 and 7 are examples that reflect on the positive sub-category of the Cognitive Acts. As such, the verbs *contend* and *supports* are used positively to express an attitude and acceptance towards the claim. *Agree*, *contend*, *hold*, *think*, *support*, and *know* were other positive cognitive verbs used in the data analysed. The reporting verb *believe* is used to express a tentative stance in Extract 6. It is used as a form of speculation in the extract. Another similar verb used in the data is *suppose*.

Finally, in Extract 8, the reporting verb *pictured* is used to express a neutral stance. It is used to taking a kind of indifferent ground towards a proposition in academic writing. This means that *pictured*, as used in Extract 8, expresses no positive or negative attitude towards the material in the statement. Other verbs of this kind used in the data were *reflect*, *conceive*, *anticipate*, and *conceptualise*.

Discourse Acts

The last category of reporting verbs next to the Cognitive Acts is the *Discourse Acts*. In Hyland's (2002) framework, the *Discourse Acts* verbs perform an evaluative function, where the writer takes responsibility for interpretations or attributing qualifications. Discourse Acts are usually verbally used to express a point of view. Illustrations are provided in Extracts 9 to 12.

Extract 9

Dunne *et al.* (2005) however **suggest** that “there seem to be strong theoretical and econometric reasons not to use the Feder-Ram model” and further postulate that the model was common in older literature because of its ability to provide a direct link from theory to empirical analysis. [LR6]

Extract 10

Mundell (1961) did **not specify** the type of factor... [LR15]

Extract 11

Minsky (1974) **argued** that financial crises are prevalent in capitalism because debtors and financiers tend to progressively make reckless decisions during periods of economic prosperity. [LR9]

Extract 12

Stewart (1991) **challenged** the results of opposing economists by finding that defence and non-defence burdens had an increasing growth effect over a long period. [LR6]

Extracts 9 to 12 provides some examples of reporting verbs used in the Discourse Acts category. Aside from the examples presented in the extracts, others are *postulate*, *stated*, *criticizes*, *point out*, *defined*, *discuss*, and *proposed*. *Suggest* in Extract 9 is used to express tentative doubt. In the data analysed, *indicate*, *hypothesise*, *intimate*, and *postulate* were used in similar ways. *Not specify* is used critically to denote doubt towards the reported subject in Extract 10. Other verbs used in a similar way in the data include *not account*, *not provide*, and *exaggerate*.

With assurance as a sub-category of the Discourse Acts, *argued* is used to provide a factive stance towards the assertion in Extract 11. *State*, *explain*, *affirm*, *assert*, *put forward*, *present*, *note*, *point out*, *maintain*, and *declare* were also used in a similar way in the data analysed. On the other hand, *define*, *summarise*, *describe*, *discuss* were used to project a non-factive attitude towards the cited information. Finally, in Extract 12, *challenged* is used to object to the information presented. In all, it is evident that the Discourse Acts were used to evaluate the citations. *Nullify* and *critique* performed similar functions in the data analysed.

Discussion

The present study examined the functions of reporting verbs in Economics master's thesis. The study focused on theses written by students in the University of Ghana. The study relied on Hyland's (2002) classification of reporting verbs and used the corpus-based methodology to analyse the data. In the present section, we discuss the findings in the light of previous studies.

This study found that the *Discourse Acts* was the frequently used category of the reporting verbs as compared to the *Research Acts* and *Cognition Acts*. It is evident that the denotative function of the RV categories presents some insightful results concerning their use in the Economics discipline. For instance, in all the extracts presented, the researchers, scholars, or scientists cited were placed at the subject position. They were made the theme of the information or reported statement. Similar findings were reported by Loan and Pramoolsook (2015). To this, Paltridge (2006) alludes this textual practice to the importance placed on the authors to strengthen their study.

Regarding the frequency of occurrences, Hyland (2002), Agbaglo (2017), and Loan and Pramoolsook (2015) reported that the Discourse Acts occurred most frequently in citations. Nonetheless, variations in the percentages occurred at 57%, 51%, and 62% respectively. The present study concurs with the findings of these authors with a percentage of 41.27 for Discourse Acts. However, the findings contradict that of Manan and Noor (2014) who found the Discourse Acts to be the least occurring category of reporting verbs in master's theses.

Also, Un-udom and Un-udom (2020) found the Research Acts to be the highest occurring category. These variations in findings could be a reflection of disciplinary differences. For instance, the study by Manan and Noor (2014) focused on English Language Studies theses while the present study focused on Economics.

Strikingly, while Hyland (2002) associates the dominant use of reporting verbs to be characteristic of soft disciplines, the Economics discipline is a hard discipline. Perhaps, there is variation in disciplinary practices where Economics is likely to be a grey line between soft and hard discipline, given that its percentage was not up to half the data. Further, *report* was the highest occurring example of the Discourse Acts verb with a frequency of 24. Contrastively, Manan and Noor (2014) identified *state* to be the highest occurring Discourse Acts verb. The Research Acts, *examined*, had the highest frequency amongst the other examples of verbs with a frequency of 17. Finally, *support* had an occurrence of 7 in relation to the Cognition Acts. These findings are acknowledgeable.

We also found that in the evaluative categories, Findings and Assurance categories were employed the most concerning Research Acts and Discourse Acts respectively. Through these occurrences, the students create a basis for thematizing their discussion. Arguably, while Hyland (2002) asserts that students barely use counter-factive verbs in their study, this study presents the most occurring frequency of counter-factive verbs. In this regard, the findings contrast the reports by Hyland (2002), Charles (2006), and Agbaglo (2017). This account can allude to the disciplinary classification of Economics. Economics essentially involves hypothesis testing where researchers are likely to employ counter-factive verbs to reject results. This may explain the high frequency of this category of reporting verbs in the data analysed.

Furthermore, our study found that within the Assurance category, as compared to Doubt and Counters, the factive verbs recorded 66 occurrences of reporting verbs representing 17.46%. This finding concurs with Loan and Pramoolsook (2015) and Agbaglo (2017) who found the Assurance verbs occurring most among the other categories. However, differences occur between the sub-divisions of factive and non-factive. This study records a higher frequency of factive assurance verbs while Agbaglo (2017) identifies the non-factive to be the highest occurring. This difference in findings is attributable to disciplinary variations: Agbaglo (2017) focused on English Studies, a Humanities discipline which is likely to use reporting verbs differently from Economics, a Social Science discipline. Interestingly, Wen and Pramoolsook's (2021) findings correspond to the present study. It is not surprising that the tentative verbs had the highest percentage compared to the critical verbs. Similar to Agbaglo's (2017) study, Wen and Pramoolsook (2021), and Loan and Pramoolsook (2015) are the studies that report the occurrence of tentative verbs in citations.

CONCLUSION

The study aimed at examining the kinds and frequency of reporting verbs in the literature review section of Economics theses. Using Hyland's (2002) model for categorizing reporting verbs, the study utilised a corpus of 79,393 words from fifteen dissertations. On the frequency of the reporting verbs, the Discourse Acts reported the highest frequency, Research Acts were second in frequency, while Cognition Acts recorded the least. Interestingly, the assurance sub-category in the Discourse Acts had the highest occurrence amongst others. Research Acts were used to accept information, express experimental or methodical activity and refute claims. Cognition Acts were mainly employed to portray positive attitudes towards reported information. Discourse Acts performed an evaluative function towards the cited information. For instance, doubt as a sub-category was expressed tentatively and critically. Nonetheless, assurance was identified predominantly in the factive stance.

For future studies, other researchers may adopt an interview section to explore the understanding of researchers in using the reporting verbs in their academic writing. Such a study can provide further scope to complement the kinds and frequencies of reporting verbs used. Similarly, a study can be devoted to studying the rhetorical functions of reporting verbs taking into consideration the context within which they occur. This can provide rhetorical features that are characteristic to some disciplines.

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