

## A COMPARATIVE ANALYSIS OF LEXICO-GRAMMATICAL STANCE FEATURES IN SOCIAL SCIENCES AND NATURAL SCIENCES MPhil DISSERTATIONS: AN EPISTEMOLOGICAL PERSPECTIVE

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### Abstract

This paper explores how the lexico-grammatical features of stance are used in MPhil dissertations in the Social Sciences and Natural Sciences by taking an epistemological approach to how the academic writing conventions of a specific discipline influence academic writing. Through the lexico-grammatical framework by Biber (2006), the research is based on three broad categories of stance features, which include modal verbs and semi-modal verbs, stance adverbs, and stance complement clauses. The methodology used was that of a corpus, which included the introduction chapters of MPhil dissertations submitted to Abdul Wali Khan University, Mardan. To determine the functional and rhetorical patterns of stance use, the data were analyzed with Sketch Engine, which is a combination of quantitative frequency analysis and qualitative analysis of the concordance lines. The results demonstrate apparent disciplinary differences in stance construction. Social Sciences dissertations are more expressive, argumentative, and agentive, which means that they use many prediction and obligation modal auxiliaries, evaluative stance adverbs, and communication-related complement clauses. Conversely, Natural Sciences dissertations are much more reticent and empirically wary, and highly dependent on possibility modals, restricted evaluative adverbs, and evidence-based constructions of the complement. Such tendencies demonstrate epistemological disparities in the interpretive and empirically-oriented disciplines. The paper concludes that the lexico-grammatical stance is a practice that is discipline-specific and develops early in postgraduate academic writing. The results have significant implications for the discipline-specific academic writing teaching and will add to the further comprehension of how emerging scholars negotiate knowledge and authorial identity in academic discourse.

### 1. Introduction

The aspects of lexico-grammatical stance contribute significantly to understanding the role of the writers in academic discourse. These properties contain the language devices that writers employ to express attitudes, show levels of assurance, and express commitment to their

propositions. Modal verbs, stance adverbs, or constructions of complement clauses, among others, are regarded as prime instruments of negotiating knowledge and forming the presentation of arguments in scholarly writings. By using a careful choice of these features, authors are not only voicing themselves, but also shaping

their language to the standards and requirements of their professional discipline. The careful selection of these features will not only enable authors to speak up, but also to construct their language to suit the norms and needs of their professional field. The analysis of stance at the lexico-grammatical level therefore, provides much insight as to the connection between language and knowledge and disciplinary norms and the manner in which writers cope with the epistemic responsibility and interact with their audience.

Academic fields, nevertheless, vary widely in their styles in both production and validation of knowledge, which then influence the linguistic actualization of stance. Social Sciences and Natural Sciences are two large disciplinary traditions that exemplify these differences quite well. Social Sciences do not always work with unambiguous, objective, and factual data and writers of such texts have to work around subtlety, subjectivity, and a range of confidence levels in their assertions. Conversely, Natural Sciences generally place more importance on empirical evidence, repeatable findings, and certainty that is quantifiable, and in doing this, they tend to create a writing style that is more focused on objectivity and accuracy. These epistemological orientations not only have effects on the rhetorical decisions that writers make but also on the particular lexico-grammatical resources that are used by writers to indicate stance, demonstrating the complex connection between disciplinary epistemology and the use of language. MPhil dissertations, at the borderland between student and scholar, offer an excellent opportunity to study the process through which emerging researchers embrace and negotiate disciplinary conventions. At this level, authors are expected to show the command of content and the knowledge of scholarly discourse practices, such as the subtle expression of position. Modal verbs can express tentativeness or certainty, stance adverbs can be used to assess evidence or express caution, and complement clauses can be used to explain commitment to certain assertions. Although the role of stance in the development of argumentation and perception by readers is acknowledged, little comparative research has been conducted on

MPhil theses in different fields. The study of these texts provides useful empirical evidence on the process by which inexperienced academics internalize and reproduce discipline-based forms of linguistic practices, thus helping to develop larger conceptualizations of socialization in academia and epistemic positioning. This research aims to shed some light by engaging in a comparative study of stance features in MPhil dissertations on Social Sciences and Natural Sciences to understand how disciplinary norms influence the lexico-grammatical choices. Such an inquiry not only deepens our knowledge of how knowledge and authority are produced in academic writing, but also gives a perspective into the developmental dynamic of the initial-stage researchers as they learn to negotiate the thorny conventions of academic communication. What follows will expound on the theoretical and empirical underpinnings of this research, which places the lexico-grammatical stance as an analytic prism through which one can study disciplinary differences in academic writing.

## 1.2. Research Problem Statement

Whereas the topic of stance has been extensively explored in scholarly articles, little light has been shed on postgraduate written works, especially in MPhil dissertations. The available literature tends to address either one specific discipline or even expert writing, which has created a gap in the comprehension of how stance is achieved by student writers in other disciplines (Charles, 2006). In addition, comparative studies involving Social Sciences and Natural Sciences have the propensity of ignoring the functional application of stance features and concentrating on the number of times they occur. This restricts our knowledge of the relationship between linguistic choices and disciplinary knowledge and rhetorical demands. In the absence of such comparative insights, one cannot be sure of how disciplinary conventions influence the postgraduate level stance-taking practices of students. Consequently, limited empirical data have been identified regarding why and how MPhil writers in various fields employ lexico-grammatical stance features in various ways. This gap needs to be filled in order

to gain a better understanding of disciplinary variation and to be able to promote effective pedagogy of academic writing.

### **1.3. Rationale of the Study**

The research is inspired by the necessity to reduce the gap between the linguistic analysis and the construction of knowledge disciplines. By knowing the way stance is coded in language, we can get a clue on how authors bargain authority, certainty, and responsibility in academic language (Hunston and Thompson, 2000). The comparison of the Social and Natural Sciences is especially valuable due to the fact that the methodologies of these disciplines are based on different assumptions regarding the nature of epistemology. This paper studies MPhil dissertations in order to identify the linguistic decisions of writers who have yet to establish disciplinary identities and whose language choices are particularly reflective of institutional, disciplinary demands. Additionally, patterns in modal verbs, stance adverbs, and complement clauses can be identified, which can be used in the research of corpus-based academic writing to provide some systematic proof of the stance functions at the postgraduate level. These insights can be used to make better-informed decisions in the field of linguistics and education.

### **1.4. Significance of the Study**

The results of this research have theoretical, pedagogical, and practical importance. Theoretically, the research helps the literature on academic stance and assessment and builds upon existing knowledge of how epistemology influences linguistic form in various fields (Martin and White, 2005). Pedagogically, the study can enable supervisors and academic writing teachers to have a better insight into the difficulties of MPhil students in an appropriate disciplinary stance. Recognition of these variations can result in more disciplinary writing instruction. In practice, the research provides directions to beginner researchers on how to match their writing to disciplinary requirements to enable them write more convincing and scholarly dissertations. The study will promote stronger and

successful academic communication by emphasizing the pattern of stance, which is specific to disciplines.

### **1.5. Research Objective**

To compare the application of major lexico-grammatical stance features in Social Sciences and Natural Sciences MPhil dissertations to identify discipline-specific tendencies of academic stance and knowledge building.

### **1.6. Research Question**

What are the differences between the lexico-grammatical features of stance between Social Sciences and Natural Sciences MPhil dissertations, and what do they tell us about disciplinary epistemological norms?

### **1.7. Delimitations of the Study**

The research is confined to the investigation of lexico-grammatical stance characteristics in MPhil dissertations in the Social Sciences and Natural Sciences presented at Abdul Wali Khan University, Mardan. This analysis is concerned with the frequency, types, and functional roles of the chosen features of stance as they are manifested in the written text of these dissertations. Only the lexico-grammatical resources that are pertinent to the construction of stance are analyzed, and the data are elicited only through the help of a corpus of the chosen MPhil dissertations. The research is not expanded to other levels of academic study, institutions, and fields of discipline, or non-linguistic or contextual factors that affect stance.

## **2. Literature Review**

The notion of stance in scholarly writing has been transformed throughout several decades from a marginal preoccupation to a centre of discourse and applied linguistics. The foundational work on the linguistic expression of stance started with the study of modality and interpersonal meaning, in which authors studied how speakers and writers can mark the attitude, certainty, and evidentiality using grammar and lexis (Biber and Finegan, 1989). This published piece confirmed that stance is not just an optional rhetorical practice but is

also systematic in the language of scholarly writings. Continuing the previous descriptive methods, the lexicogrammatical model by Biber (2006) provided a detailed analytical system that classified the stance markers into three broad groups: modal and semi-modal verbs, stance adverbs, and positioning clauses governed by stance verbs, adjectives, or nouns. The large corpus study conducted by Biber showed that the features are important components of both spoken and written academic registers, and the modal verbs are the most common stance device in written academic English. Since it is detailed, classification-wise, and empirically based, this model has become a foundation of the research on stance in academic writing. Corpus-based approaches have been used to approach the study of stance in academic discourse more systematically, as formulated by Biber. Research on academic genre corpus has revealed that stance markers are relative to register, field, and experience of authors. Indicatively, Heliyon (2021) demonstrated that grammatical expressions of stance, including modals, stance adverbs, and complement clauses, vary in frequency and usage among disciplinary corpora; social sciences texts tend to use more forms of evaluative expressions than hard sciences texts. These results validate the initial arguments that disciplinary conventions inform the location of writers and their interaction with the readers. The modal verbs are one of the key categories of stance markers that have been studied extensively in the form of research as well as student writings. In their article, Becker and Feng (2020) have studied the writing of Physical Sciences students according to the framework proposed by Biber and discovered that possibility and prediction modals were the most prevalent, which makes sense that even in hard sciences, stance is subtle and depends on the degrees of certainty and situation. In the same way, empirical studies of modal and semi-modal within the Pakistani academic language context reveal that modals are in different frequencies and use based on disciplinary norms and composition of corpus, which supports the argument that stance is contextually based on disciplinary norms.

Another important type of evaluative language that researchers have considered is stance adverbs. According to research and subsequent summaries of Biber's 2006 model, epistemic and attitudinal adverbs, including possibly, clearly, and apparently, have a major role in the expression of degrees of certainty and attitude in academic prose. These articles elucidated that stance adverbs are inherent to the rhetorical functions of the research writing, and they are part of the rhetorical power of the academic discourse. In addition to individual studies on features, comparative studies also show that there are differences in the use of stance available between different disciplines. Corpus research into grammatical devices of stance in applied linguistics and literature abstracts established that social science subjects are more inclined to make use of more stance markers in general and with more functional variety than more technical or hard science subjects. This trend is consistent with larger observations that fields of study that share interpretive or argumentative traditions tend to pre-empt evaluative language to contextualise claims, in relation to the reader's expectation. Stance in student dissertations and theses has also been studied by researchers, but this work is relatively rare. An example of a corpus study comparing the utilization of stance features in Chinese MA dissertations and PhD theses was that advanced writers exhibited more elaborate and diversified stance marking, which indicates how stance is handled in postgraduate dissertation development. Enhancing this, research on epistemic adverbs of doctoral dissertations also indicates patterns of discipline-specific variability as writers vary in their adoption of stance markers that indicate more general cultural and rhetorical practices. The pedagogical aspect of stance research is also an important one. Research that examines the development of academic writing indicates that the ability and disciplinary background of learners to use stance markers are affected by proficiency, and that with explicit teaching, better use of evaluative language can be facilitated. These results underline that not only is stance a descriptive linguistic phenomenon, but it is also a learnable rhetorical

competence that postgraduate writers get progressively trained in. Lastly, systematic overviews of the authorial stance research suggest an incremental expansion of the field over the last 20 years, alongside a rise in interest in interactive and persuasive roles of stance markers and their effects on identity, readership, and epistemology in the academic discourse. Overall, the body of the literature confirms that stance is a complex linguistic process that is part and parcel of academic writing. Disciplinary conventions play a critical role in determining the realisation of stance markers, which is more focused on evaluative and interpersonal resources in social sciences as opposed to natural sciences. This evidence is mostly based on published research papers and a small amount of doctoral writing, although comparative studies of MPhil dissertations, especially in non-Western environments, are still scarce, which underscores the importance of the current study.

### 3. Method for Data Analysis

The present research uses the lexico-grammatical model of stance developed by Biber (2006) to understand how stance is created in some of the MPhil dissertations in the Social Sciences and Natural Sciences. It discusses three broad groups of stance features: modal and semi-modal verbs, stance adverbs, and stance complement clauses governed by verbs, adjectives, and nouns. Each of the disciplinary domains was compiled with a corpus of the introduction chapters of the chosen dissertations. The analysis was facilitated by Sketch Engine, where the word list and concordance features were applied to determine the features of stance that apply. The analysis only incorporated the stance markers that are clearly defined in the framework by Biber (2006). The research is an integration of quantitative and qualitative study designs. The first step involved generating frequency counts to determine the distribution of the features of stance within the two corpora. Second, concordance lines were observed in order to examine the contextual and

functional application of these features in stance construction. Quantitative findings were tabulated and graphically presented, and the qualitative interpretation was carried out to gain insight into the epistemological and rhetorical functions of stance characteristics.

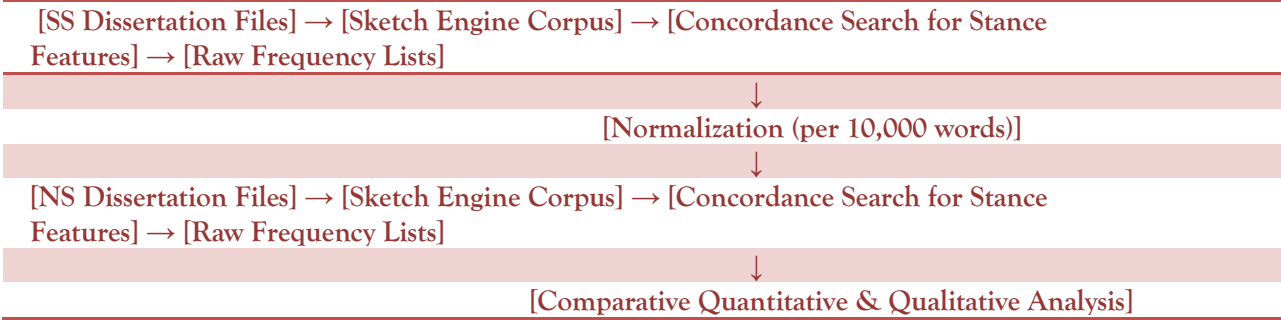
### 4. Discussion and Analysis

This chapter offers a comprehensive study of stance construction as applied in the scholarly writing of MPhil students at Abdul Wali Khan University, Mardan. This study provides a new contribution to the investigation of the differences in epistemological and rhetorical bases of disciplinary discourse beyond the surface level frequencies using the lexical-grammatical framework proposed by Biber (2006) to specialized corpora in the Social Sciences (SS) and Natural Sciences (NS). The analysis, enriched with comprehensive tabular and graphical descriptions, presents the research questions in a systematic way to provide a granular perspective on how the scholars in these disciplines linguistically argue out the issue of certainty, projecting authority, and how they position themselves within the knowledge communities.

#### 4.1 Methodology and Analysis Process.

The validity of the study is based on a sound corpus linguistics approach. Two discrete corpora were collated using completed MPhil dissertations: Corpus of Social Sciences (SS): 26,345 words pertaining to the field(s) of Political Science, Sociology, and English. Corpus: Natural Sciences (NS) 33,142 words that represent fields of Chemistry, Zoology, and Statistics. The Sketch Engine was used to create concordance lines of the pre-determined stance features according to the taxonomy of Biber. Most importantly, raw frequencies were normalized to a standard frequency per 10,000 words as in the standard formula:  $(\text{Raw Frequency} / \text{Total Words in Corpus}) \times 10,000$ . Such normalization is also necessary to make proper cross-corpus comparison, as it is demonstrated in the conceptual model below.

Figure 4.1: Analytical Workflow for Stance Feature Identification and Comparison



The qualitative analysis involved close reading of concordance lines to classify features into functional categories (e.g., epistemic vs. attitude) and to interpret their rhetorical role in context.

4.2 Granular Frequency Analysis and Functional Interpretation

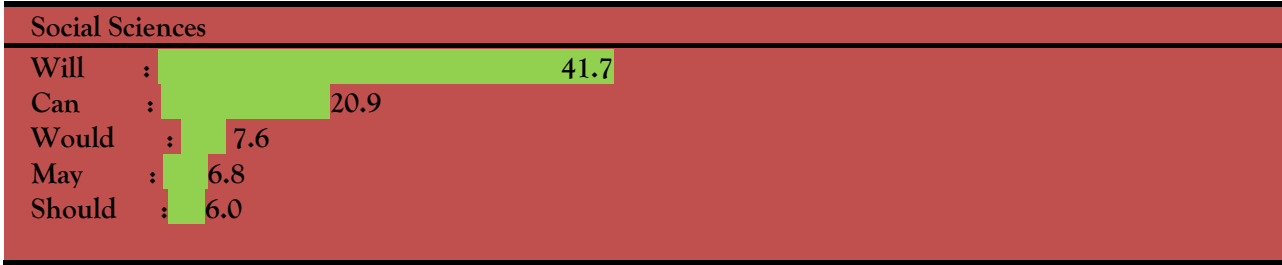
4.2.1 Modal Verbs: The Calculus of Certainty and Obligation

Modal verbs are the primary grammatical tools for expressing a writer's commitment level. The stark contrast between SS and NS reveals foundational disciplinary ideologies.

Table 4.1: Detailed Distribution of Modal Verb Classes (Normalized per 10,000 words)

| Modal Verb Class       | Key Examples                     | Social Sciences Frequency | Natural Sciences Frequency | Disciplinary Interpretation                                                     |
|------------------------|----------------------------------|---------------------------|----------------------------|---------------------------------------------------------------------------------|
| Prediction/Volition    | will, would<br>shall<br>going to | 49.7                      | 4.8                        | SS: Projects intention, significance, and future argumentative direction.       |
| Possibility/Permission | can, could,<br>may, might        | 33.0                      | 66.3                       | NS: Dominant. Expresses capacity, scientific potential, and hedged probability. |
| Necessity/Obligation   | must,<br>should,<br>(need to)    | 7.9                       | 2.1                        | SS: Used for strong recommendations and deontic logic in policy/analysis.       |
| TOTAL (All Modals)     |                                  | 90.2                      | 73.3                       | SS shows 23% higher overall use of modalization.                                |

Figure 4.2: Normalized Frequency of Top 5 Modal Verbs by Discipline



## Natural Sciences

|       |   |      |      |
|-------|---|------|------|
| Can   | : |      | 39.5 |
| May   | : | 19.0 |      |
| Might | : | 5.1  |      |
| Will  | : | 4.2  |      |
| Could | : | 2.7  |      |

• **SS: The Predictive & Agentive Stance.** The overwhelming use of *will* (41.7) frames the research as a purposeful, agent-driven endeavor. Examples: "*The study **will** elaborate the importance of this project...*" or "*[...] service organizations **will** face major and difficult issues...*" This constructs an authorial persona confident in guiding the reader through a logical, future-oriented argument. The use of *should* for recommendations aligns with the normative, applied goals of much social science research.

• **NS: The Realm of Possibility & Observed Capacity.** The dominance of *can* (39.5) and *may* (19.0) reflects the empirical core of

NS. *Can* often states general capacities derived from natural laws: "*Organic heterocycles **can** be categorized as three, four, five, six, or seven-membered....*" *May* and *might* are critical hedging devices, protecting claims against overgeneralization: "*These results **may** indicate a novel pathway.*" The minimal use of *will* shows a restraint against over-prediction, sticking closely to demonstrable fact or highly probable inference.

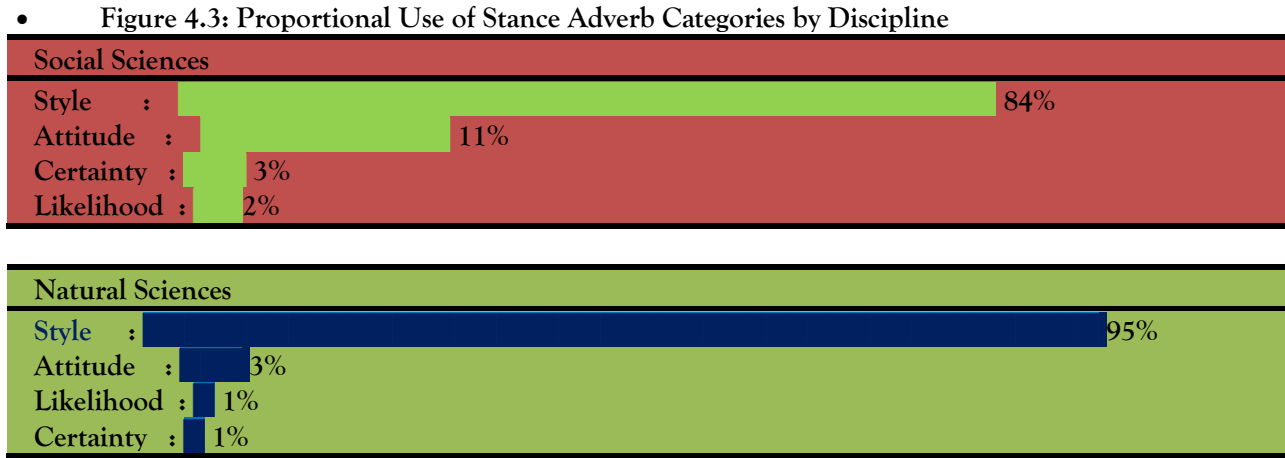
#### 4.2.2 Stance Adverbs: The Adverbial Palette of Evaluation

Adverbs provide a finer layer of commentary, modifying and evaluating whole propositions. Their distribution highlights how disciplines manage subjectivity.

Table 4.2: Functional Categories of Stance Adverbs (Normalized per 10,000 words)

| Category   | Function                                 | SS Examples (Freq)                                   | NS Examples (Freq)                                    | SS Freq | NS Freq |
|------------|------------------------------------------|------------------------------------------------------|-------------------------------------------------------|---------|---------|
| Style      | Comment on manner/perspective of message | <i>generally</i> (1.9),<br><i>particularly</i> (2.6) | <i>typically</i> (2.4),<br><i>commonly</i> (3.9)      | 83.1    | 82.8    |
| Attitude   | Express writer's evaluation/judgment     | <i>importantly</i> (0.7),<br><i>alarmingly</i> (1.1) | <i>importantly</i> (0.3),<br><i>effectively</i> (3.3) | 10.4    | 3.0     |
| Certainty  | Assert high certainty/actuality          | <i>actually</i> (0.4),<br><i>in fact</i> (0.4)       | <i>certainly</i> (0.3),<br><i>actually</i> (0.3)      | 3.1     | 0.6     |
| Likelihood | Express doubt/possibility                | <i>perhaps</i> (1.1),<br><i>maybe</i> (0.7)          | <i>perhaps</i> (0.9)                                  | 2.2     | 1.2     |
| TOTAL      |                                          |                                                      |                                                       | 98.8    | 87.6    |

Figure 4.3: Proportional Use of Stance Adverb Categories by Discipline



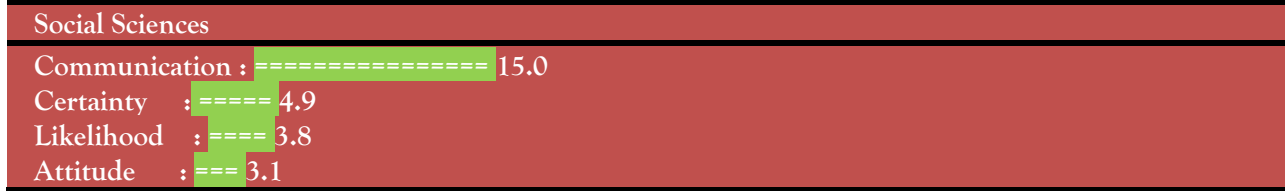
- The Universal Style Frame:** The near-identical high frequency of Style adverbs in both corpora underscores a shared academic practice: carefully framing the scope and perspective of claims. This is essential for precise knowledge communication.
  - The Key Divergence: Attitude and Certainty.** The threefold greater use of Attitude adverbs in SS (10.4 vs. 3.0) is significant. Words like *alarmingly*, *rightly*, or *importantly* inject explicit moral, psychological, or evaluative judgment into the discourse, which is often central to critical social analysis. The higher use of Certainty adverbs (*actually*, *in fact*) in SS may serve to strengthen contested interpretations within a field characterized by multiple theoretical paradigms. For example, "[...] *actually*, in Pakistan the democracy not introduced in real sense."
- 4.2.3 Stance Complement Clauses: Architecting Complex Propositions**
- These are the most syntactically sophisticated stance devices, allowing writers to express their perspective on an entire embedded clause.

A. Verb + *That*-Clause: Framing Reported Knowledge and Findings.

Table 4.3: Top Stance Verbs with *That*-Clause and Their Functions

| Discipline       | Top 3 Verbs (Norm. Freq)                                                        | Functional Category       | Example from Corpus                                                                                      |
|------------------|---------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------|
| Social Sciences  | 1. <i>say</i> (1.9)<br>2. <i>show</i> (1.9)<br>3. <i>argue</i> (1.5)            | Communication / Certainty | "She worked on liberal feminism and <b>argued</b> that economic rights are more important for women...." |
| Natural Sciences | 1. <i>demonstrate</i> (1.5)<br>2. <i>show</i> (1.5)<br>3. <i>indicate</i> (1.5) | Certainty / Likelihood    | "The data <b>demonstrate</b> that the correlation is significant."                                       |

Figure 4.4: Frequency of Stance Verb + *That*-Clause by Semantic Category



| Natural Sciences |     |
|------------------|-----|
| Communication :  | 7.5 |
| Certainty :      | 3.9 |
| Attitude :       | 1.8 |
| Likelihood :     | 0.6 |

- **SS: The Discourse of Argument and Attribution.** The higher overall frequency and the prominence of communication verbs (*say, argue, claim*) reflect a discursive reality where engaging with other scholars' voices is paramount. The use of attitude verbs (*hope, fear*) personalizes the stance. Example from Corpus, “Written language is

said to be used for business, information and entertainment.”

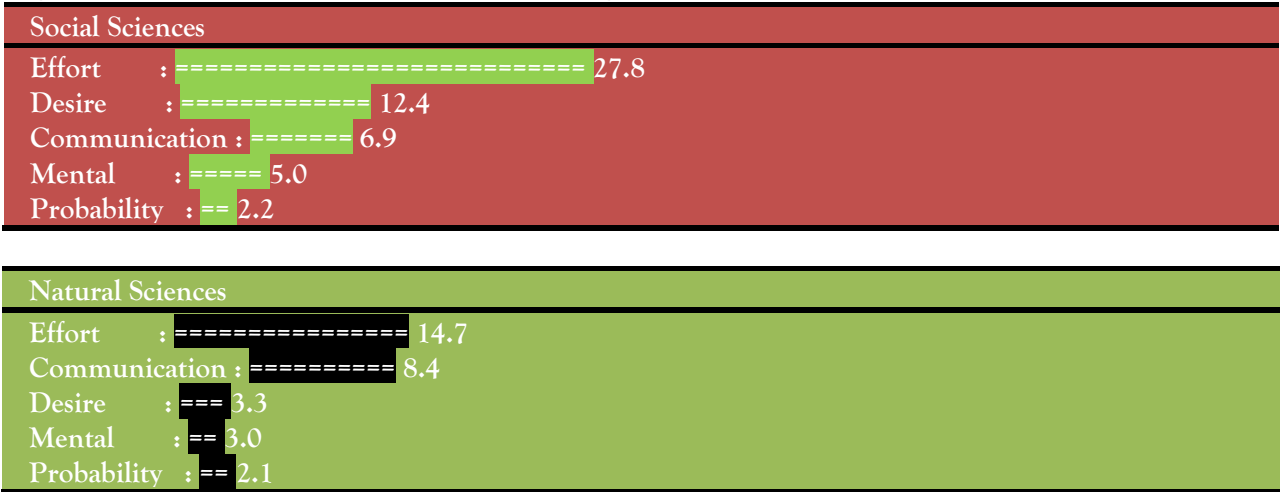
- **NS: The Discourse of Demonstration and Evidence.** The lower overall frequency and the dominance of certainty verbs (*demonstrate, show, find*)—often in passive constructions (“It was found that...”)—foreground the evidence itself, minimizing the human agent of discovery.

B. Verb + To-Clause: Expressing Purpose, Intention, and Tendency.

Table 4.4: Top Stance Verbs with To-Clause and Their Functions

| Discipline       | Top 3 Verbs (Norm. Freq)                          | Functional Category    | Disciplinary Implication                                                              |
|------------------|---------------------------------------------------|------------------------|---------------------------------------------------------------------------------------|
| Social Sciences  | lead to (9.1)<br>relate to (4.5)<br>need to (3.8) | Effort / Desire        | Expresses causality, analysis goals, and prescriptive intent.                         |
| Natural Sciences | use to (8.7)<br>lead to (7.2)<br>refer to (3.9)   | Effort / Communication | Describes methodological function, natural causality, and referential classification. |

Figure 4.5: Distribution of Verb + To-Clause Categories



- **SS: Goal-Oriented and Agentive.** The high frequency of **Desire/Intention verbs** (*need to, want to, intend to*) is a major differentiator. It

explicitly encodes the researcher's or social actor's goals, aligning with the field's prescriptive and

policy-oriented dimensions. "Every research *needs* to be placed in a theoretical model..."

- **NS: Process-Oriented and Functional.** While 'lead to' is common in both, in NS it more often describes a chemical or physical

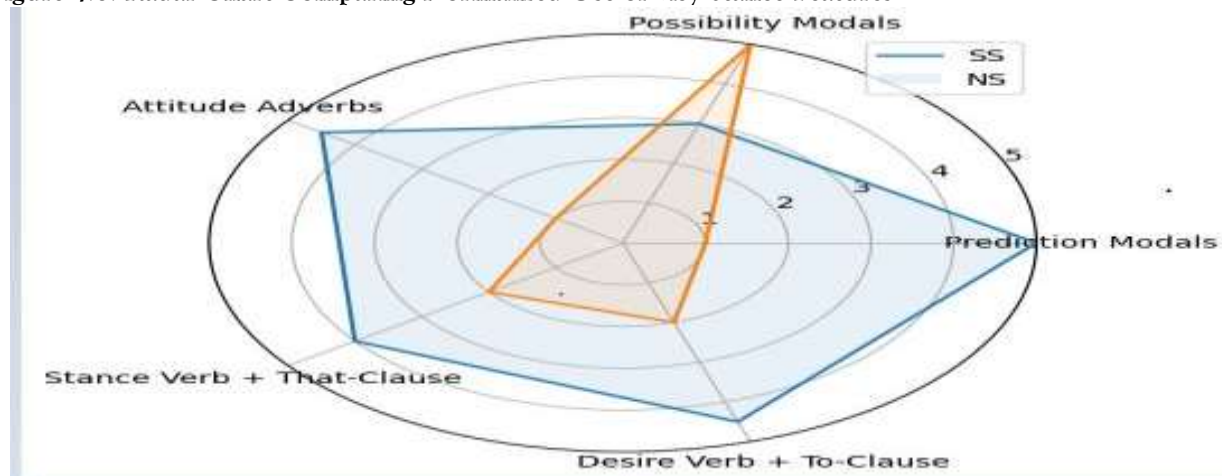
process rather than a social cause. The prominence of *use to* highlights the methodological focus. The category of **Communication verbs** (*refer to, report to*) is higher in NS, relating to the functional classification of data and phenomena.

#### 4.3 The Integrated Picture: Synthesis of Disciplinary Stance Profiles

Table 4.5: Synthesized Stance Profiles of Social Sciences vs. Natural Sciences

| Stance Dimension    | Social Sciences (SS) Profile                                                                         | Natural Sciences (NS) Profile                                                                                        | Epistemological Rationale                                                                 |
|---------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| Primary Stance      | Argumentative & Interpretive                                                                         | Reportive & Demonstrative                                                                                            | SS constructs knowledge through debate; NS through discovery and verification.            |
| Authorial Presence  | High-Visibility Agent<br>(Uses <i>I/we</i> <i>argue</i> , <i>desire</i> verbs, <i>attitude</i> adv.) | Low-Visibility Observer<br>(Uses passive voice, <i>it is shown</i> , <i>style</i> adv.)                              | SS values positioned perspective; NS values objective, replicable reporting.              |
| Epistemic Caution   | Manages <b>interpretive certainty</b><br>(Uses <i>will</i> for claims, <i>actually</i> to fortify).  | Manages <b>empirical probability</b><br>(Uses <i>may/can</i> , hedges with <i>might</i> , <i>perhaps</i> ).          | SS claims are theoretically contestable; NS claims are empirically falsifiable.           |
| Evaluative Language | Overt & Encouraged<br>(Attitude adverbs, evaluative adjectives).                                     | Covert & Minimized<br>(Evaluation is often encoded in choice of verb, e.g., <i>demonstrate</i> vs. <i>suggest</i> ). | Evaluation is central to social critique; it is a potential bias in scientific reporting. |
| Discursive Function | To persuade, critique, and recommend.                                                                | To report, explain, and establish factual relationships.                                                             | Aims to impact policy/human understanding; aims to describe natural world mechanisms.     |

Figure 4.6: Radar Chart Comparing Normalized Use of Key Stance Features



The resulting shape for SS would be wide and spiky, showing varied, emphatic stance-taking. The shape for NS would be more compact and focused on the "Possibility Modals" axis, showing restrained, focused stance.

#### 4.4 Conclusion and Implications

This detailed, data-rich analysis confirms that stance is not a generic academic skill but a **disciplinary practice**. The MPhil candidates at Abdul Wali Khan University Mardan are actively apprenticing into these distinct discursive communities.

##### Implications:

1. **For Pedagogy (ESP/EAP):** Teaching materials must be discipline-specific. A writing guide for NS students should focus on hedging, impersonal constructions, and precise reporting verbs. A guide for SS students should address strategic use of argumentative verbs, evaluative language, and framing future contributions.
2. **For Students and Supervisors:** Explicit awareness of these patterns can help students avoid discourse that sounds "off" to their disciplinary readers (e.g., a biology student sounding too polemical, or a sociology student sounding too tentative). Supervisors can provide more targeted feedback.
3. **For Research:** This study offers a replicable model. Future work could investigate stance in other Pakistani universities, compare MA vs. PhD writing, or explore the stance conveyed through other features like **stance nouns** (*assumption, claim*) or **adjectives** (*crucial, probable*).

Ultimately, this research demonstrates that the journey to mastering academic writing is, in large part, the journey of mastering the nuanced language of stance specific to one's field—a language that fundamentally shapes how knowledge is created, contested, and communicated.

##### Conclusion

This paper explored how the lexico-grammatical stance features are used in MPhil dissertations in Social Sciences and Natural Sciences through the epistemological approach using Bibers (2006) framework and a corpus-based study. The results clearly show that stance is a practicing discipline, but not an equal practice of academic writing. The unique tendencies in the stance-taking can be seen as the ways to construct, prove, and share knowledge within various disciplinary traditions. This analysis indicated that Social Sciences dissertations have a more explicit, argumentative, and agentive position. The predictive and obligatory modal auxiliaries are often applied in this field by writers to project a feeling of authorial presence, assess arguments, and respond to alternative perspectives. Attitude and certainty adverbs and communication-oriented complement clauses are also applied in this sphere by writers. Such language decisions are consistent with the interpretive and debate-based

epistemology of the Social Sciences, in which the meaning is negotiated, and the claims can be disputed theoretically. By contrast, Natural Sciences dissertations are more reserved and cautious with regard to empiricism. Domination of possibility modals, restricted application of evaluative adverbs, and choices in favor of evidence-based complement clauses indicate an epistemology of observation, verification, and probability. Authority voice is reduced to a minimum to give place to reporting procedures, outcomes, and provable associations. Notably, the presence of these disciplinary variations can be observed as early as the MPhil level, which means that future scholars are socialized into discipline-based regimes of stance-taking. This result highlights the importance of postgraduate writing as a point of critical development of academic identity and epistemic positioning. The study therefore builds further on the body of current research on stance, which has been mostly directed towards expert writing and research articles, by offering empirical data on postgraduate dissertations in a non-Western academic setting. On the whole, these results demonstrate the necessity of discipline-specific methods of teaching academic writing. Increasing awareness of stance conventions may help MPhil students to align their language use with disciplinary norms and thus both increase the clarity, persuasiveness, and credibility of their academic writing.

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