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Constructional Preferences of Subject Types before *Can* and *Could*: Evidence from the ICNALE Learner Corpus

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ABSTRACT

This study investigates how Japanese and Indonesian learners of English use the modal verbs *can* and *could, compared* with native English speakers, using spoken and written data from the ICNALE corpus. Using a usage-based constructional framework (Goldberg, 2006; Bybee, 2010), the study examines recurrent subject–modal pairings and uses Distinctive Collexeme Analysis (DCA) to identify subject types differentially associated with can and could across learner groups and modalities. Subject tokens were manually classified into four categories: first-person, second-person, third-person human, and third-person non-human. The results reveal distinct constructional preferences across groups. Native speakers consistently associated second-person subjects with *can* and third-person non-human subjects with *could*, whereas learner groups exhibited different attraction patterns, particularly involving third-person human and non-human subjects. Significant associations were especially evident in Indonesian spoken production and Japanese written production. The findings suggest that modal usage is shaped not only by modal verb choice but also by preferences for recurrent subject–modal constructions. The study contributes to learner corpus research by providing a constructional perspective on modality and highlighting variation in subject–modal preferences across learner and native-speaker populations.

Keywords: *Subject Selection; Modal Verbs; Learner English; Corpus-Based Analysis; Spoken and Written Modes*

INTRODUCTION

Modal auxiliary verbs are fundamental to English because they enable speakers to express meanings such as ability, possibility, and permission, functions that are particularly associated with the modal verbs can and could (Celce-Murcia et al., 1999). They also enable speakers to express varying degrees of certainty, probability, and evaluation, thus contributing to the construction of stance in discourse (Biber et al., 2021; Hyland, 2005). Through modal expressions, speakers position themselves in relation to events, propositions, and interlocutors, making modality a central resource for interpersonal communication.

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Although important, modal verbs remain a challenging area for students of English. Unlike ordinary verbs, modal auxiliaries do not take subject–verb agreement markers and are followed directly by the base form of a verb without the infinitive marker *to*. Moreover, modal verbs commonly express multiple meanings depending on context, and their usage may vary across languages. These grammatical and semantic complexities make modal verbs difficult for learners to acquire and use appropriately.

Among English modal verbs, *can* and *could* constitute a particularly suitable pair for quantitative comparison. Although closely related in form and historically connected, previous corpus-based studies have consistently reported asymmetrical patterns in their use in learner English, with learners tending to depend more heavily on *can* while using *could* considerably less frequently than native speakers (Li, 2017; Xiao, 2017; Whitty, 2019). Such asymmetry suggests that modal choice may be affected by factors beyond the modal verbs themselves and calls for further investigation into the grammatical patterns in which they occur.

Modal expressions interact with surrounding grammatical elements that contribute to their interpretation and communicative functions. From a usage-based and constructional perspective, the subject preceding a modal verb forms part of a larger subject–modal construction whose meaning emerges from the interaction of its components (Bybee & Beckner, 2010; Hoffmann, 2022). Different subject types may position speakers differently with respect to their claims, ranging from personal involvement to general or objective perspectives. For example, first-person subjects such as *I* often foreground personal experience, authorial identity, and speaker commitment, whereas non-human or abstract subjects tend to promote a more detached or informational stance (Hyland, 2001, 2005; Tang & John, 1999). Consequently, subject choice may influence how modal meanings are expressed and interpreted in discourse.

Previous learner corpus studies have investigated modal verbs from multiple perspectives, including their frequency of use, semantic categories, and pragmatic or rhetorical functions in learner writing (Aijmer, 2002; Hinkel, 2009; Seog & Choi, 2018; Xiao, 2017; Yang, 2018; Whitty, 2019). However, relatively little attention has been paid to the distribution of subject types within modal constructions, particularly across groups and modes.

From a usage-based and constructional perspective (Bybee, 2010; Goldberg, 2006), recurring subject–modal combinations may be viewed as partially schematic form–meaning pairings which emerge through repeated language use. Rather than treating modal verbs as isolated lexical items, this viewpoint highlights recurrent subject–modal constructions as meaningful units whose distribution reflects speakers' usage preferences and whose recurrent use contributes to the expression of stance (Hyland, 2005).

Building on this perspective, the present study examines the subject types that occur with the modal verbs *can* and *could* in learner and native-speaker English. Using data from the International Corpus Network of Asian Learners of English (ICNALE), the study compares Indonesian and Japanese learners and investigates how subject–modal constructions are distributed across written and spoken modes. By analyzing these patterns and comparing them with native-speaker usage, the study aims to contribute to learner corpus research by providing a constructional account of modal usage and showing how learners from different language backgrounds use subject–modal patterns.

LITERATURE REVIEW

Previous corpus-based research has demonstrated that modal verb usage varies systematically across registers, discourse contexts, and learner populations. Using the British National Corpus, Kennedy (2002) showed that modal verb distribution differs across registers, indicating that modal choice is closely associated with communicative context. Building on these findings, learner corpus research has compared modal verb use by second language learners and native speakers, revealing systematic differences in modal frequency and distribution rather than random variation (Li, 2017; Whitty, 2019; Whitty et al., 2022).

Within learner English, corpus-based studies have consistently reported uneven preferences for modal verbs (Li, 2017; Nakayama, 2021; Putri & Natsir, 2025; Xiao, 2017). Across different learner

populations, *can* is generally among the most frequently used modal verbs, whereas *could* occurs considerably less often (Li, 2017; Nakayama, 2021; Whitty, 2019; Whitty et al., 2022; Xiao, 2017). Nevertheless, this tendency is not universal. Comparing Swedish learner and native-speaker writing, Aijmer (2002) found broadly similar distributions of *can* and *could*, although Swedish learners significantly overused *might*. These contrasting findings suggest that modal preferences differ across learner populations and therefore warrant further cross-linguistic investigation.

Cross-linguistic learner corpus research further indicates that learners' first language backgrounds contribute to variation in modal usage. Learner corpus studies have repeatedly demonstrated systematic grammatical and lexical differences across learner groups (Granger et al., 2015). Similarly, analyses based on the International Corpus Network of Asian Learners of English (ICNALE) have provided evidence of systematic variation among Asian learner populations and established a valuable resource for contrastive interlanguage analysis (Ishikawa, 2013). More specifically, Rahmawati and Hardjanto (2025) reported significant differences in the distribution and meanings of modal auxiliary verbs between Indonesian and non-Indonesian writers of English newspaper editorials, suggesting that learners' linguistic backgrounds influence modal selection.

Differences in modal usage have also been associated with discourse context and rhetorical purpose. In academic discourse, modal verbs are frequently employed to express varying degrees of certainty, evaluation, and interpersonal positioning (Hardjanto, 2016). Likewise, studies of political speeches have shown that epistemic modal expressions function as rhetorical resources for conveying commitment, negotiating certainty, and positioning speakers toward their audiences (Hardjanto & Mazia, 2019). Within learner language, the preference for high-frequency modal verbs such as *can* has been interpreted as reflecting learners' greater reliance on expressions of certainty and their comparatively limited use of nuanced forms of qualification and tentativeness (Hyland & Milton, 1997). More recent studies focusing specifically on *can* and *could* further demonstrate that native writers employ *could* more frequently than learners to express cautious, hypothetical, or hedged propositions in academic writing (Whitty, 2019; Whitty et al., 2022). Together, these findings indicate that learner modal usage reflects systematic interlanguage tendencies as well as differences in rhetorical preferences.

Register constitutes another important dimension of modal usage. Large-scale corpus analyses have shown that spoken and written registers differ systematically in grammatical features, including modal verbs and subject reference (Biber et al., 2021). Spoken discourse tends to contain more personal and interactive expressions, whereas academic writing favors more impersonal and information-oriented constructions. Research on authorial presence likewise demonstrates that subject choice contributes substantially to stance construction. First-person pronouns mark writer identity and involvement (Hyland, 2001; Tang & John, 1999), whereas non-human subjects (Biber et al., 2021) and impersonal constructions are associated with more detached presentation styles.

Corpus-based comparisons between native and non-native academic writing similarly reveal differences in authorial visibility. For example, Januarto and Hardjanto (2020) found that native English scholars employ self-mention more frequently than non-native scholars, reflecting different rhetorical strategies for constructing authorial presence. These findings suggest that subject selection contributes not only to grammatical organization but also to expressing stance and identity across discourse contexts.

From a usage-based perspective, grammatical patterns emerge through recurrent language use and become increasingly entrenched through experience (Bybee, 2008; Bybee & Beckner, 2010; Ellis, 2008). Rather than being governed solely by abstract rules, speakers' linguistic knowledge reflects the statistical regularities of language use. Construction Grammar further conceptualizes these regularities as conventionalized form–meaning pairings that vary in their degree of schematicity (Hoffmann, 2022). Within this framework, modal constructions are viewed as meaningful grammatical patterns rather than isolated lexical items.

THEORETICAL FRAMEWORK

Subject Selection and Authorial Presence

The choice of grammatical subjects shapes how information is presented and varies systematically across discourse registers. Corpus-based research demonstrates that conversational discourse favors personal pronouns, while academic writing typically employs informational structures with inanimate or impersonal subjects (Biber et al., 2021).

Personal subjects such as *I* and *we* indicate direct author or speaker involvement and are commonly associated with interactional and interpersonal styles. These forms allow speakers and writers to express opinions, experiences, intentions, and evaluations explicitly. In contrast, impersonal or inanimate subjects (e.g., *this study*, *the system*, *technology*, *it*) reduce author visibility and shift attention toward information, processes, or abstract entities, contributing to a more detached or informational style (Biber et al., 2021; Hyland, 2005). Argumentative and academic discourse may also employ generalized human subjects such as *people*, *students*, or *someone* to express broad claims without referring to a specific individual agent.

Research on authorial presence further suggests that subject choice contributes to how writers construct stance and identity in discourse. First-person pronouns mark writer visibility and interactional involvement, while impersonal constructions are often associated with greater distance and objectivity (Hyland, 2005; Tang & John, 1999). Corpus-based studies comparing native and non-native academic writing have likewise reported differences in the degree of authorial visibility. For example, Januarto and Hardjanto (2020) found that native English scholars use self-mention more frequently than non-native scholars in research articles, reflecting different rhetorical preferences in presenting authorial presence.

Based on these findings, the present study categorizes subjects preceding modal constructions into three functional types: (1) personal subjects (e.g., *I*, *we*, *you*), (2) generalized human subjects (e.g., *people*, *students*, *someone*), and (3) impersonal or inanimate subjects (e.g., *it*, *this*, *technology*, *the system*). This classification allows the analysis to capture differences in authorial involvement, generalization, and informational focus in learner language.

Stance and Subject–Modal Constructions

Subject choice is closely connected to the idea of stance, which involves the different ways speakers and writers show their attitudes, judgments, evaluations, and the extent of their commitment to various propositions (Hyland, 2005). Stance is expressed not only through lexical items such as modal verbs, but also through how modal verbs interact with subject selection. As a result, different combinations of subject and modal verb can therefore place speakers and writers in different positions about the statements they make. For instance, various subject–modal combinations can highlight different perspectives and degrees of commitment, enabling speakers and writers to position themselves in relation to their propositions. In this way, subject–modal pairings may act as recurring rhetorical patterns linked to different communicative purposes and discourse contexts.

At the learner level, however, the subjects chosen may also result from developmental and experiential factors rather than from a fully deliberate rhetorical choice. Instead, learners may use recurring combinations of subject and modal verb as patterns they have acquired through classroom teaching, repeated exposure, or limited experience with a variety of discourse situations.

From a constructional point of view, repeated combinations of different subject types with modal verbs can become conventionalized as subject–modal constructions that convey certain interpersonal meanings, and their frequent use leads to preferences specific to each construction, which can be examined through corpus-based analyses of actual language use.

Usage-Based Grammar and Corpus Studies

Usage-based grammar assumes that grammatical knowledge emerges from repeated language use rather than from abstract rules independent of experience (Bybee, 2008; Bybee & Beckner, 2010). From this perspective, constructions are conventionalized form–meaning pairings whose representations are shaped by recurring patterns of language use. Because linguistic experience is reflected in the frequency and distribution of

constructions in authentic discourse, naturally occurring corpus data provide an appropriate empirical basis for investigating constructional preferences.

Accordingly, corpus-based analysis is particularly well suited to examining how constructions are used across different speaker populations. Rather than treating distributional patterns as merely descriptive, a usage-based approach interprets them as evidence of speakers' accumulated linguistic experience and the conventionalization of grammatical constructions. Comparing such patterns across learner and native-speaker corpora therefore offers insight into similarities and differences in constructional usage.

From a usage-based perspective, constructional preferences are revealed through systematic distributional patterns in authentic language use. Consequently, investigating the association between lexical items and grammatical constructions requires analytical approaches that account not only for the occurrence of linguistic elements but also for the strength of their association with particular constructions. Corpus-based association measures are therefore especially valuable because they investigate statistically meaningful constructional preferences, providing empirical evidence for usage-based accounts of grammatical knowledge.

Distinctive Collexeme Analysis

Distinctive collexeme analysis (DCA) is a corpus-based statistical method developed within the collostructional framework of Construction Grammar to identify lexical items that exhibit a significantly stronger attraction to one of two functionally similar constructions than to the other (Gries & Stefanowitsch, 2004; Gries, 2019). Unlike analyses based solely on raw frequency, DCA evaluates the strength of association between lexical items and competing constructions, thereby revealing systematic distributional preferences that characterize individual constructions.

From a usage-based perspective, these distributional preferences are not random co-occurrence patterns but reflections of recurrent language use. Because grammatical knowledge is assumed to emerge through repeated exposure to constructions (Bybee, 2008; Bybee & Beckner, 2010), recurrent associations contribute to the conventionalization of constructions. DCA is therefore well suited to usage-based research, as it quantitatively captures the associations that arise from repeated linguistic experience.

Within Construction Grammar, these associations are interpreted as properties of the relationship between lexical items and constructions rather than as independent characteristics of individual words (Stefanowitsch & Gries, 2003; Gries, 2019). By identifying lexical items that are significantly attracted to one construction over another, DCA reveals the distinctive lexical profile of competing constructions and provides a principled basis for comparing constructional preferences across language varieties and speaker groups.

Accordingly, the present study applies DCA to examine the association between subject types and the competing modal constructions *can* and *could*. By measuring the strength of association between subject types and these constructions, DCA identifies their distinctive constructional preferences. However, interpreting how these preferences vary across learner populations requires an appropriate comparative framework.

Contrastive Interlanguage Analysis

To interpret differences in constructional preferences among various groups of learners, this study uses the Contrastive Interlanguage Analysis (CIA) framework (Granger, 1996; Granger et al., 2015). CIA is a corpus-based, comparative method which systematically compares learner corpora with native-speaker corpora and, where appropriate, examines learner corpora that differ according to the learners' first language. Rather than judging learner language only in terms of errors, CIA examines recurrent patterns of overuse, underuse, and distributional variation that are characteristic of learner language as a systematic linguistic system.

In this study, CIA enhances Distinctive Collexeme Analysis by providing a framework for comparing constructional preferences across different groups of learners. While DCA examines the strength of the association between subject types and the modal constructions can and could, CIA allows these associations to be compared across Indonesian learners, Japanese learners, and native speakers. These comparisons show similarities and differences in learners' preferred subject–modal

constructions without assuming that native-speaker usage is the only target norm.

The differences found between the Indonesian and Japanese learners are explained in terms of cross-linguistic influence, a view which holds that a learner's first language may account for the variations in their use of the second language (Jarvis & Pavlenko, 2008). Yet, in agreement with a usage-based approach, these differences are seen as probabilistic usage tendencies shaped by the learner's accumulated linguistic experience, the instructional input they have received, and their communication experience, rather than as the result of deterministic transfer effects.

METHODS

Description of the Corpus

The data analyzed in this study were obtained from the International Corpus Network of Asian Learners of English (ICNALE), a learner corpus of spoken and written English produced by Asian learners from diverse first-language backgrounds, together with comparable native-speaker data collected under controlled task conditions (Ishikawa, 2013).

For the present study, data from Indonesian learners, Japanese learners, and English native speakers were selected. Two discourse modes were analyzed: written and spoken. The written component consists of argumentative essays based on two prompts: *part-time jobs* and *non-smoking policies*. The learner proficiency levels range from CEFR A2 to B2 (Council of Europe, 2020).

ICNALE was selected because it provides a large-scale and systematically controlled learner corpus with both written and spoken production from different linguistic backgrounds. This allows systematic contrasts between Indonesian and Japanese learners and with native English.

Several limitations of the corpus should be acknowledged. Because each participant produced multiple texts and all texts were included in the analysis, the observations cannot be considered fully independent at the participant level. Accordingly, the findings should be interpreted primarily as text-level distributional tendencies rather than as fully independent individual behaviors.

Data Collection

The dataset's written component includes 400 essays by Japanese learners, 200 by Indonesian learners, and 200 by native English speakers. In addition, its spoken component includes 150 texts by Japanese learners, 100 by Indonesian learners, and 150 by native English speakers.

At the initial stage of data collection, all occurrences of the modal verbs can and could were extracted from the corpus without preliminary filtering. In total, 6,061 modal instances were manually annotated: 3,623 instances of can in written data, 1,992 in spoken data, 243 instances of could in written data, and 203 in spoken data.

Data Annotation and Noise Filtering

During annotation, the subject preceding each modal verb occurrence was manually identified. At the same time, we removed non-analyzable cases according to predefined noise criteria. Ungrammatical fragments, including those lacking subjects, containing false starts, or consisting of abandoned clauses, were excluded. Excessive repetition resulting from hesitation or self-repair was also excluded.

The researcher conducted the annotation and noise-filtering procedures manually using consistent annotation criteria. However, the absence of inter-annotator validation may introduce subjectivity into the classification process. Thus, the final counts reflect manual decisions made by a single researcher according to the specified criteria.

After noise filtering, the final dataset consisted of 3,572 instances of *can* in written data, 1,977 instances of *can* in spoken data, and 235 instances of *could* in written data. The final dataset also included 191 instances of *could* in spoken data. These counts reflect the annotation and noise-filtering procedures described above.

Subject Classification

After extraction and noise filtering, we categorized the identified subjects into functional types to capture recurring subject–modal combinations. The classification scheme consisted of four categories:

1. First-person subjects (e.g., *I*, *we*)
2. Second-person subjects (e.g., *you*)
3. Human third-person subjects (e.g., *people*, *students*, *someone*, *he*, *she*, *they*)
4. Non-human subjects (e.g., *it*, *this*, *technology*, *the system*, *the job*)

In the present study, non-human subjects refer to inanimate, abstract, or informational entities that do not denote specific human agents. This category excludes human-denoting nouns and pronouns, and includes both pronouns and lexical noun phrases functioning as impersonal or informational subjects.

The classification was designed to capture differences in personal involvement, generalization, and informational focus within subject–modal constructions, and to inform the count-based method.

Data Analysis

The analysis focused on the distributional patterns of subject types occurring with the modal verbs *can* and *could* across learner populations. We first calculated frequency distributions for each subject category across learner groups and modalities. To examine whether subject-type distributions differed significantly between groups, we conducted Fisher–Freeman–Halton exact tests. This test was selected because the data consisted of categorical frequency distributions with unequal group sizes and several low-frequency cells, particularly in the *could* data. In this context, the Fisher–Freeman–Halton exact test is more appropriate than the standard chi-square test for contingency tables containing sparse frequencies.

We then conducted pairwise comparisons between Indonesian and Japanese learners, Indonesian learners and native speakers, and Japanese learners and native speakers. These comparisons identified group-specific usage tendencies in subject–modal constructions.

In addition to the frequency-based analysis, distinctive collexeme analysis (Stefanowitsch & Gries, 2003) was employed to examine the strength of association between subject types and the modal constructions *can* and *could*. This analysis makes it possible to identify subject types that are more strongly associated with particular modal constructions across spoken and written data.

The analysis primarily focused on overall form-based distributional tendencies rather than detailed discourse-pragmatic interpretation. Although contextual factors, such as essay prompts and communicative goals, may influence subject selection, the present study aimed to characterize recurrent subject–modal preferences observable across learner groups and modalities.

RESULTS AND DISCUSSION

Subject Distribution with *Can* in Written Mode

This section examines subject types preceding the modal verb *can* in written data from Indonesian learners (IDN), Japanese learners (JPN), and native English speakers (ENS). It compares subject selection across these three groups to identify similarities and differences in their use of *can*. Table 1 presents the distribution of subject types in written *can* constructions.

The distribution of subject types differed considerably across the three groups. Japanese learners showed a markedly higher proportion of first-person subjects (45%, n = 575) than Indonesian learners (17%, n = 199) and native speakers (15%, n = 75), indicating greater reliance on personally framed constructions such as *I can* and *we can. This pattern suggests that Japanese learners used can more frequently in personally framed constructions* than the other two groups.

Table 1

Subject distribution with "can" *in written mode*

Group	First person	Second person	Third-person human	Non-human	Total
IDN	17% (199)	3% (34)	36% (413)	44% (510)	1156
JPN	45% (575)	7% (90)	37% (469)	10% (131)	1265

Group	First person	Second person	Third-person human	Non-human	Total
ENS	15%	12%	41%	33%	496
	(75)	(57)	(201)	(163)	

The written constructions revealed substantial differences across learner groups. Japanese learners showed a markedly higher proportion of first-person subjects (45%) than Indonesian learners (17%) and native speakers (15%). This was one of the largest effect sizes in the dataset. Japanese learners therefore preferred personally anchored constructions such as *I can* and *we can* in written argumentation. Representative examples are shown below.

(1) *I can have time to work and can earn my living cost.* [WE_JPN_PTJ0_325_B1_2.txt]

(2) *If we have a part-time job, we can get some money,…* [WE_JPN_PTJ0_041_B2_0.txt]

In contrast, Indonesian learners most frequently used non-human subjects (44%, $n = 510$), followed by third-person human subjects (36%, $n = 413$). Native speakers showed the highest proportion of third-person human subjects (41%), followed by non-human subjects (33%). These patterns indicate that Indonesian learners and native speakers relied more on generalized or informational subject reference than Japanese learners. Representative examples are presented in (3) for Indonesian and (4) for ENS.

(3) *high school students who just turned into college students can be independent…* [WE_IDN_PTJ0_178_B2_0.txt job]

(4) *People can still eat the same foods* [WE_ENS_SMK0_154_XX_3.txt]

Although the most frequent subject type differed slightly between Indonesian learners and native speakers, both groups relied more on third-person human and non-human subjects than Japanese learners did. This pattern shows a greater tendency toward generalized or informational reference, whereas Japanese learners relied more heavily on first-person subjects. This reflects a more explicitly personal stance (Biber et al., 2021; Hyland, 2005).

The Fisher–Freeman–Halton exact test revealed a significant difference in subject distributions across the three groups ($p < .001$). Moreover, pairwise comparisons further indicated significant differences between Japanese learners and Indonesian learners, as well as between Japanese learners and native speakers. The largest contrasts involved first-person and non-human subjects.

Overall, the results show that subject selection before *can* differ systematically across learner groups. Japanese learners consistently preferred first-person subjects, while Indonesian learners and native speakers used third-person human and non-human subjects more often. Together, these findings suggest that learner groups differ in both the frequency and preferred patterns of subject selection with *can*.

Subject Distribution with *Can* in Spoken Mode

Table 2 presents the distribution of subject types preceding *can* in the spoken data across Indonesian learners (IDN), Japanese learners (JPN), and English native speakers (ENS). Compared with the written data, the spoken mode showed greater differences in subject selection among the three groups.

Japanese learners exhibited a markedly higher proportion of first-person subjects (54%, $n = 298$) than Indonesian learners (27%, $n = 226$) and native speakers (8%, $n = 53$). This distribution indicates that Japanese learners relied heavily on personally framed constructions in spoken production.

Representative examples from the Japanese learner corpus are shown below.

(5) *…and also we can earn money.* [SM_JPN_PTJ2_069_B2_0.txt]

(6) *I can enjoy talking to them, and also I can learn from…* [SM_JPN_PTJ1_062_B2_0.txt]

Table 2

Subject distribution with "can" in spoken mode

Group	First person	Second person	Third-person human	Non-human	Total
IDN	27% (226)	5% (43)	30% (253)	37% (309)	831
JPN	54% (298)	6% (34)	33% (186)	7% (38)	556
ENS	8% (53)	18% (111)	41% (257)	33% (211)	632

In contrast, Indonesian learners most frequently used non-human subjects (37%, n = 309), followed by third-person human subjects (30%, n = 253). Native speakers displayed a different distribution, with third-person human subjects accounting for the largest proportion (41%, n = 257), followed by non-human subjects (33%, n = 211). Notably, native speakers also used second-person subjects (18%, n = 111) considerably more frequently than either Indonesian learners (5%, n = 43) or Japanese learners (6%, n = 34), indicating greater reliance on addressee-oriented expressions in spoken discourse (Biber et al., 2021; Hyland, 2005). Representative examples from the Indonesian learner and native-speaker corpora are presented in (7) and (8).

(7) *It can enhance their experience in working, and it can add …* [SM_IDN_PTJ1_017_B1_2.txt]

(8) *they can keep on smoking as long as they…* [SM_ENS_SMK1_067_XX_1.txt]

The Fisher–Freeman–Halton exact test revealed a significant difference in subject distributions across the three groups ($p < .001$). Pairwise comparisons indicated significant differences between Japanese learners and both Indonesian learners and native speakers, especially in the use of first-person and second-person subjects.

Overall, the findings demonstrate that subject selection before *can* in spoken production differs systematically across learner groups. Japanese learners relied predominantly on first-person subjects, whereas Indonesian learners showed a broader distribution of subject types, and native speakers made greater use of third-person human and second-person subjects. These differences indicate distinct preferences in subject selection across the three groups, especially in personal, generalized, and addressee-oriented reference.

Subject Distribution with *Could* in Written Mode

Table 3

Subject distribution with "could" in written mode

Group	First person	Second person	Third-person human	Non-human	Total
IDN	9% (4)	9% (4)	28% (13)	54% (25)	46
JPN	51% (56)	3% (3)	27% (30)	19% (21)	110
ENS	16% (13)	0% (0)	26% (21)	59% (48)	82

Table 3 presents the distribution of subject types preceding *could* in the written data across Indonesian learners (IDN), Japanese learners (JPN), and English native speakers (ENS). The distributions differed noticeably among the three groups.

Japanese learners showed a markedly higher proportion of first-person subjects (51%, $n = 56$) than Indonesian learners (9%, $n = 4$) and native speakers (16%, $n = 13$). In contrast, non-human subjects accounted for the largest proportion in both the Indonesian learner corpus (54%, $n = 25$) and the native-speaker corpus (59%, $n = 48$). Third-person human subjects represented approximately one-quarter of the *could* constructions in all three groups, whereas second-person subjects were infrequent. Representative examples illustrating these patterns are presented below.

(9) *I could learn consumer's needs,…* [WE_JPN_PTJ0_153_B1_2.txt]

(10) *Smoking could give both active smokers and passive smokers many diseases.* [WE_IDN_SMK0_009_B1_2.txt]

(11) *Health concerns could be improved dramatically by simply eliminating smoking altogether.* [WE_ENS_SMK0_166_XX_3.txt]

The Fisher–Freeman–Halton exact test revealed a significant difference in subject distributions across the three groups ($p < .001$). Pairwise comparisons indicated significant differences between Japanese learners and Indonesian learners ($p < .001$) and between Japanese learners and native speakers ($p < .001$). In contrast, no significant difference was found between Indonesian learners and native speakers ($p = .463$), suggesting comparable distributions of subject types in written could constructions.

The predominance of first-person subjects among Japanese learners contrasts with the greater use of non-human subjects by Indonesian learners and native speakers. This pattern suggests that Japanese learners more frequently employed could in personally framed contexts. In contrast, Indonesian learners and native speakers tended to use could with non-human subjects referring to situations, events, or abstract entities. These differences align with variation in authorial stance and the degree of personal involvement reflected in subject choice (Biber et al., 2021; Hyland, 2005).

Subject distribution with "could" in spoken mode

Table 4 presents the distribution of subject types preceding *could* in the spoken data across Indonesian learners (IDN), Japanese learners (JPN), and English native speakers (ENS). The modal verb *could* occurred relatively infrequently in the learner corpora, particularly among Japanese learners ($n = 9$). Owing to the limited number of tokens, the findings are interpreted descriptively rather than statistically.

Table 4

Subject distribution with "could" in spoken mode

Group	First person	Second person	Third-person human	Non-human	Total
IDN	17% (12)	3% (2)	61% (43)	19% (13)	70
JPN	78% (7)	0% (0)	22% (2)	0% (0)	9
ENS	9% (10)	9% (10)	38% (44)	45% (52)	116

Despite the small dataset, some tendencies are evident. Japanese learners produced predominantly first-person subjects (78%, n = 7), with the remaining tokens occurring with third-person human subjects (22%,n=2). Representative examples from the three corpora are presented below.

(12) *but I – I could get a lot of experiences from manager…*[SM_JPN_PTJ2_111_B1_2.txt]

(13) … *they could handle the situation - the overall situation of …* [SM_IDN_PTJ2_014_B1_2.txt]

(14) The ash and the smoking air could reach the food that people eat. [SM_ENS_SMK2_038_XX_2.txt]

(15) … *children, um, could be victimized* [SM_ENS_SMK1_079_XX_3.txt]

Compared with the written data, Indonesian learners showed a shift in subject preference, with third-person human subjects becoming more frequent than non-human subjects in spoken *could* constructions. In contrast, native speakers continued to rely primarily on non-human and third-person human subjects, whereas the limited Japanese learner data remained dominated by first-person subjects.

Overall, although the small number of *could* tokens warrants cautious interpretation, the distributions suggest that subject selection in spoken

could constructions differs across the three groups. Japanese learners predominantly produced first-person subjects, Indonesian learners more frequently employed third-person human subjects, and native speakers relied mainly on non-human and third-person human subjects.

Overall Patterns Across Subject–Modal Constructions

Across both written and spoken modes, Japanese learners consistently showed a strong preference for first-person subject–modal constructions, particularly combinations such as I can and I could. In contrast, Indonesian learners and native speakers relied more frequently on third-person human and non-human subjects. These recurring distributions indicate systematic differences in preferred subject–modal pairings across the three groups, a pattern that the Distinctive Collexeme Analysis further supported.

Indonesian learners exhibited a greater tendency to use non-human subjects, particularly in the written mode. In contrast, native speakers showed the broadest distribution of subject types, including relatively frequent use of second-person and third-person human subjects. These findings suggest that Indonesian learners and native speakers more often employed generalized or topic-oriented reference, while native speakers exhibited greater flexibility in subject selection (Biber et al., 2021; Hyland, 2005).

The comparison between can and could further revealed differences in modal usage across the three groups. Although can occurred much more frequently than could in all corpora, Japanese learners consistently favored first-person subject–modal pairings with both modal verbs. In contrast, Indonesian learners and native speakers showed greater diversity in subject selection, particularly with could, which frequently occurred with non-human or third-person human subjects. The DCA results further indicated that native speakers displayed the greatest degree of subject–modal specialization, whereas Japanese learners exhibited comparatively limited differentiation. Because the spoken could data contained relatively few learner tokens, especially in the Japanese learner corpus, these observations should be interpreted with appropriate caution.

From a usage-based perspective, the repeated occurrence of combinations such as I can, people can, and it could suggests that these subject–modal pairings become conventionalized through repeated language use (Bybee, 2010; Goldberg, 2006). Within Construction Grammar, such recurring pairings can be viewed as partially schematic constructions whose distributions emerge from usage. The differences observed across learner groups therefore reflect not only variation in the frequencies of individual subject categories but also systematic differences in the constructional preferences associated with can and could, supporting the view that subject selection forms an integral part of learners' knowledge of modal constructions.

Distinctive Collexeme Analysis of Subject–Modal Constructions

To complement the frequency analyses, Distinctive Collexeme Analysis (DCA) was conducted to identify subject categories showing statistically significant preferences for either *can* or *could*. Unlike descriptive frequency comparisons, DCA evaluates the strength of association between lexical items and competing constructions, thereby revealing construction-specific preferences (Gries & Stefanowitsch, 2004; Gries, 2019). Within a usage-based framework, recurrent associations between subject categories and modal constructions are interpreted as evidence of conventionalized constructional preferences that emerge through repeated language use.

Japanese learner corpus

Table 5

Distinctive Collexeme Analysis of Subject Categories Associated with *can* and *could* in the Japanese Spoken Corpus

Subject category	can	could	Strength	*p*	Preferred
First person	298	7	0.72	.189	—
Second person	34	0	0.00	1.000	—
Third-person human	186	2	0.14	.725	—

Subject category	can	could	Strength	*p*	Preferred
Third-person non-human	38	0	0.00	1.000	—

Note. Strength = collostruction strength (–log10 *p*). Values ≥ 1.30 indicate $p < .05$; ≥ 2.00 indicate $p < .01$; ≥ 3.00 indicate $p < .001$. "—" indicates no statistically significant preference.

The Japanese learner corpus exhibited relatively limited subject–modal specialization. As shown in Table 5, no statistically significant collexemes were identified in the spoken corpus. Although first-person subjects showed the strongest tendency toward *could* (strength = 0.72), the association was not statistically significant. This result is likely attributable to the very small number of spoken *could* tokens ($n = 9$).

Table 6

Distinctive Collexeme Analysis of Subject Categories Associated with *can* and *could* in the Japanese Written Corpus

Subject category	can	could	Strength	*p*	Preferred
First person	575	56	0.47	.340	—
Second person	90	3	1.00	.100	—
Third-person human	469	30	1.15	.070	—
Third-person non-human	**131**	**21**	**2.22**	**.006**	**could**

In contrast, the written corpus produced one significant collexeme. Third-person non-human subjects were significantly associated with *could* (strength = 2.22, $p = .006$), whereas the remaining subject categories showed no statistically reliable preference for either modal construction. Overall, the Japanese learner data indicate relatively weak differentiation between *can* and *could*, particularly in spoken production.

Indonesian learner corpus

The Indonesian learner corpus (Table 7) demonstrated clearer construction-specific preferences than the Japanese learner corpus. In the spoken corpus, third-person human subjects showed a strong preference for *could* (strength > 6.00, $p < .001$), whereas third-person non-human subjects were significantly associated with *can* (strength = 2.70, $p = .002$). These contrasting associations indicate that Indonesian learners differentiated the two modal constructions according to subject category in spoken production.

Table 7

Distinctive Collexeme Analysis of Subject Categories Associated with *can* and *could* in the Indonesian Spoken Corpus

Subject category	can	could	Strength	*p*	Preferred
First person	226	12	1.22	.060	—
Second person	43	2	0.27	.540	—
Third-person human	**253**	**43**	**>6.00**	**<.001**	**could**
Third-person non-human	**309**	**13**	**2.70**	**.002**	**can**

Table 8

Distinctive Collexeme Analysis of Subject Categories Associated with *can* and *could* in the Indonesian Written Corpus

Subject category	can	could	Strength	*p*	Preferred
First person	199	4	0.82	.150	—
Second person	**34**	**4**	**1.52**	**.030**	**could**
Third-person human	413	13	0.46	.350	—

Subject category	can	could	Strength	*p*	Preferred
Third-person non-human	510	25	0.74	.180	—

The written corpus (Table 8) displayed fewer significant associations. Only second-person subjects emerged as a distinctive collexeme of could (strength = 1.52, p = .03), while the remaining subject categories showed no statistically significant preferences. Compared with the spoken corpus, the written data therefore suggest less subject–modal specialization.

Native-speaker corpus

Table 9

Distinctive Collexeme Analysis of Subject Categories Associated with *can* and *could* in the Native Spoken Corpus

Subject category	can	could	Strength	*p*	Preferred
First person	53	10	0.02	.950	—
Second person	**111**	**10**	**1.70**	**.020**	**Can**
Third-person human	257	44	0.12	.750	—
Third-person non-human	**211**	**52**	**1.52**	**.030**	**could**

The native-speaker corpus exhibited the clearest differentiation between the two modal constructions. In the spoken corpus (Table 9), second-person subjects were significantly associated with *can* (strength = 1.70, *p* = .02). In contrast, third-person non-human subjects preferred *could* (strength = 1.52, *p* = .03). No significant preferences were observed for first-person or third-person human subjects.

The written corpus revealed the strongest construction-specific associations in the entire dataset. Third-person non-human subjects emerged as a highly distinctive collexeme of *could* (strength > 4.00, *p* < .001), while second-person (strength = 2.52, *p* = .003) and third-person human subjects (strength = 1.40, *p* = .04) were significantly associated with *can*. These results indicate a relatively well-developed specialization of subject–modal pairings in native-speaker writing.

Table 10

Distinctive Collexeme Analysis of Subject Categories Associated with *can* and *could* in the Native-written Corpus

Subject category	can	could	Strength	*p*	Preferred
First person	75	13	0.05	.900	—
Second person	57	0	**2.52**	**.003**	**can**
Third-person human	201	1	**1.40**	**.040**	**can**
Third-person non-human	163	48	**>4.00**	**<.001**	**could**

Overall DCA patterns

Across the six corpora, the DCA results revealed clear differences in the degree of subject–modal specialization. Native speakers exhibited the greatest number of statistically significant subject–modal associations, indicating more differentiated constructional preferences for *can* and *could*. Indonesian learners showed intermediate levels of specialization, particularly in the spoken corpus, whereas Japanese learners displayed comparatively limited differentiation, largely because of the extremely low frequency of spoken *could*.

From a usage-based perspective, these findings suggest that repeated subject–modal pairings become conventionalized to different degrees across learner groups. Rather than representing independent grammatical choices, combinations such as *I can*, *people can*, and *it could* appear to function as recurrent constructional patterns whose distributions reflect speakers' accumulated experience with English modal constructions (Bybee, 2010; Goldberg, 2006).

CONCLUSION

Although modal verbs have been extensively investigated in learner corpus research, they are typically examined as individual lexical or grammatical items. The present study approached *can* and *could* from a constructional perspective by treating subject–modal combinations as meaningful units of analysis. This perspective revealed systematic differences in how Indonesian and Japanese EFL learners and native English speakers combine subjects with modal verbs across written and spoken English, demonstrating that learner variation extends beyond modal choice to the grammatical environments in which modal constructions occur.

The analyses revealed systematic differences in subject selection across the three groups. Japanese learners consistently preferred first-person subject–modal pairings, particularly *I can* and *I could*, whereas Indonesian learners more frequently employed non-human subjects, especially in the written mode. Native speakers exhibited the greatest diversity of subject categories, including relatively frequent use of second-person and third-person human subjects. The comparison between *can* and *could* further showed that *could* occurred considerably less frequently than *can* in all learner corpora, particularly in spoken production. Distinctive Collexeme Analysis additionally demonstrated that native speakers exhibited the clearest construction-specific subject–modal preferences, Indonesian learners showed intermediate levels of specialization, and Japanese learners displayed comparatively limited differentiation, especially in the spoken corpus.

These findings support a usage-based account of learner language in which recurrent subject–modal pairings emerge through repeated language use and become conventionalized as constructional preferences (Bybee, 2010; Goldberg, 2006). Rather than functioning as independent grammatical choices, combinations such as *I can*, *people can*, and *it could* appear to constitute recurring subject–modal constructions whose distributions differ across learner groups. The results therefore suggest that subject selection forms an important component of learners' knowledge of English modal constructions and contributes to the expression of stance in learner English.

The present study also contributes to learner corpus research by demonstrating the value of examining grammatical constructions rather than individual lexical or grammatical items in isolation. By combining corpus frequency analysis, statistical testing, and Distinctive Collexeme Analysis, the study provides a construction-based account of how learner groups differ in their subject preferences–modal pairings. This perspective extends previous research on English modal verbs by showing that differences between learner and native-speaker English are reflected not only in modal frequency but also in the distribution of the grammatical environments in which modal verbs occur.

Several limitations should be acknowledged. First, the analysis focused on subject distributions and did not examine broader discourse-pragmatic functions or rhetorical organization. Second, the spoken *corpus* data contained relatively few learner tokens, particularly in the Japanese learner corpus, limiting the strength of statistical comparisons. Third, the researcher annotated the data manually, which may have introduced some subjectivity despite clearly defined annotation criteria.

Future research could investigate how subject–modal constructions develop across proficiency levels and whether constructional preferences change as learners gain greater exposure to English. Longitudinal learner corpora would be particularly valuable for examining how recurring subject–modal pairings become conventionalized over time. Future studies may also extend the present analysis to additional modal verbs and incorporate discourse-pragmatic analyses to explore how subject selection interacts with stance and communicative function in learner English.

BACK MATTER

Disclosure of Author Contributions

Author 1: Conceptualization, Data curation, Formal analysis, Writing – original draft, Writing – review & editing.

Author 2: Conceptualization, Supervision, Writing – review & editing.

Disclosure of Competing Interests

The author is affiliated with the editorial team of this journal. To maintain editorial impartiality, the author was recused from all stages of the editorial evaluation of this manuscript. The author declares no additional competing financial or personal interests.

Disclosure of The Use of AI-Tool and Supportive Applications

During the preparation of this work, the author(s) used ChatGPT (GPT -6, OpenAI) as an AI-assisted writing tool to support the refinement of the literature review, clarification of the theoretical and methodological framework, and improvement of academic expression. It was also used to assist in checking the alignment between citations and research claims and reviewing the reference list. In addition, Grammarly was used to check grammar and language accuracy during the final revision of the manuscript. All research decisions, corpus analyses, interpretations, and final revisions were reviewed and verified by the author, who takes full responsibility for the content of the article.

Disclosure of Publication Agreement

On behalf of all co-authors, the corresponding author, hereby, declares that all authors have reviewed and approved the final manuscript and agree to its publication in this journal. The corresponding author assumes full responsibility for any issues related to authorship, originality, ethics, or publication rights associated with this article.

Disclosure of Ethical Approval and Informed Consent

This research did not involve human participants, animal subjects, or any privacy- or security-sensitive materials. The study utilized only publicly accessible data, and all sources, including websites, URLs, books, and other materials, are transparently disclosed and cited in the manuscript. The author(s) takes full responsibility for the content of the published article due to any potential issues related to ethical concerns.

Disclosure of Data Availability

The data supporting the findings of this study are openly available in International Corpus Network of Asian Learner of English (ICNALE) at https://language.sakura.ne.jp/icnale/. Researchers may access the dataset without restriction.

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