

Comparing The Argumentative Essay Formats of Indonesian and Korean Students Using the Toulmin Model

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Abstract

This study's overarching goal is to dissect and contrast the organizational framework of persuasive compositions generated by Indonesian and Korean (South Korean) pupils who are acquiring English as a secondary language, utilizing the Toulmin model as a theoretical framework for argument assessment. The research sample consisted of five participants from Indonesia, five participants from Korea, five female participants from Indonesia, and five female participants from Korea. Typically, individuals originate from diverse educational and vocational contexts. The articles generated by the authors served as the focal point of an analysis that employed elements of the Toulmin framework. The research's findings imply that there is no appreciable difference between men's and women's levels of reasoning in the two countries. It was evident that a discernible distinction among the participants was the absence of counterargument sections in certain individuals. This study holds significant importance in terms of examining the impact of cultural factors inherent in each nation and its language on the principles of argumentative writing. The results obtained from the investigation conducted in this research. can be employed to improve pedagogical strategies and facilitate the development of writing curricula that are culturally appropriate. It is anticipated that future investigations will facilitate the examination of additional linguistic and cultural attributes, as well as the broadening of the research's purview to encompass a more heterogeneous cohort hailing from a greater array of nations, as well as persons with differing levels of scholarly attainment.

Keywords: Toulmin model, Indonesian and Korean students, Quality of Argumentative Essay

Introduction

Thus, in an effort to be successful in academic environments where the capacity to construct an argument that is convincing is a key skill, students need to have the ability to convey their ideas and back them with sound reasoning and evidence (El Majidi et al., 2021). The philosopher Stephen Toulmin created the Toulmin Model in the 1950s, which serves as a framework for creating convincing arguments. The process involves breaking down arguments into their basic constituents and has undergone modifications to integrate the most recent research discoveries (Purdue University. Purdue Online Writing Lab, 2023). The latest revisions take into account the distribution of multimedia

and the influence of cognitive mechanisms, predispositions, and mental shortcuts on individuals' understanding. The efficacy of argumentative approaches has been better understood through the incorporation of cognitive components, such as cognitive biases and heuristics, which have enhanced the model (Lockton, 2012). Although the Toulmin model has gained significant traction as a tool for evaluating argumentative writing across different domains, its implementation in cross-cultural environments has yet to be thoroughly investigated.

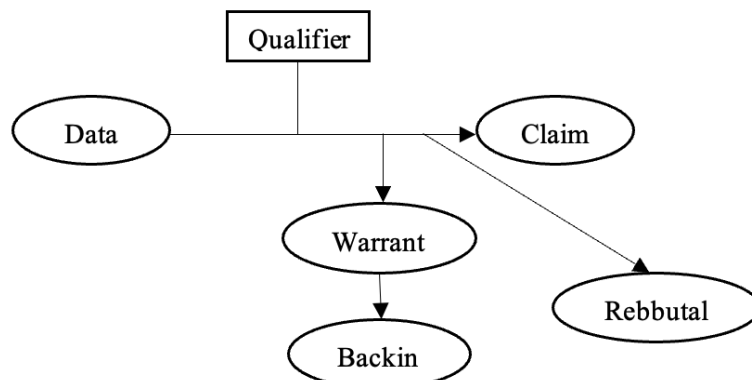


Figure 1. Diagram of Toulmin's logical argument (Toulmin, 1958)

Both Indonesia and Korea have unique cultural and educational traditions (Jeong et al., 2017). Both nations' educational systems place a premium on the development of strong writing abilities, especially the capacity for persuasive prose. However, cultural norms, pedagogical tenets, and language backgrounds may all affect how students organize and present their ideas in written assignments like essays (Sanger, 2020).

Comparing and contrasting the argumentative essay forms of Indonesian and Korean students using the Toulmin model might shed light on the similarities and differences between the two groups' approaches to writing. Teachers and curriculum designers may use this information to better tailor their writing lessons to their students' language and cultural needs (Ishikawa, 2019). Furthermore, when we compare cultures, we get a deeper comprehension of reasoning and the ways in which it is impacted by sociocultural elements (Ishikawa, 2013).

The bridging of a knowledge gap is the purpose of this investigation in the existing literature and gives empirical evidence on the possible variances in argumentative writing practices by comparing the essay styles of students in Indonesia and Korea using the Toulmin model. The results may be used in language teaching, curriculum design, and the promotion of efficient communication skills in a wide range of educational and cultural settings.

The analysis of argumentative essays authored by students who are acquiring English as a Foreign Language (EFL) in Asia is of utmost importance in comprehending the intricacies and obstacles they encounter while formulating persuasive arguments (Sundari & Febriyanti, 2021). The argument structures of the Toulmin Model provide significant insights into the language acquisition and communication strategies employed by language learners. Scholars have the ability to discern the merits and drawbacks of students' writing, furnish precise feedback for each writing style, and formulate effective pedagogical strategies to enhance their proficiency in argumentative writing (Qin & Karabacak, 2010). The analytical and logical thinking abilities of students in Asia are frequently impacted by language and cultural barriers. Toulmin's Model of

Logic-Based Argumentation sheds light on the impact of cultural and educational backgrounds on an individual's preferred persuasion techniques, reasoning patterns, and argumentation styles. This underscores the significant influence of cultural context on these aspects of argumentation (Jumariati et al., 2021). The acquisition of this knowledge holds significant value for educators and curriculum designers, as it empowers them to tailor their teaching methodologies to effectively address the distinctive requirements of the learners.

Acquiring knowledge about the advantages and disadvantages of argumentative essays produced by students in Asia holds practical significance in the realm of language instruction. Educators have the ability to offer specific feedback by pinpointing recurring errors or areas requiring improvement and furnishing instructional resources customized to address these challenges. The findings of this research possess the capability to provide insight into the creation of efficacious pedagogical approaches aimed at improving the aptitude of Asian students who are acquiring English as a second language in the area of composing persuasive written discourse.

Research questions and objectives

The utilization of the Toulmin Model is a crucial aspect in the development of arguments within argumentative essays produced by EFL learners residing in the Asian region. Nonetheless, the extant literature exhibits a notable deficiency in investigating its utilization for evaluating diverse frameworks. The Toulmin Model's comprehensive structure facilitates comprehension of arguments. However, there exists a dearth of research on its utilization and customization to suit the distinct linguistic and cultural contexts of EFL learners hailing from Asian nations.

The Toulmin Argument Pattern (TAP) is utilized to assess the caliber of argumentative writing. This approach offers a methodical structure for constructing arguments. Nonetheless, there exists a dearth of scholarly inquiry pertaining to the extent of students' utilization of the TAP components and their concomitant impact on the caliber of their written work. The examination of potential disparities in the quality of argument patterns exhibited by male and female learners of EFL remains an area that has yet to be comprehensively investigated.

1. To what extent do the argumentative essay structures employed by Asian EFL learners conform to the (modified) Toulmin model (1958, 2003)?
2. What is the general standard of argumentative writing among EFL learners when utilizing the TAP?
3. Is there a notable disparity in the caliber of argumentative patterns exhibited by male and female Students of the English Language?

The major purpose of this work is to explore the ICNALE corpus of argumentative writing that was created by Indonesian and Korean EFL students and to discover the components that make up such structures. Through an adaptation of Toulmin's (1958, 2003) model, the present inquiry makes an attempt to establish a framework for the analysis of the argumentation structures utilized by Indonesian dan Korean participants. This research is done with a specific purpose in mind to analyze the corpus in order to discover how frequently and what types of elements occur in the argumentative writing of the students. Because of this objective, we will have a clearer understanding of how EFL students develop and apply their debate talents and methods (Zhang et al., 2017).

Studying how well Indonesian and Korean participants apply the Toulmin argument pattern (TAP) in their writing is the study's secondary goal. This is done so that the participants' arguments may be analyzed for their level of coherence, clarity, and logical reasoning, as well as their ability to persuade. In order to learn about and comprehend the 20 participants' general capacity to generate well-structured and persuasive arguments, the evaluation's findings will be able to highlight the strengths and limits of their argumentative writing abilities.

The study's third objective is to determine whether or not female and male students from Indonesia and Korea use different argument structures in their written discourse. By analyzing the argumentative writing examples of female and male learners, the research seeks to identify whether there are any gender-based variances in the design and execution of argument structures. This purpose will give insights into any gender-related disparities in argumentative competence and shed light on the possible effect of gender on the development of argumentation abilities among those learners.

Literature Review

Overview of previous studies on Toulmin Model argument structures

The drive of Yang's (2022) research is to discover whether or not there is a connection between the ability to write persuasively in English and the various types of argumentative sentences used in the language, utilizing the Toulmin model. The study evaluates the timed argumentative writings of 117 students and categorizes them into groups based on their respective high, medium, and low marks. The study identifies 23 distinct categories of assertions and evaluates them based on the qualifying components of the argumentative structure. The group with higher marks predominantly formulates claims utilizing words and claims (QW + C), whereas the group with lower marks primarily formulates claims incorporating comprehensive information. The research indicates that there is no statistically significant association between the variety of qualifying components in claims and the effectiveness of argumentative writing.

The study by Qin and Karabacak (2010) examines the use of the Toulmin model's six components—claim, data, counterargument claim, counterargument data, rebuttal claim, and rebuttal data—in argumentative papers written by university students who are learning English as a second language (L2). The research looked at 153 Chinese second-year English majors who submitted argumentative papers after reading two opinion articles with contrasting viewpoints on a contentious issue. The research showed that most papers had at least one claim backed up by four pieces of evidence. Significant determinants of the quality of argumentative papers, such as the employment of a counterargument claim, counterargument data, a rebuttal claim, and rebuttal data, were less often used. The research may have ramifications for how we teach argumentative writing in second languages.

Analysis of existing research on Asian EFL learners' argumentative essays

The existing literature on argumentative writing within the realm of EFL has predominantly centered on the difficulties encountered by EFL learners and typical concerns that arise in their written compositions. The current body of literature is insufficient to explore the utilization of the Toulmin Model's constituents and frameworks in the composition of EFL academic papers by Asian students and educators. Furthermore, a scarcity of scholarly inquiry exists regarding gender-based distinctions in the argumentative writing strategies employed by Indonesian and Korean EFL learners. Despite extant research on language and communication variations, there

exists a dearth of empirical investigations on the potential influence of gender regarding the level of persuasiveness of the arguments presented patterns among EFL students utilizing the Toulmin Model. The objective of this study is to examine the efficacy of the Toulmin Model in enhancing the quality of argumentative writing generated by a specific cohort of learners, as evaluated by the Tool for Argumentative Writing Assessment (TAP). The objective of this study is to address the voids in the current body of literature and offer novel insights into enhancing the abilities of non-native English-speaking students in Asia to write persuasively.

Identification of research gap

This research only includes Indonesian and Korean EFL students who made argumentative essays on the topic of 'Smoking should be completely banned at all the restaurants in the country'; thus, the results may not apply to other groups or settings. Findings may not be generalizable since there were only five men and five women in the sample for each nation. Because they are at the B1_2 (B1 high) level of the four CEFR-linked proficiency bands, EFL students may struggle to fully execute the Toulmin paradigm. The Toulmin model by Qin and Karabacak (2010) and its effect on argument structures as outlined by Erduran et al. (2004) are the primary subjects of this investigation. The Toulmin model offers a structured process for analyzing and developing arguments, including an assessment of the effectiveness of the argument and the identification of areas for improvement. Moreover, I will arrive at various conclusions due to possible disparities in interpreting and coding the essays due to the subjective nature of identifying and categorizing argument structures in essays.

Methodology

Description of research design and Participants

Table 1. The six Toulmin components defined (Qin & Karabacak, 2010)

| Elements | Definition |
|-----------------------|---|
| Claim | A statement made in reaction to a controversial subject or issue. |
| Data | Empirical data or factual information that substantiates a statement. The phenomenon in question can be evident in various manners and may include additional items beyond those explicitly mentioned to factual information, statistical data, personal anecdotes, empirical research findings, authoritative viewpoints, definitional statements, comparative analogies, and logically coherent justifications. |
| Counterargument claim | The writer's claim may face potential challenges from opposing perspectives, which may also be substantiated by empirical evidence (Nemeth & Kormos, 2001). |
| Counterargument data | Empirical data or scholarly sources that provide support for an opposing viewpoint. |
| Rebuttal claim | According to Ramage and Bean (1999), writers may address counter-arguments by identifying potential weaknesses in the opposing claim, data, or warrant. The argument may have a logical fallacy, inadequate backing, incorrect assumptions, or unethical attitudes. |
| Rebuttal data | Empirical data or factual information that can be used to counter an opposing argument. |

There are several components that go into making a strong argument. The claim, which serves as the argument's focal point, is specific, succinct, and open to criticism. Statistics, anecdotes, expert quotes, and other forms of evidence support the allegation. Opposing arguments, or counterarguments, are those that acknowledge and prepare for probable challenges to the initial assertion. Supporting the other side with evidence shows objectivity and intellectual honesty, as in a counterargument.

Strategically responding to a counterargument claim by offering counterarguments or emphasizing the claim's faults and inconsistencies is called making a "rebuttal claim." A rebuttal assertion requires a proof, such as counterevidence, logical reasoning, or illustrated examples, to back it up. Debaters may demonstrate their intellectual prowess and create a well-rounded, convincing argument by deftly using these elements.

Table 2. Analytical Methods and Frameworks for Evaluating Argumentation Quality
(Erduran et al., 2004)

| Level | Description |
|---------|--|
| Level 1 | The argumentation is characterized by a basic structure of a singular claim pitted against either a counterclaim or another claim. |
| Level 2 | Arguments that pit one claim against another and are backed by evidence (statistics, warrants, etc.) are indicative of level 2 argumentation. It is worth noting, however, that there are no rebuttals to these claims in the arguments presented. |
| Level 3 | At Level 3 of argumentation, one typically encounters a sequence of claims and counterclaims that are supported by data, warrants, or backings, occasionally accompanied by a weak rebuttal. |
| Level 4 | At Level 4 of argumentation, the arguments presented entail a claim that is accompanied by a distinct and readily identifiable rebuttal. This line of reasoning may encompass multiple assertions and opposing viewpoints. |
| Level 5 | The argumentation at Level 5 is characterized by an elaborate presentation of the argument, which includes multiple rebuttals. |

A metric for evaluating the effectiveness of an argument can be established through the implementation of an analytical framework that employs a numerical scale ranging from one to five. Arguments presented at the primary level may exhibit deficiencies in their ability to convince, manifest contradictions, or be subject to individual prejudices. Arguments classified as Level 2 exhibit a greater degree of organization and evidential support, yet they may still be prone to logical inconsistencies or inadequate warranting. The reasoning behind the argument is laid bare at this stage, with supporting evidence spread out evenly. In the last phase, its efficacy and persuasiveness are amplified via increased logical coherence, warrants, and support. One way to assess an author's skills as an argumentative thinker and writer is to look at how they deal with counterarguments. Since the structure, warrants, and supporting evidence of the fifth-level discourse are so solid, it is difficult to counter it. Overall, the argument shows off excellent analytical and persuasive skills.

Table 3. Male and Female Participants

| Female Participants | Major/Occupation | Academic genre |
|-----------------------|------------------------|-----------------------|
| F-W IDN SMK0 009 B1 2 | Information Technology | Sciences & Technology |
| F-W IDN SMK0 020 B1 2 | Accounting | Social Sciences |
| F-W IDN SMK0 034 B1 2 | Engineering | Sciences & Technology |
| F-W IDN SMK0 035 B1 2 | Linguistics | Humanities |
| F-W IDN SMK0 090 B1 2 | English | Humanities |

| Male Participants | Major/Occupation | Academic genre |
|---------------------|------------------------|-----------------------|
| W IDN SMK0 168 B1 2 | Information Technology | Sciences & Technology |
| W IDN SMK0 192 B1 2 | Management | Social Sciences |
| W IDN SMK0 196 B1 2 | Engineering | Sciences & Technology |
| W IDN SMK0 100 B1 2 | Management | Social Sciences |
| W IDN SMK0 027 B1 2 | Informatics | Sciences & Technology |

| Female Participants | Major/Occupation | Academic genre |
|-----------------------|------------------|-----------------------|
| F-W KOR SMK0 030 B1 2 | Military | Sciences & Technology |
| F-W KOR SMK0 035 B1 2 | English | Humanities |
| F-W KOR SMK0 087 B1 2 | Education | Humanities |
| F-W KOR SMK0 096 B1 2 | Education | Humanities |
| F-W KOR SMK0 299 B1 2 | Chemistry | Sciences & Technology |

| Male Participants | Major/Occupation | Academic genre |
|---------------------|------------------|-----------------------|
| W KOR SMK0 024 B1 2 | Business | Social Sciences |
| W KOR SMK0 080 B1 2 | English | Humanities |
| W KOR SMK0 012 B1 2 | Military | Sciences & Technology |
| W KOR SMK0 037 B1 2 | English | Humanities |
| W KOR SMK0 052 B1 2 | Education | Humanities |

The study's participants were sourced from the EFL learners writing corpus available at <https://language.sakura.ne.jp/icnale/> within the ICNALE framework. The study involved the participation of two countries, namely Indonesia and South Korea. The subject matter under investigation pertains to the complete prohibition of smoking in all restaurants throughout the nation.

Each person taking part in this event has been given a unique code that indicates their native language and the degree of fluency they now possess in that language. The alphabetical symbol 'W' serves as the initial character of the term 'written', while the acronyms 'IDN' and 'KOR' denote the respective countries of origin of the participants. Specifically, the 'IDN' designation signifies that the participant hails from Indonesia, whereas the 'KOR' designation denotes that the participant originates from Korea. The symbol 'F' is utilized to indicate the gender of the participant as female. The letter 'SMK' denotes the participant's stance on the proposition that smoking ought to be entirely prohibited in all restaurants across the nation. The numerical identifier of the participant can be ascertained by examining the alphanumeric sequence that immediately follows the alphabetic character 'SMK'.

As per the guidelines outlined in the Common European Framework of Reference for Languages (CEFR), the proficiency level denoted as "B1_2" is identified. The subsequent text depicts an exemplar of the participant's code as it would be perceived by a reader. The composition pertaining to tobacco consumption was authored by a Korean student identified as #001, who possesses a CEFR proficiency level of B1

advanced. W_KOR_SMK0_024_B1_2. The data indicates that there are five male participants from Indonesia and five female participants from Korea involved in this event. In a broad context, individuals identifying as male or female in Indonesia and Korea stem from distinct cultural and scholarly traditions that are not mutually interchangeable.

Table 4. The CEFR Proficiency Bands (ICNALE, 2022)

| Levels | TOEIC | TOEFL PBT | TOEFL iBT | IELTS | STEP | TEPS | CET | VST |
|-------------------------|-------|-----------|-----------|-----------|-------|------|-----|-----|
| A2 (Waystage) | -545 | -486 | -56 | 3+ | 3+ | ---- | | -24 |
| B1_1 (Threshold; Lower) | 550+ | 487+ | 57+ | 4+ | 2+ | 417+ | 4+ | 25+ |
| B1_2 (Threshold: Upper) | 670+ | 527+ | 72+ | 4+ | 2+ | 513+ | 4+ | 36+ |
| B2+ (Vantage or higher) | 785+ | 567+ | 87+ | 5 (5.5) + | Pre1+ | 608+ | 6+ | 47+ |

Standardized L2 vocabulary size tests (VSTs) covering the top 5K word levels are required for high-stakes English proficiency assessments like the TOEFL and TOEIC. Placement into one of four CEFR-linked proficiency bands (A2, B1_1, B1_2, or B2+) is how classes are organized.

The ICNALE's mapping approach was developed with input from the IELTS, TOEFL, TOEIC, TEPS, and STEP. However, there are no established standards for converting between vocabulary size and CEFR levels. Scores on the VST were converted to TOEIC scores for 268 Asians who had completed both tests using a linear regression model.

Explanation of data collection methods and instruments

The objective of the research is to examine the application of the Toulmin model in diverse settings, such as Indonesia and Korea, through the selection of participants who possess comparable levels of English proficiency. The study's participants were selected from diverse academic disciplines and professional backgrounds, all possessing a comparable level of proficiency at B1_2 (B1 high). They were subsequently categorized into four proficiency bands that corresponded with the Common European Framework of Reference for Languages (CEFR). It is to evaluate the initial comprehension and utilization of argument structures and degrees of argumentation among the participants.

The Toulmin model will be taught to participants through a variety of methods, including workshops, instructional materials, and interactive sessions that will be customized to their individual levels of proficiency. Participants will receive designated essay prompts to formulate arguments utilizing the model, prompting arguments at varying levels of argumentation. Each individual participant will compose an argumentative essay in response to the provided prompt. The essays gathered will undergo examination utilizing a coding system that is grounded in the Toulmin model and the levels of argumentation framework. To ensure consistency and reliability, multiple coders will be involved in the process. The study employs quantitative analysis to compute frequencies, percentages, and statistical disparities across genders and countries with respect to argument structures and levels of argumentation. Pursuing a deeper understanding motivates the qualitative analysis method of the caliber, advantages, and limitations of the arguments presented.

Data analysis procedures and techniques

In order to enhance comprehension, I utilize diverse techniques for data analysis, including but not limited to coding and categorization, quantitative and qualitative analysis, comparative analysis, and descriptive statistics. The Toulmin model is used in the coding and classifying process in order to properly differentiate and categorize the various aspects (Simon, 2008). Participants' argumentative writings are quantitatively analyzed by tallying up their scores on a variety of criteria and then comparing those scores to established norms. By comparing the argumentative essay to a predetermined set of criteria known as a rubric, a qualitative analysis may be performed. Language and rhetorical strategies, as well as readability and internal coherence, are all taken into account throughout the evaluation process (Kang, 2022). Different groups of students from the two countries' essay samples are analyzed in terms of the extent to which they use an argumentative format. The only way to decide whether or not male and female students are different is to examine the distribution of argumentation components. In academic writing, descriptive statistics may postulate a high-level indication of the facts and an overview of the argument's structure. Over the implementation of these techniques, scholars can attain a more comprehensive conception of the argumentative frameworks that exist, ultimately accomplishing the overarching objectives of the investigation.

Results

Presentation of findings on Toulmin Model argument structures in Indonesian and Korean EFL Learners' argumentative essays

The utilization of the Toulmin model in the process of determining the element resulted in the consequent outcome. The study's methodology involved selecting participants and determining their number. The elements and their respective quantities were then determined from the results and categorized by gender and nation (Indonesia and Korea). This approach was employed in order to enable a distinct comparison of the results between genders.

Table 5. Cumulative Frequency Distribution of TAP Elements for Indonesian Female Participants

| Female Participants | CLAIM | DAT A | COUN TER RG CLA IM | COUNTER ARG DATA | REBUT TAL CLAIM | REBUTT AL DATA | LEVEL |
|-----------------------|-------|----------|--------------------------------|------------------------|-----------------------|----------------------|----------|
| F-W_IDN_SMK0_009_B1_2 | 3 | 7 | 2 | 1 | 2 | 2 | 5 |
| F-W_IDN_SMK0_020_B1_2 | 3 | 7 | 4 | 4 | 0 | 0 | 2 |
| F-W_IDN_SMK0_034_B1_2 | 2 | 6 | 2 | 2 | 1 | 4 | 4 |
| F-W_IDN_SMK0_035_B1_2 | 1 | 10 | 1 | 0 | 0 | 0 | 1 |
| F-W_IDN_SMK0_090_B1_2 | 1 | 10 | 1 | 1 | 1 | 3 | 5 |
| TOTAL/AVERAGE | | | | | | | 17/5=3,4 |

The tabulated data reveals that participants '009' and '020' have a considerable number of claims, specifically three claims each, and an equivalent quantity of data, namely seven data points. Participant '009' exhibits a more uniform distribution of elements, resulting in their attainment of level 5 in the argumentation quality, equivalent to that of participant '090'. This is due to the former's presentation of an extended argument with multiple rebuttals. Participant '020' has not presented any

rebuttals. As a result, the quality level of the arguments presented by Participant '020' is at level 2. Participant '035' lacks rebuttals and presents arguments that involve a basic assertion and a counterclaim, thereby qualifying for level 1 in terms of the level of excellence in the arguments presented.

Table 6. Quality of Argumentation of Indonesian Female Participants

| Participants | LEVEL |
|-----------------------|-------|
| F-W_IDN_SMK0_009_B1_2 | 5 |
| F-W_IDN_SMK0_020_B1_2 | 2 |
| F-W_IDN_SMK0_034_B1_2 | 4 |
| F-W_IDN_SMK0_035_B1_2 | 1 |
| F-W_IDN_SMK0_090_B1_2 | 5 |

Table 7. Cumulative Frequency Distribution of TAP Elements for Indonesian Male Participants

| Male Participants | CLAIM | DATA | COUNTERARG CLAIM | COUNTERARG DATA | REBUTTAL CLAIM | REBUTTAL DATA | LEVEL |
|---------------------|-------|------|------------------|-----------------|----------------|---------------|----------|
| W_IDN_SMK0_168_B1_2 | 2 | 1 | 1 | 1 | 1 | 4 | 4 |
| W_IDN_SMK0_192_B1_2 | 1 | 5 | 1 | 4 | 1 | 2 | 3 |
| W_IDN_SMK0_196_B1_2 | 2 | 7 | 2 | 3 | 1 | 2 | 4 |
| W_IDN_SMK0_100_B1_2 | 2 | 3 | 1 | 2 | 1 | 2 | 4 |
| W_IDN_SMK0_027_B1_2 | 3 | 7 | 1 | 1 | 0 | 0 | 2 |
| TOTAL/AVERAGE | | | | | | | 17/5=3,4 |

The table indicates that solely the participant identified as '027' did not engage in rebuttal, thereby qualifying for level 2 in terms of the level of persuasiveness of the arguments presented. Within this cohort of male Indonesian participants, I have identified three individuals who presented arguments featuring a claim that was effectively countered by a clearly recognizable rebuttal. An argument consists of multiple claims and counterclaims put forth by a single participant, supported by data, occasionally accompanied by weak rebuttals. Such an argument can be classified as level 3 in terms of the level of excellence in the arguments presented.

Table 8. Quality of Argumentation of Indonesian Male Participants

| Participants | LEVEL |
|---------------------|-------|
| W_IDN_SMK0_168_B1_2 | 4 |
| W_IDN_SMK0_192_B1_2 | 3 |
| W_IDN_SMK0_196_B1_2 | 4 |
| W_IDN_SMK0_100_B1_2 | 4 |
| W_IDN_SMK0_027_B1_2 | 2 |

Table 9. Cumulative Frequency Distribution of TAP Elements for Korean Female Participants

| Female Participants | CLAIM | DATA | COUNTERARG CLAIM | COUNTERARG DATA | REBUTTAL CLAIM | REBUTTAL DATA | LEVEL |
|-----------------------|-------|------|------------------|-----------------|----------------|---------------|----------|
| F-W_KOR_SMK0_030_B1_2 | 2 | 5 | 1 | 2 | 1 | 2 | 3 |
| F-W_KOR_SMK0_035_B1_2 | 2 | 9 | 0 | 0 | 0 | 0 | 2 |
| F-W_KOR_SMK0_087_B1_2 | 3 | 4 | 1 | 5 | 0 | 0 | 2 |
| F-W_KOR_SMK0_096_B1_2 | 1 | 5 | 2 | 4 | 1 | 4 | 4 |
| F-W_KOR_SMK0_299_B1_2 | 2 | 8 | 1 | 1 | 0 | 0 | 2 |
| TOTAL/AVERAGE | | | | | | | 13/5=2.6 |

In this table, each participant possesses a substantial number of claims and data. Only participant '096' has a single claim consisting of five data points, while the remaining participants have multiple claims with a minimum of four and a maximum of nine data points. However, participants '035', '087', and '299' did not submit any rebuttal claims or data, despite holding a substantial quantity of data. As a consequence, the quality of their arguments is only at the second-lowest level. Arguments presented by contributor 096 have all the hallmarks of the Toulmin model, including a clear claim and an obvious counterargument. It's possible that several claims and contrasting points of view are included in this line of thinking. Though they have the necessary information, the counter presented by participant '030' is not strong. The person's reasoning is at the third-highest level since it consists of a chain of claims and counterclaims backed by evidence and sometimes weak rebuttals.

Table 10. Quality of Argumentation of Korean Female Participants

| Participants | LEVEL |
|-----------------------|-------|
| F-W_KOR_SMK0_030_B1_2 | 3 |
| F-W_KOR_SMK0_035_B1_2 | 2 |
| F-W_KOR_SMK0_087_B1_2 | 2 |
| F-W_KOR_SMK0_096_B1_2 | 4 |
| F-W_KOR_SMK0_299_B1_2 | 2 |

Table 11. Cumulative Frequency Distribution of TAP Elements for Korean Male Participants

| Male Participants | CLAIM | DATA | COUNTERARG CLAIM | COUNTERARG DATA | REBUTTAL CLAIM | REBUTTAL DATA | LEVEL |
|---------------------|-------|------|------------------|-----------------|----------------|---------------|----------|
| W_KOR_SMK0_024_B1_2 | 4 | 9 | 1 | 2 | 0 | 0 | 2 |
| W_KOR_SMK0_080_B1_2 | 4 | 2 | 1 | 7 | 1 | 0 | 3 |
| W_KOR_SMK0_012_B1_2 | 2 | 8 | 1 | 4 | 0 | 0 | 2 |
| W_KOR_SMK0_037_B1_2 | 2 | 6 | 2 | 9 | 1 | 3 | 4 |
| W_KOR_SMK0_052_B1_2 | 3 | 13 | 0 | 0 | 0 | 0 | 2 |
| TOTAL/AVERAGE | | | | | | | 13/5=2.6 |

The table shows that both male and female participants demonstrated the same quality of reasoning on average. The most information is available for participant '052', who has accumulated a grand total of 13 pieces of information. In addition, the participant has filed three separate claims. It's worth noting, however, that excluding

those two characteristics, these individual lacks every other Toulmin model characteristic. Participants '024' and '012' are missing rebuttal claims and rebuttal data, but have enough information on the claim, the counterargument claim, and the counterargument data to draw valid conclusions. Only participant '037' has presented an argument that features a claim with a distinct and classifiable rebuttal. The argument also presents multiple claims and counterclaims. The participant identified as '080' has presented an argumentative discourse consisting of a succession of claims and counterclaims sustained by data albeit with infrequent weak rebuttals. He does not possess any rebuttal data.

Table 12. Quality of Argumentation of Korean Male Participants

| Participants | LEVEL |
|---------------------|-------|
| W_KOR_SMK0_024_B1_2 | 2 |
| W_KOR_SMK0_080_B1_2 | 3 |
| W_KOR_SMK0_012_B1_2 | 2 |
| W_KOR_SMK0_037_B1_2 | 4 |
| W_KOR_SMK0_052_B1_2 | 2 |

Evaluation of the strengths and weaknesses of the arguments

All arguments presented are clear claims because the arguments present clear and concise claims that effectively convey the main point or position of the argument and well-supported data because the arguments given provide significant and substantial evidence to support the claims. The shreds of evidence include facts, statistics, examples, or expert opinions, demonstrating a solid foundation for the argument. For Indonesian female participants, most of the essays have a coherent structure with strong arguments and a logical structure with well-connected elements. However, in this female participant, there were two participants who did not follow the Toulmin model effectively because they did not have any rebuttals at all. In Indonesian female participants, it was found that there were no counterarguments by acknowledging opposing viewpoints and providing thoughtful and persuasive rebuttals. All Indonesian male participants have counterarguments in their writings.

The essays generated by female participants in Korea demonstrate a logical structure that is substantiated by persuasive reasoning and features interrelated elements, as evidenced by the overwhelming majority of such compositions. Notwithstanding, it is noteworthy that three of the participants failed to adhere to the Toulmin model by omitting rebuttals. Based on the results of the investigation, it was observed that all male subjects hailing from Korea who participated in the study offered a counterargument to the proposition. However, it is noteworthy that three of the male participants refrained from presenting any empirical evidence to challenge the claims posited by their adversaries.

The argument quality of participants from Indonesia and Korea was found to be comparable, although the Indonesian participants exhibited a slightly higher level of argument quality than their Korean counterparts. The results align with previous studies, providing further substantiation for the conjectures that have been posited. Despite the observed differences in methodology, sample size, and sample type, these factors did not significantly distress the overall quality of the engendered reasoning in the research.

Discussion

Interpretation of the results

Established on the available data, it can be deduced that the performance of Indonesian participants, regardless of gender, surpassed that of their Korean counterparts, regardless of gender. The aforementioned observation implies that the level of English acceptability among EFL learners in Indonesia surpasses that of their counterparts in Korea. It can be inferred from the aforementioned findings that the Korean participants possessed a higher level of knowledge regarding the rationales behind the prohibition of smoking in public spaces. At this juncture, the Indonesian participants provided copious evidence; however, they relied on counterargument claims due to the entrenched cultural acceptance of smoking among the Indonesian populace.

The present observation suggests that the utilization of the constituents of the Toulmin model is influenced by the cultural background of each respective nation (Sanger, 2020). In the event of a nationwide smoking ban and subsequent adherence by citizens, the potential for contentious debates or claims would be eliminated, as individuals would not have the opportunity to express such ideas. It is evident that the role of gender in composing this argument against smoking does not exert a substantial degree of impact. As a result of this, comprehending gender-based inequalities in language within this framework is challenging since the perspectives of both men and women, as long as they coexist within the same societal structure, are equally justified.

Implications of the findings

Findings from a research study of Toulmin's model argument structures in the argumentative essays of Indonesian and Korean EFL students highlight the value of clear teaching, the cultivation of critical thinking, the provision of targeted feedback, the use of genuine writing assignments, and the consideration of gender differences. Teachers may help students develop more coherent and convincing arguments by providing direct instruction on aspects of the Toulmin Model. Activities that foster critical thinking, such as analyzing and assessing arguments from diverse viewpoints, spotting logical fallacies, and formulating counterarguments, might aid EFL students in developing stronger argumentative writing abilities. Learners may enhance their argument writing with the support of constructive criticism on the quality of their arguments. Opinion pieces, persuasive essays, and research papers are all examples of authentic writing assignments that provide students with the prospect to pertain their knowledge to everyday circumstances and develop their ability to articulate and defend an argument with evidence.

Conclusion

The research showcases the applicability of the Toulmin Model in scrutinizing the argumentative compositions of male and female participants hailing from Indonesia and Korea with the topic under investigation pertaining to the complete prohibition of smoking in all restaurants throughout the nation. This enables a more comprehensive comprehension of how writers with varying professional experiences formulate comparable arguments. The component of argument structure has the potential to augment the comprehension of arguments among English language learners. Additionally, it can offer valuable insights into the strengths and weaknesses of the presented claims while considering the cultural norms of the participating nations.

The method that TAP uses to examine argumentative writing entails evaluating the plausibility, persuasiveness, significance, validity, and coherence of logical reasoning. The findings indicate that the persuasive power of Indonesian arguments surpasses that of Korean arguments. Indonesian participants made a number of claims and counterclaims, all of which had supporting evidence and refutations. In contrast, Korean individuals frequently articulate their arguments by positioning a claim alongside another claim, which is frequently substantiated by empirical evidence yet lacks overt contentions.

The results indicate that gender-based disparities in the acquisition of foreign languages do not have a substantial impact on the development of subsequent arguments, irrespective of gender (Hassan & Iqbal, 2023). The aforementioned statement may serve as a basis for the hypothesis that the variances in gender with regard to the acquisition of foreign languages do not exert a substantial impact on the construction of argumentative essays.

The results of the study hold significant theoretical and practical implications for teaching argumentative abilities in EFL contexts. The discernment of the constituent elements comprising the framework of an argument has the potential to enhance pedagogical strategies that prioritize the direct instruction and cultivation of critical reasoning skills. The analysis of the level of quality present in argumentative writing functions as a point of reference for the development of authentic writing tasks and the provision of targeted feedback.

The results offer novel perspectives on gender inequalities, aiding in the advancement of equitable opportunities and tailoring support for every student. In general, the investigation presented here constitutes a noteworthy advancement in the realm of argumentative writing within Asian EFL contexts. This is achieved through a comprehensive examination of argument structures, an evaluation of writing proficiency, an exploration of gender disparities, and the provision of pedagogical recommendations for instructional purposes.

Limitations and recommendations for further research

Small sample numbers and a lack of participants from different Asian nations hamper the generalizability of findings from the study of argument structures using the Toulmin Model by Asian EFL learners. It is also possible that the results don't hold up when extrapolated to other cultures or other language learning circumstances. More study is needed to examine the argumentative writing abilities of EFL students from various backgrounds, taking into account factors like prior experience, exposure to controversial texts, and pedagogical approach. The development of participants' argumentative writing abilities may be tracked over time, and promising treatments can be identified. To fully grasp the nuanced nature of argumentative writing, researchers should use mixed-methodology approaches that combine quantitative and qualitative techniques for data gathering and analysis.

Increasing students' ability to construct valid arguments in written form in EFL classrooms requires targeted interventions such as explicit instruction, scaffolded writing exercises, peer feedback, and technology-based treatments. Improving students' argumentative writing skills in EFL contexts requires more study to produce evidence-based teaching approaches and interventions.

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