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Revalidation of Grammar Attitude Scale: The Fuzzy Delphi Method Approach

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Abstract

Grammar instruction remains a contentious issue in the field of teaching and teacher education. It is generally agreed that attention to grammatical form is necessary and beneficial, but research is still needed on some teaching grammar-related issues. Because learners' mastery of grammar is the key to language proficiency, it is essential to examine teachers' attitudes towards grammar instruction, and a valid measurement instrument is required. As a result, the study sought to revalidate teachers' attitude scales regarding the teaching of grammar, as well as obtain consensus and expert opinions on the scale. The study uses the Fuzzy Delphi method with a seven-point Likert scale to collect responses from nine experts in the English Language Teaching field. The evaluation of a twenty-item questionnaire was assigned to experts. The Fuzzy Delphi technique was used for data analysis. The triangular fuzzy numbering (triangular fuzzy number) method was used to analyze the data, and the 'defuzzification' process was used to determine the position (ranking) of each variable. The response and expert consensus on the grammar teaching attitude scale are at a satisfactory level, according to the findings. The overall expert consensus agreement exceeds 75%, the overall value of the threshold (d) is 0.2, and a -cut is greater than 0.5. The elements of the priority guidelines were prioritized and refined by adding and removing items suggested by the experts. Further research is suggested for future researchers.

Keywords: Grammar, Fuzzy Delphi, Validation, Expert Agreement

Introduction

English language is the most significant second language and also the medium of instruction and communication in many non-English speaking countries. In Malaysia, English is spoken and used as a second language since the British colonial era. Additionally, it is required by the Primary School Standard Curriculum (KSSR) and the Secondary School Standard Curriculum (SSSC) (KSSM). While some students may be able to achieve functional English proficiency, the overall standard of English among learners has deteriorated over time

(Windsor, 2021). Grammar proficiency is a crucial component of language proficiency (Bikowski, 2018). Those who lack a solid understanding of grammatical concepts are incapable of expressing themselves accurately and proficiently; they typically fear making errors and have low self-esteem (Azar, 2007; Mahalingam & Embi, 2017). Poor language proficiency also affects tertiary learners in Malaysian universities, with graduates unable to express themselves accurately and fluently. To meet the demands of a demanding workforce, tertiary-level learners must be fluent in English, as it is the primary business language and the world's lingua franca today (Mahalingam & Embi, 2017). Two major reasons for the lack of mastery in English grammar are learners' apprehension towards grammar classes and the difficulty in understanding grammar tenses (Ediger, 2016).

The decline in English language proficiency in Malaysia led to the establishment of the English Language Standard and Quality Council (ELSQ) in 2013. ELSQ provides a comprehensive and holistic plan for English Language Education Reform in Malaysia, The Roadmap 2015-2025. Adopting the Common European Framework of Reference (CEFR) as a benchmark, the roadmap produces a more conclusive plan upholding an international education standard. The mechanism of reformation is based on quality practice in English language programs, quality in the delivery system and quality in the learning outcomes. To produce quality practice, a competent teaching workforce is highlighted in the reformation where three major success factors are necessary including getting the right teachers to teach, training them into effective instructors and ensuring that the education system can impart the best possible instruction for learners to be proficient users of English.

In recent years, the teaching of grammar has made its way back into language curricula, where it once belonged. Professionals in the field of language instruction currently hold the view that grammar cannot be disregarded, and that the development of learners' language skills can be severely hampered in the absence of adequate grammatical knowledge (Al Balushi, 2019). There are numerous schools of thought regarding the optimal method for teaching grammar to students. Studies are now challenging previously unchallengeable assumptions about the most effective methods for language instruction as a result of the tenacity of researchers attempting to gain a deeper understanding of language instruction**.** Today's methods for teaching the English language in classrooms are mostly based on extensive research into actual classroom behaviour. Teachers are likely to employ instructional practices that are more in line with their beliefs and theories regarding language teaching and learning due to the complexity of grammar. It is a well-known fact that language teachers combine their ideas, knowledge, and experience to form their own beliefs.

In Malaysia, where grammar has been the predominant medium of language education, the methods for teaching grammar and ideas for making it more meaningful and fruitful have become a major concern. As an illustration, when teaching grammar, some instructors prefer to use interactive teaching aids to make the instructions clearer and more interesting to the learners. Others favour immediate correction of grammar errors in language classes to emphasize the significance of correct language usage. In the same language teaching contexts, however, a minority of teachers continue to believe that grammar is an integral part of speaking, reading, and writing and that it should only be taught in reading texts, communicative dialogues, sample essays and listening practices. All of these diverse teaching perspectives lead us to the conclusion that if the attitudes of teachers are investigated, we

will find that it is easier to comprehend the function of grammar in the language teachers' minds**.**

Measuring Teachers' Attitudes towards Grammar Teaching

The term "attitude" refers to a person's course of action or behaviour and is considered to be one of the most significant concepts in the field of social psychology. Attitudes are directly related to behaviour and are subject to change throughout our lives (Yanik, 2018). Attitude is defined as the emotional and mental preparation state that has a directive or dynamic power of influence on the behaviours of the individual in response to all of the related objects and situations that are encountered as a result of experiences. A person's attitude is a part of their emotional make-up that influences the habits they've formed over the years and that leads to skewed judgement and biased choices. According to Ulgen (1995), if an object or an attitude developed in response to an object or event is positive, the decisions that are taken in response to that object or event are likely to be positive. Studies concerning teachers' attitudes towards grammar teaching are a very important issue that needs to be looked into to assist students to improve their grammar knowledge. Consequently, the need for authentic and valid measurement tools is essential. The researchers conducted a review and analysis of the existing research (see table 1) and found that there have been multiple studies conducted on the construction of measuring instruments that examine grammar attitudes. Some examples of these measuring instruments are from (Nazari & Sheikhi, 2022; Degirmencioglu, 2021; Hassan et al., 2022; Edwall, 2020; Ruiz, 2019; Al Balushi, 2019; Polat, 2017; Yavuz et al., 2015). Factor analysis (EFA) was mostly used as a validity analysis based on the findings of research conducted by researchers as well as the findings of earlier studies conducted to develop instruments for measuring attitudes towards grammar. As few studies employ expert validity analysis, the researcher will conduct validity testing using the Fuzzy Delphi method or by seeking the consensus of experts to establish validity.

Previous Studies on Teachers' Attitude Towards Grammar Teaching

Table 1

Previous work on Grammar Attitude

No	Author	Study title	Year	Analysis/methodology
1	Mostafa Nazari, Azadeh Boustani and Mohammad Sheikhi	A case study of the impact of a teacher education course on two Iranian EFL teachers' beliefs and practices about grammar teaching	2022	Exploratory Factor Analysis
2	Ümit Levent Değirmencioğlu	Grammar teaching in the 21st century: a comparative study between experienced and inexperienced turkish efl teachers' beliefs at secondary school level	2021	Exploratory Analysis (EDA)
3	Ahdi Hassan, Rusnadi Ali Kasan, Mariam Alawawda, Randa Abdou Soliman	Metalinguistic reflective beliefs of Saudi EFL teachers in the content of grammar teaching and learning: A cross-sectional survey	2022	Exploratory Analysis (EDA)
4	Nicolina Edwall	Explicit Grammar Instruction: In-Service Teacher Attitudes and Classroom Implementations	2020	Factor Analysis (EDA)
5	Luis Antonio Balderas Ruiz	Perceptions of EFL Teachers and Learners about Implicit and Explicit Grammar Instruction	2019	Factor Analysis

6	Khadija Al Balushi	The Relationship between TESOL Teachers' Attitudes towards Grammar Teaching and their Grammatical Knowledge	2019	Exploratory Factor Analysis
7	Murat Polat	Teachers' Attitudes towards Teaching English Grammar: A Scale Development Study	2017	Exploratory Factor Analysis
8	Nuriye Değirmenci Uysal and Fatih Yavuz	Pre-Service Teachers' Attitudes Towards Grammar Teaching	2015	Exploratory Factor Analysis

Methodology

Considering the consistency of factor analysis, the authors of this study opted to use the Fuzzy Delphi Method for validation. Fuzzy Delphi's usefulness in validation is significant, especially in the expert validation stage. Further, this approach is highly efficient because it relies on the knowledge of specialists to determine which items are appropriate. An expert's investigation into the topic will reveal which measuring items are reliable and which are not. Due to this, the teachers' attitudes towards the grammar scale will be validated through the Fuzzy Delphi Method in this study.

Sampling Procedure

Purposeful sampling is used in this analysis. This methodology is appropriate because the researchers seek consensus among experts on a predetermined topic. Purposeful sampling is the Fuzzy Delphi Method's most acceptable tactic, claim (Hasson, 2000). Seven experts participated in this investigation concurrently. Table 2 contains a list of the experts who have consented to participate. Based on their qualifications and area of experience, these experts were chosen. If every specialist participating in this analysis is the same, then between 5 and 10 professionals are required. The minimal number of Delphi experts varies from 10 to 15 persons when there is considerable stability (Adler & Ziglio, 1996).

Table 2
List of Experts

Expert	Field of expertise	Institution
7 Senior Lecturers	Language learning and grammar	Public university
2 Lecturers		Public university

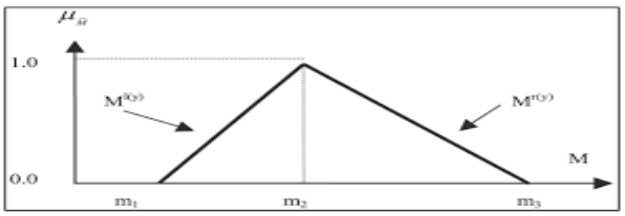
Expert Criteria

Experts, according to Booker and Mc Namara (2004), are those who have devoted their time and effort to obtaining their credentials, training, experience, professional membership, and peer recognition (Nikolopoulos, 2004; Perera et al., 2012). Cantrill et al (1996); Mullen (2003) define an expert as someone who possesses knowledge and expertise in a particular field or industry. A crucial consideration in Fuzzy Delphi studies is the use of an expert panel. Concerns such as the legitimacy, validity, and reliability of the study's findings may be raised when expert selection is done incorrectly and based on criteria (Mustapha & Darusalam, 2017). The experts engaged in the research, according to Kaynak and Macauley (1984), must represent or be knowledgeable about the topic or issue under investigation.

Fuzzy Delphi Step

Table 3

Fuzzy Delphi step

Step	Formulation
1. Expert Selection	● A total of nine experts contributed to this study. A Google Meet was convened to examine the significance of the assessment parameters on the to-be-evaluated factors using linguistic variables and definitions of potential issues with the work, etc.
2. Determining linguistic scale	● This procedure involves translating all linguistic variables into fuzzy triangle counts (triangular fuzzy numbers). In addition, fuzzy numbers will be added to the translation of linguistic variables (Hsieh et al., 2004). The notation for the Triangular Fuzzy Number, which represents the values m1, m2, and m3, is as follows: (m1, m2, m3). m1 represents the minimum possible value, m2 represents a rational value, and m3 represents the maximum possible value. While a Triangular Fuzzy Number is used to generate a Fuzzy Scale to convert linguistic variables into fuzzy numbers, a Fuzzy Scale is used to generate Triangular Fuzzy Number
	
	Figure 1: Triangular fuzzy number
3. The Determination of Linguistic Variables and Average Responses	● Once the researcher has received feedback from the designated experts, she must convert all measurement results to fuzzy scales. This is typically regarded as the acknowledgment of each response (Benitez et al., 2007).

4. The determination of threshold value "d"	● The significance of the threshold value in determining the level of agreement among experts is crucial (Thomaidis et al., 2006). Using the formula, the distances for each fuzzy integer m = (m1, m2, m3) and n = (m1, m2, m3) are calculated. $d(\bar{m},\bar{n}) = \sqrt{\frac{1}{3}[(m1-n1)^2 + (m2-n2)^2 + (m3-n3)^2]}$
5. Identify the alpha cut aggregate level of fuzzy assessment	● If an expert consensus is reached, each piece is assigned a fuzzy number (Mustapha & Darussalam, 2017). The procedure for calculating and measuring fuzzy values is as follows: (1) 4 (m1 + 2m2 + m3) Amax
6. Defuzzification process	● The formula Amax = (1) 4 (a1 + 2am + a3) is utilised in this procedure. If the researcher uses Average Fuzzy Numbers or the mean response, the resulting score is a number between 0 and 1. (Ridhuan et al., 2014). There are three formulas involved in this process: i. A = 1/3 * (m1 + m2 + m3), ii. A = 1/4 * (m1 + 2m2 + m3), and iii. A = 1/6 * (m1 + 4m2 + m3). A-cut value equals the median value for '0' and '1', where -cut equals (0 + 1) / 2 = 0.5. If the calculated A value is less than the -cutoff value of 0.5, the item will be rejected because it does not indicate expert consensus. Bojdanova (2006) suggests that the alpha cut value should exceed 0.5. The -cut value should be greater than 0.5, according to (Tang and Wu, 2010).
7. Ranking process	● The positioning process is conducted by defining elements based on defuzzification values based on the expert consensus that the element with the highest importance is the most crucial location for decision making (Fortemps & Roubens, 1996)

Instrumentation

The Fuzzy Delphi research instrument was developed by the researchers utilizing relevant literature already in existence. Based on the literature, pilot studies, and experience, researchers can create questionnaire items (Skulmowski et al., 2007). To develop questions for the Fuzzy Delphi technique, they utilized research literature, expert interviews, and focus group techniques (Mustapha & Darussalam, 2017). In addition, Okoli and Pawlowski (2004) argue that a review of relevant literature should precede the development of research items and content.

Therefore, researchers compiled the most significant elements of teachers' attitudes towards grammar teaching using published works. Using a 7-point scale, a list of expert questions is

then compiled. The 7-point scale was adopted because the greater the number of scales utilized, the more precise and flawless the results (Chen et al., 2011). To facilitate responses from professionals, the researcher replaced the fuzzy value in Table 4 with a 1–7 scale value, as shown:

Table 4
Fuzzy scale

Item	Fuzzy number
Strongly disagree	(0.0, 0.0, 0.1)
Disagree	(0.0, 0.1, 0.3)
Somewhat Disagree	(0.1, 0.3, 0.5)
Neutral	(0,3, 0.5, 0.7)
Somewhat agree	(0.5, 0.7, 0.9)
Agree	(0.7, 0.9, 1.0
Strongly agree	(0.9, 1.0, 1.0)

The List of items concerning teachers' attitudes toward grammar teaching

A literature review led the researchers to highlight the list of elements used to examine teachers' attitudes towards grammar instruction. The researchers then used the Fuzzy Delphi method to determine the validity and consensus of the experts regarding the suitability of including this aspect in this model.

Table 5
The List of items concerning teachers' attitudes toward grammar teaching

	Early item rank	The elements are based on teachers' attitudes toward grammar teaching
Teachers' attitudes towards grammar teaching	TAG1	I present grammar rules to my learners first, then I expect them to use the rules.
	TAG 2	I think teaching English grammar rules directly is more appropriate for older learners.
	TAG 3	I start my lesson with communicative tasks then I focus on grammar structures.
	TAG 4	I think grammar should be taught separately, it shouldn't be combined with other skills like writing and reading.
	TAG 5	In my view, the teachers' main responsibility in grammar lessons is to explain the rules to students.
	TAG 6	I think indirect grammar teaching is more appropriate for younger people than for older learners.
	TAG 7	I don't think that teaching grammar formally will help my students to become fluent in English.
	TAG 8	I think teachers should always correct students' spoken grammatical errors in English.
	TAG 9	It is difficult for me to correct my students' grammatical errors in a written communicative context.

	TAG 10	It is difficult for me to correct my students' grammatical errors in a spoken communicative context.
	TAG 11	Students do not use the grammatical structures they have learned when they speak or write in English.
	TAG 12	When students frequently practice the structures, their grammatical accuracy can improve.
	TAG 13	Reading grammar books can help students to improve their language.
	TAG 14	Students need to be aware of a structure's form and its function before they can use it proficiently.
	TAG 15	Students can only develop their grammatical knowledge if they participate in real-life tasks in language classrooms.
	TAG 16	Presenting grammar in a complete context will help students to learn it successfully.
	TAG 17	Comparison and contrast of individual structures are helpful for students learning grammar.
	TAG 18	Form-focused correction helps students to improve their grammatical performance
	TAG 19	Students can be encouraged to learn grammar by using problem-solving techniques.
	TAG 20	Discussing Grammatical rules explicitly is very helpful in improving students' grammatical knowledge.

Findings

This section will provide expert consensus on how teachers view grammar instruction. Fuzzy Delphi questions were presented to 9 experts in the relevant area, and the findings were collected based on their responses. The following are the findings:

Table 6
The analysis results 1

Results	Item1	Item2	Item3	Item4	Item5	Item6	Item7	Item8	Item9	Item10	Item11	Item12	Item13	Item14	Item15	Item16	Item17	Item18	Item19	Item20
Expert1	0.001	0.001	0.144	0.026	0.083	0.076	0.025	0.025	0.539	0.796	0.764	0.194	0.115	0.489	0.851	0.123	0.448	0.146	0.412	0.006
Expert2	0.001	0.001	0.144	0.026	0.083	0.076	0.025	0.025	0.539	0.796	0.764	0.194	0.115	0.489	0.851	0.123	0.448	0.146	0.412	0.006

rt	8	8	9	6		9	2	6	9	6	1	2	4	6	8	3	0	9	1	4
2	3	3	1	4		8	8	6	6	2	5	5	7	6	1	2	8	1	5	2
E	0.		0.		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		0.		0.	0.	0.
x	1	0.	0	0.	0	0	1	2	1	2	1	0	1	0	0.	0	0.	0	0	0
p	0	1	4	1	3	7	4	0	9	8	6	1	1	8	2	6	0	4	6	0
e	2	2	4	2	2	6	1	5	2	2	6	9	5	9	5	4	8	4	4	6
rt	6	8	9	8	0	9	1	2	4	2	7	2	4	8	6	1	3	9	1	4
3	4	3	1	3	8	8	3	8	5	6	9	5	7	1	6	5	4	1	5	2
E	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		0.	0.	0.		0.	0.	0.
x	1	1	0	0	1	0	1	0	1	0	1	0		0	0	0	0.	0	0	0
p	0	0	7	1	4	3	4	2	5	6	6	9		8	2	6	0	7	5	0
e	2	2	0	2	7	8	1	5	3	4	6	6		9	5	4	8	0	1	6
rt	6	6	5	8	5	4	1	6	9	1	7	2		8	6	1	3	5	3	4
4	4	4	7	3	5	9	3	6	6	5	9	3	0	1	6	5	4	7	2	2
E		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.		0.	0.	0.		0.	0.	0.
x	0.	1	1	0	0	1	1	0	0	0	1	0		0	0	0	0.	0	0	2
p	1	0	8	1	3	5	4	2	7	6	6	9		8	2	6	0	7	5	2
e	2	2	6	2	2	3	1	5	6	4	6	6		9	5	4	8	0	1	4
rt	8	6	0	8	0	9	1	6	9	1	7	2		8	6	1	3	5	3	5
5	3	4	4	3	8	6	3	6	8	5	9	3	0	1	6	5	4	7	2	3
E	0.	0.	0.	0.		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
x	0	1	0	2	0.	0	2	0	0	1	0	0	1	1	0	0	0	0	0	0
p	1	0	7	1	0	7	0	2	7	7	6	1	1	4	8	6	3	7	5	0
e	2	2	0	8	8	6	5	5	6	9	4	9	5	1	9	4	2	0	1	6
rt	8	6	5	1	3	9	2	6	9	6	1	2	4	1	8	1	0	5	3	4
6	3	4	7	1	4	8	8	6	8	2	5	5	7	3	1	5	8	7	2	2
E	0.	0.	0.		0.	0.	0.	0.	0.	0.	0.	0.		0.	0.	0.	0.	0.	0.	0.
x	2	0	1	0.	2	1	1	2	0	0	0	0		1	1	0	0	0	0	1
p	4	1	0	1	6	5	4	0	7	6	6	1		4	4	5	8	7	5	0
e	3	2	2	2	3	3	1	5	6	4	4	9		1	1	1	9	0	1	9
rt	7	8	6	8	0	9	1	2	9	1	1	2		1	1	3	8	5	3	0
7	7	3	4	3	2	6	3	8	8	5	5	5	0	3	3	2	1	7	2	6
E	0.		0.	0.		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
x	1	0.	0	0	0.	0	2	1	1	2	1	0	1	0	0	0	0	1	0	1
p	0	1	4	1	0	7	0	4	9	8	7	1	1	8	8	5	3	0	5	2
e	2	2	4	2	8	6	5	1	2	2	9	9	5	9	9	1	2	2	1	1
rt	6	8	9	8	3	9	2	1	4	2	6	2	4	8	8	3	0	6	3	8
8	4	3	1	3	4	8	8	3	5	6	2	5	7	1	1	2	8	4	2	9
E	0.	0.	0.		0.	0.		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
x	1	0	0	0.	1	0	0.	1	1	1	0	0	1	0	0	0	0	0	0	1
p	0	1	4	1	4	3	2	4	5	6	6	7	1	8	8	5	3	4	6	7
e	2	2	4	2	1	8	5	1	3	6	4	6	5	9	9	1	2	4	4	9
rt	6	8	9	8	1	4	6	1	9	7	1	9	4	8	8	3	0	9	1	6
9	4	3	1	3	3	9	6	3	6	9	5	8	7	1	1	2	8	1	5	2

Table 7
The analysis results 2

Statistics	Item1	Item2	Item3	**Item4**	Item5	Item6	Item7	Item8	**Item9**	Item10	Item11	Item12	Item13	Item14	Item15	Item16	Item17	Item18	Item19	Item20
Value of the item	0.009124	0.006843	0.007271	**0.009409**	0.10555	0.008553	0.018247	0.009124	**0.136851**	0.116251	0.111911	0.042777	0.076988	0.009979	0.009979	0.005702	0.055656	0.006273	0.005702	0.007413
Value of the construct																				0.009138
Item < 0.2	8	9	9	**8**	8	9	4	7	**9**	7	9	9	9	9	8	9	9	9	9	8
% of item < 0.2	88%	100%	100%	**88%**	88%	100%	44%	77%	**100%**	77%	100%	100%	100%	100%	88%	100%	100%	100%	100%	88%
Average of % consensus																				91
Defuzzification	0.722222	0.677778	0.822222	**0.322222**	0.755556	0.766667	0.544444	0.655556	**0.433333**	0.588889	0.588889	0.866667	0.7	0.544444	0.744444	0.811111	0.844444	0.822222	0.788889	0.688889
Ranking	9	12	3	**17**	7	6	15	13	**16**	14	14	1	10	15	8	4	2	3	5	11
Status	Accept	Accept	Accept	**Reject**	Accept	Accept	Accept	Accept	**Reject**	Accept	Accept	Accept	Accept	Accept	Accept	Accept	Accept	Accept	Accept	Accept

According to the results of the analysis, the bold threshold value exceeds the threshold value of 0.2 (> 0.2) after data processing (see table 6). In other words, there are experts whose viewpoints do not coincide or even agree on certain matters. In contrast, the average threshold value (d) for all elements on teachers' attitudes on grammar teaching impact is below 0.2, or 0.05329 (see table 7). If the average (d) value is less than 0.2, the item demonstrates a high level of consensus among experts (Cheng & Lin, 2002; Chang, Hsu & Chang, 2011). In the meantime, the total percentage of expert agreement is 91%, which is greater than (> 75%) 91%, indicating that the expert agreement requirements for this item have been met. However, two items are not accepted by the expert which are item 4 - *I think grammar should be taught separately, it should not be combined with other skills like writing and reading* and item 9 "*It is difficult for me to correct my students' grammatical errors in a written communicative context*'.

Table 8
Final results of teachers' attitudes towards grammar teaching items revalidation

Item No	Item/Construct	Previous Rank	New Rank
1	I present grammar rules to my learners first, then I expect them to use the rules.	1	9
2	I think teaching English grammar rules directly is more appropriate for older learners.	2	12
3	I start my lesson with communicative tasks then I focus on grammar structures.	3	3
5	In my view, the teachers' main responsibility in grammar lessons is to explain the rules to students.	5	7
6	I think indirect grammar teaching is more appropriate for younger people than for older learners.	6	6
7	I don't think that teaching grammar formally will help my students to become fluent in English.	7	15
8	I think teachers should always correct students' spoken grammatical errors in English.	8	13
10	It is difficult for me to correct my students' grammatical errors in a spoken communicative context.	10	14
11	Students do not use the grammatical structures they've learned when they speak or write in English.	11	14
12	When students frequently practice the structures, their grammatical accuracy can improve.	12	1
13	Reading grammar books can help students to improve their language.	13	10
14	Students need to be aware of a structure's form and its function before they can use it proficiently.	14	15
15	Students can only develop their grammatical knowledge if they participate in real-life tasks in language classrooms.	15	8
16	Presenting grammar in a complete context will help students to learn it successfully.	16	4
17	Comparison and contrast of individual structures are helpful for	17	2

	students learning grammar.		
18	Form-focused correction helps students to improve their grammatical performance	18	3
19	Students can be encouraged to learn grammar by using problem-solving techniques.	19	5
20	Discussing Grammatical rules explicitly is very helpful in improving students' grammatical knowledge.	20	11

Conclusion and Suggestion

This study aimed to revalidate a scale that measures teachers' attitudes toward grammar instruction. The Fuzzy Delphi Method was utilized to revalidate the dimensions of teachers' attitudes and produce a reliable scale. Results from the Defuzzification procedure, the threshold "d" value, and the percentage of experts who agree (consensus) indicate that all items reach consensus and are valid through the expert judgements procedure. All processes utilized in this study are consistent with the Fuzzy Delphi method. Therefore, the obtained data demonstrate that the validated items satisfy the necessary criteria. Specifically, this study contributes new information to the validation procedure. In conducting the validation process for items, the majority of researchers use factor analysis, but other methods can also be used. The variety of methods can shed new light on the world of academic writing, particularly concerning the validation procedure. However, the study's limitations include the researcher's exclusive use of Malaysian experts. Future researchers may expand the ideas from foreign experts to obtain more comprehensive data. Future research can also examine the revalidation of the students' attitude scale in grammar learning, as it is crucial to examine both teachers' and students' attitudes to enhance grammar instruction and learning.

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