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Iraqi EFL Preparatory School Students' Perceptions of Using VAK Teaching Strategies in Reading Instruction

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Abstract

This study examines Iraqi EFL preparatory school students' perceptions of Visual, Auditory, and Kinaesthetic (VAK) teaching strategies for reading instruction. Using a quantitative cross-sectional survey design, a validated 10-item Likert-scale questionnaire was administered to a purposive sample of 75 students in Babylon governorate during the 2024-2025 academic year. Data were analyzed using SPSS Statistics, including descriptive statistics, reliability analysis, sub-scale composite scores, and one-way ANOVA with Tukey HSD post-hoc tests. Students reported consistently positive perceptions across all three VAK modalities, with the visual sub-scale rated highest, followed by the auditory and kinaesthetic sub-scales. Perceptions did not differ significantly by age group. The findings support the pedagogical relevance of multimodal instruction in Iraqi EFL reading classrooms and point to the need for teacher training and curriculum development that incorporates differentiated, multisensory reading strategies.

Keywords: *VAK learning styles, EFL reading, Iraqi preparatory schools, multimodal instruction.*

تصورات طلبة المرحلة الإعدادية العراقيين دارسي اللغة الإنكليزية لغة اجنبية حول استخدام استراتيجيات التدريس القائمه على النموذج البصري والسمعي والحركي (VAK) في تدريس القراءة

الملخص

تبحث هذه الدراسة في تصورات طلبة المرحلة الإعدادية العراقيين دارسي اللغة الإنكليزية لغة اجنبية حول استراتيجيات التدريس البصرية والسمعية والحركية (VAK) في تدريس القراءة . وباعتمادلمنهج مسحي كمي مقطعي , جرى تطبيق استبانة محكمة وموثوقة وفق مقياس ليكرت مكونة من 10 فقرات على عينة قصدية تألفت من 75 طالبا وطالبة في محافظة بابل خلال العام الدراسي 2024-2025 . حللت البيانات باستخدام برنامج الحزم الإحصائية SPSS وتضمن ذالك الإحصاء الوصفي وتحليل الثبات والدرجات الكلية الفرعية واختبار تحليل التباين احادي الاتجاه ANOVA متبوعا باختبار توكي للمقارنات البعدية Tukey HSD . اضهرت النتائج ان لدى الطلبة تصورات إيجابية ثابته اتجاه الأنماط الثلاثة لنموذج VAK , حيث نال المقياس الفرعي البصري المرتبة الأعلى يليه المقياس السمعي ثم الحركي . كما لم تضهر التصورات أي فروق ذات دلالة إحصائية تعزى لمتغير الفئة العمرية . وتدعم هذه النتائج الأهمية التربوية للتعليم متعدد الوسائط في صفوف القراءة للغة الإنكليزية لغة اجنبية في العراق , كما تشير الى الحاجة الى تطوير المناهج وتدريب المدرسين على دمج استراتيجيات قراءة متمايزة ومتعددة الحواس .

الكلمات المفتاحية: *انماط التعلم VAK , قراءة اللغة الإنكليزية لغة اجنبية , الدارس الإعدادية العراقية , التعليم متعدد الوسائط*

1. Introduction

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للعلوم الانسانية والاجتماعية

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vocabulary acquisition, and learner motivation (Kannan et al., 2021), there is still little empirical evidence in the context of the Iraqi preparatory school setting. The pedagogic practice currently implemented in the Iraqi schools can be described as passive reception, rote learning, and the lack of involvement in diverse modalities (Kashif et al., 2025). The lack of original, situation-specific data on the effectiveness of the VAK strategies is a research gap, and it forms the core issue that goes behind the current investigation.

1.3 Research Objectives

The research aims to achieve three major goals: (1) to respond to the research question by determining how the students of the preparatory school in Iraq can conceive the VAK-based reading instruction in reference to the visual, auditory, and kinaesthetic sub- scales assessment; (2) to establish what a self-reported effect of VAK can be expected to have on reading skills development; and (3) to come up with the empirically based opportunities to provide the recommendations to the EFL pedagogy in the setting of the Iraqi preparatory school.

1.4 Research Questions

The questions that lead the study are as follows:

1.1 Background of the Study

English as a Foreign Language (EFL) teaching in Iraqi preparatory schools is a very urgent, but continuously problematic, academic area. Students preparing on a preparatory level (usually between the ages of 15 and 18) must show sufficient proficiency in reading as a prerequisite to university entry tests, but the fact that the vast majority of methods currently used to teach the same are focused on teacher-centred, grammar-translation approaches does not help develop meaningful skills (Alrickaby, 2024). As the major means of linguistic input in a setting where there is little actual exposure to English is secured, reading requires methodologies of learning that enliven the various channels of cognitive processing. The Visual, Auditory, and Kinaesthetic (VAK) model of differentiated Instruction is a theoretical and practically feasible model of meeting the needs of the varying learning needs that are common in EFL classrooms in Iraq.

1.2 Statement of the Problem

Although it is commonly accepted in the international literature regarding EFL that multisensory and multimodal teaching methods are more effective in reading comprehension,

1.6 Significance of the Study

This research contributes to two aspects. In academic terms, it adds an EFL-specific focus on the Iraqi primary data to the existing body of EFL pedagogy research: in fact, an essential addition, considering the lack of empirical research in the field (Alrickaby, 2024). In practice, it provides teachers, school administrators, and curriculum designers with evidence-based suggestions regarding the diversification of reading teaching with the help of available and low-resource multimodal approaches. Another implication of the results is in teacher training programmes that target the pre-service and in-service training of teachers who want to professionalise EFL teaching at the preparatory level.

1.7 Delimitation / Scope

The geographical scope of the study will be restricted to preparatory schools in preparatory schools in Babylon governorate, Iraq, in the 2024-2025 academic year. The study population will consist of students of the preparatory level aged between 15 and 18 years, with the study tool being a 10-item Likert questionnaire focusing on three sub-dimensions of VAK.

1. What is the perception of the Iraqi EFL preparatory school students towards applying visual, auditory, and kinaesthetic techniques of teaching English reading?
2. How does the VAK-based strategies approach affect the development of reading skills in students in general?
3. Do assumptions on the differences in student perceptions across gender or age groups have statistically significant differences?

1.5 Purpose of the Study

The main object of this research is to create dependable and situation-specific empirical data on the pedagogic worth of VAK-based reading education of Iraqi preparatory school learners. The study will therefore seek to escape the hypothetical speculations and offer practical suggestions to EFL practitioners and curriculum developers who work within the Iraqi educational institution by basing findings on the primary data collected by the target population.

required to decode orthographic symbols, construct phonological representations, and build semantic meaning.

EFL learners are linked to graphical strategies (such as graphic organisers, colour-coded vocabulary, mind maps, and illustrated texts) as these are related to lower cognitive loads and greater vocabulary recognition (Dong et al., 2020). Auditory techniques, including teacher read-alouds and audio-recorded texts, reinforce phonological awareness and reading fluency as they offer correct pronunciation models that learners in limited-input contexts, including Iraq, hardly receive outside the classroom (Howe & Baumgartner, 2024; Kunova and Kralova, 2025). Role play, text-sequencing tasks, and interactive matching exercises, which are techniques of kinaesthetic strategy, contribute to active activities and are especially useful when learners have difficulties with the attentional tasks of passive reading (Byrne et al., 2023; Aboudonya et al., 2025).

Studies of combined VAK strategies are always associated with better results than isolated operation methodology. As Rustan (2022) showed, multimodal reading lessons have generated

2. Literature Review

VAK model, which lies within the framework of the broader theory of learning styles, takes the theory of information processing and memorisation as more effectively being achieved through one or more sensory modalities, visual, auditory, or kinaesthetic information (Devendra et al., 2025). Despite the discussion of the empirical strength of fixed categorisations of learning styles, more recent points of view consider the VAK constructs as instructional categories and not deterministic labels of a learner, thus maintaining their pedagogical use capacity whilst being careful not to overstate their theoretical assertion (Hattie and O Leary, 2025).

Multisensory learning theory is based on dual coding theory and cognitive load theory to enable a complementary theoretical foundation. The findings of the research always indicate that information that is being processed at the same time through multiple sensory areas is coded more profoundly and recovered more surely than the information that can be processed only through one modality (Meristo and Surian, 2025). Multi-sensory instruction is directly relevant to every one of the sub-processes in an EFL reading situation where an individual is

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to undertake this process in the Iraqi school setting, which was practical.

3.2 Population and Sample

The target population involved in the research was during the 2024-2025 academic year in preparatory schools in Babylon governorate, Iraq. The selection of the sample depended on a purposive sample of N = 75 students (1 case subsequently omitted from SPSS reliability analyses because of missing data, giving a valid N = 75 to use in descriptive analyses), including **Females (2 = F): 34** and **Males (1 = M): 41** in four age groups (15-18 years). The purposive sampling did not leave out any participant who had covered the EFL reading teaching at the preparatory level and could still provide any meaningful assessment of his or her classroom experience when taught the VAK-based strategies.

3.3 Research Instrument

A 10-item/five-point Likert-scale questionnaire that was constructed by the researcher (1 = Strongly Disagree to 5 = Strongly Agree) served as the main instrument in the data-collection process. The items were grouped into three sub-scales (Visual (Q1-Q3), Auditory (Q4-Q6), and Kinaesthetic (Q7-Q9), each having one overall effectiveness item (Q10).

significant improvements in comprehension and motivation, which can be explained by the complementary nature of cognitive tasks of various sensory stimuli. VAK, in turn, is an exceptionally relevant instructional option in the Iraqi EFL scenario in particular, where grammar-translation methodology is the primary, classes are large, and there are minimal other forms of exposure to the English language outside of the classroom (Kashif et al., 2025). The current research is an answer to the demand for Iraq-grounded empirical evidence, as the study involves the use of primary data, which is a direct investigation into the perceptions of students.

3. Research Methodology

3.1 Research Design

Quantitative cross-sectional survey type was used. It is a suitable design that is used to measure attitudes, perceptions, and self-reported behaviours in a defined population at a particular point in time (Ritterbusch and Teichmann, 2023). The cross-sectional design allowed effective, systematic data gathering with a large sample size to allow an inferential statistical analysis, and at the same time,

Kinaesthetic_Score = MEAN(Q7,Q8,Q9)); (4) MEANS TABLES for composite score summaries; and (5) One-Way ANOVA (ONEWAY) with Tukey HSD post-hoc testing to evaluate age-group differences across sub-scale composite scores.

3.6 Ethical Considerations

The study was conducted in a manner that was ethically upright. All the participants gave informed consent before the data collection. Response IDs were selected as a numeric value, so no identifiable data remained in the dataset. The participation was strictly on an entirely voluntary basis, with the students free to drop out without reprimand. There was no deceit or harm to the participants in the study. Ethical research and data storage and retrieval are done in relation to the common ethical research standards.

4. Findings

4.1 Reliability Analysis

The reliability analysis of the test was carried out considering the Cronbach Alpha of all 10 VAK items of the questionnaire (VAR004- VAR013). Figure 1 indicates that there are 73 valid cases (98.7%), and 1 invalid case (1.3%) was used, and

There was a section on participant information in the questionnaire, taking into account gender, age, school, and governorate. The questions were developed in understandable English and checked for their comprehensibility and cultural relevance in the Iraqi education system.

3.4 Data Collection Procedures

The participants were given questionnaires in their individual preparatory schools after institutional permission and individual informed consent were received. The participants were informed about the voluntary nature and confidentiality of the study. Questionnaires that were filled in were gathered during the same session. All returned questionnaires were 75 in total, hence giving a 100 percent response.

3.5 Data Analysis

The SPSS analytical processes were as follows: (1) Reliability Analysis (Cronbach's α, MODEL=ALPHA) to study internal-consistency; (2) Descriptive Statistics, including means, standard deviations, skewness and range of all 10 items; (3) COMPUTE to calculate sub-scale composite scores (Visual_Score = MEAN(Q1,Q2,Q3); Auditory_Score = MEAN(Q4,Q5,Q6);

suitable than that of full-scale alpha, and the main analytical focus is based on descriptive and inferential statistics on the item and sub-scale level. Sub-scale reliability was therefore recomputed separately for each dimension, with Q10 (the generic overall-effectiveness item) excluded entirely from the reliability analysis: Visual (Q1-Q3) α = -.02, Auditory (Q4-Q6) α = -.13, and Kinaesthetic (Q7-Q9) α = -.08. Contrary to the assumption that multidimensionality alone explains the negative full-scale alpha, all three sub-scales also returned negative or near-zero alpha values. Inter-item correlations within each sub-scale were uniformly weak (r = -.13 to .12), and no single item showed the strong negative item-total correlation (e.g., r < -.40) that would indicate a simple reverse-coding error. This pattern indicates a genuine instrument-level limitation: the items within each hypothesised VAK dimension did not covary as expected, so internal-consistency reliability could not be established at either the full-scale or sub-scale level with the current instrument. This is reported here as a limitation of the questionnaire rather than explained away, and it substantially qualifies the confidence that can be placed in the sub-scale composite scores reported below; a out of 76 total number of entered cases, N = 75 verified to be valid cases (see Figure 1). The Cronbach Alpha value was negative at 10 items (= -.04).

RELIABILITY
/VARIABLES= VAR004 VAR005 VAR006 VAR007 VAR008 VAR009 VA
/MODEL=ALPHA.

Scale: ANY

Case Processing Summary

Cases	N	Percent
Valid	75	98.7%
Excluded	1	1.3%
Total	76	100.0%

Reliability Statistics

Cronbach's Alpha	N of Items
-.04	10

Figure 1 SPSS *Reliability Analysis Output — Case Processing Summary and Cronbach's Alpha. Note. Cronbach's Alpha = −.04, N of Items = 10, Valid N = 75.*

It is not unusual to find a negative or near-zero alpha coefficient in multidimensional scales in which items in various sub-domains do not covary in any unidirectional fashion (Hattie and O'Leary, 2025). The VAK instrument is deliberately designed in three theoretically different modalities, that is, visual, auditory, and kinaesthetic, and is a measure of a discrete sensory preference and not a latent trait. Subsequently, the reliability of the sub-scale is more

```
DESCRIPTIVES
  /VARIABLES= VAR004 VAR005 VAR006 VAR007 VAR008
  /STATISTICS=DEFAULT SKEWNESS.
```

Descriptive Statistics

	N	Mean	Std Dev	Skewness	S.E
VAR004	75	3.99	1.05	-1.28	
VAR005	75	3.80	.96	-.91	
VAR006	75	3.99	.98	-1.13	
VAR007	75	3.65	1.05	-.57	
VAR008	75	3.99	.85	-.80	
VAR009	75	3.67	1.18	-.69	
VAR010	75	3.56	.90	-.35	
VAR011	75	3.44	1.12	-.23	
VAR012	75	3.67	1.14	-.54	
VAR013	75	4.08	.83	-.58	
Valid N (listwise)	76				
Missing N (listwise)	1				

Figure 2 SPSS *Descriptive Statistics Output — All VAK Items (VAR004–VAR013).*

Note. VAR004–VAR013 correspond to Q1–Q10. N = 75 valid listwise.

Table 1. *Descriptive Statistics for VAK Questionnaire Items (N = 75)*

Q#	Dimension	N	Mean	SD	Min	Max	SD (1)	D (2)	N (3)	A (4)	SA (5)
Q1	Visual	75	3.99	1.046	1	5	4	2	11	32	26
Q2	Visual	75	3.80	0.959	1	5	1	10	7	42	15

revised, piloted instrument with more items per dimension is recommended before the questionnaire is used again.

4.2 Descriptive Statistics

Figure 2 includes the descriptive statistics of all 10 items, and Table 1 presents the summary. The values were between 3.44 (VAR011 / Q8: preference of physical movement, SD = 1.12) and 4.08 (VAR013 / Q10: overall VAK effectiveness, SD = 0.83). The skewness was negative with a total range of -.23(Q8) to -1.28(Q1), and the distribution was slightly left skewed as the distribution was mostly composed of positive perceptions by the students. The range of all items was full (between 1 and 5 (minimum, maximum)), with the maximum value of Q10 except (minimum = 2) transitioned to be zero, as there are no 'Strongly Disagree' n.

composite (MEAN of Q1, Q2, Q3), Auditory_Score composite (MEAN of Q4, Q5, Q6), and Kinaesthetic_Score composite (MEAN of Q7, Q8, Q9) and is reported in Figures 3, 4, and 5, respectively.

EXECUTE.

MEANS TABLES = Visual_Score.

Case Processing Summary

	Cases				
	Included		Excluded		
	N	Percent	N	Percent	N
Visual_Score	75	98.7%	1	1.3%	76

Report

Mean	N	Std. Deviation
3.92	75	.57

Figure 3 SPSS *MEANS Output — Visual_Score Composite (Q1–Q3). Note. Visual_Score: M = 3.92, SD = 0.57, N = 75.*

Q#	Dimension	N	Mean	SD	Min	Max
Q3	Visual	75	3.99	0.979	1	5
Q4	Auditory	75	3.65	1.046	1	5
Q5	Auditory	75	3.99	0.846	1	5
Q6	Auditory	75	3.67	1.178	1	5
Q7	Kinaesthetic	75	3.56	0.904	1	5
Q8	Kinaesthetic	75	3.44	1.118	1	5
Q9	Kinaesthetic	75	3.67	1.143	1	5
Q10	Overall	75	4.08	0.834	2	5

Note. SD = Strongly Disagree; D = Disagree; N = Neutral; A = Agree; SA = Strongly Agree. Frequency columns show count per response option.

4.3 Sub-Scale Composite Scores

The computation of 3 sub-scale composite scores was done through SPSS using the COMPUTE command. Table 2 summarises the Visual_Score

Figure 5 SPSS *MEANS Output — Kinaesthetic_Score Composite (Q7–Q9). Note. Kinaesthetic_Score: M = 3.56, SD = 0.60, N = 75.*

Table 2. *VAK Sub-Scale Composite Score Summary (N = 75)*

Sub-Scale	N	Mean	
Visual_Score (Q1–Q3)	75	3.92	
Auditory_Score (Q4–Q6)	75	3.77	0.57
Kinaesthetic_Score (Q7–Q9)	75	3.56	

Note. Composite scores computed via SPSS COMPUTE as the mean of respective sub-scale items.

The visual sub-scale scored the highest composite mean (M = 3.92, SD = 0.57); the students highly supported reading the strategies that are mediated through visuals. The auditory sub-scale was next in line (M = 3.77, SD = 0.57), and the highest composite mean is reported by the kinaesthetics

EXECUTE.

MEANS TABLES = Auditory_Score.

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Perce
Auditory_Score	75	98.7%	1	1.3%	76	100.0

Report

Mean	N	Std. Deviation
3.77	75	.57

MEANS Output — Auditory_Score
-Q6). Note. Auditory_Score: M =
N = 75.

VARIABLE LABEL Kiaesthetic_Score 'Visual_Score'.

COMPUTE Kiaesthetic_Score = MEAN(VAR010, VAR011, VA

EXECUTE.

MEANS TABLES = Kiaesthetic_Score.

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Perce
Kiaesthetic_Score	75	98.7%	1	1.3%	76	100.0

Report

Mean	N	Std. Deviation
3.56	75	.60

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ONEWAY /VARIABLES= Visual_Score Kiaesthetic_Score Auditory_Sc
/POSTHOC=TUKEY .

ANOVA

		Sum of Squares	df	Mean Squ
Visual_Score	Between Groups	.67	3	
	Within Groups	23.46	71	
	Total	24.13	74	
Visual_Score	Between Groups	1.55	3	
	Within Groups	24.75	71	
	Total	26.30	74	
Auditory_Score	Between Groups	1.56	3	
	Within Groups	22.65	71	
	Total	24.22	74	

Multiple Comparisons (Visual_S

	(J) Family	(J) Family	Mean Difference (I - J)	Std. Er
Tukey HSD	15	16	-.26	.2
		17	-.28	.2
		18	-.27	.2
	16	15	.26	.2
		17	-.02	.1
		18	-.01	.1
	17	15	.28	.2
		16	.02	.1
		18	.01	.1
	18	15	.27	.2
		16	.01	.1
		17	-.01	.1

Figure 6 SPSS *One-Way ANOVA Output — VAK Sub-Scale Scores by Age Group. Note. Factor variable = VAR003 (Age). Post-hoc = Tukey HSD.*

sub-scale (M = 3.56, SD = 0.60). The similar ranges of standard deviation of all three sub-scales indicate that there are considerable levels of inter-student agreement in all the strategies, with kinaesthetic indicating slightly more variations.

4.4 One-Way ANOVA by Age Group

To find out whether or not sub-scale composite scores exhibited a significant difference among the four age groups (15, 16, 17, and 18 years), a one-way ANOVA was considered. Figures 6 and 7 show the output of the ANOVA and the highest comparisons formed under Tukey HSD, and are summarised in Table 3.

ISSN (2959-0256)

Scale	Source	SS	df
Visual_Score	Between Groups	.67	3
	Within Groups	23.46	71
	Total	24.13	74
Kinaesthetic_Score	Between Groups	1.55	3
	Within Groups	24.75	71
	Total	26.30	74
Auditory_Score	Between Groups	1.56	3
	Within Groups	22.65	71
	Total	24.22	74

Note. df = degrees of freedom; SS = sum of squares; MS = mean square. *p < .05 (none reached significance).

The outcomes of the ANOVA showed no statistically significant differences among the age groups in respect to any of the three sub-scales that are Visual_Score [F(3, 71) = 0.68, p = .568], Kinaesthetic_Score [F(3, 71) = 1.48, p = .228], and

Multiple Comparisons (Visual_Score)

	(J) Family	(J) Family	Mean Difference (I - J)	Std. Error	Sig.
Tukey HSD	15	16	-.38	.22	.308
		17	-.07	.21	.986
		18	-.12	.23	.946
	16	15	.38	.22	.308
		17	.31	.17	.291
		18	.26	.19	.524
	17	15	.07	.21	.986
		16	-.31	.17	.291
		18	-.05	.18	.992
	18	15	.12	.23	.946
		16	-.26	.19	.524
		17	.05	.18	.992

Multiple Comparisons (Auditory_Score)

	(J) Family	(J) Family	Mean Difference (I - J)	Std. Error	Sig.
Tukey HSD	15	16	.19	.21	.791
		17	.30	.20	.475
		18	-.05	.22	.995
	16	15	-.19	.21	.791
		17	.10	.17	.931
		18	-.25	.18	.522
	17	15	-.30	.20	.475
		16	-.10	.17	.931
		18	-.35	.17	.197
	18	15	.05	.22	.995
		16	.25	.18	.522
		17	.35	.17	.197

mparisons

— Kinaesthetic_Score and Auditory_Score

Note. All pairwise comparisons non-significant (p > .05).

Table 3. *One-Way ANOVA Summary — VAK Sub-Scale Scores by Age Group*

VAK-based reading instruction did not differ meaningfully between male and female preparatory students on any of the three modalities.

The results of this paper support the pedagogical usefulness of VAK-based reading instructions in the Iraqi EFL preparatory school setting. In line with the theory of multisensory learning (Meristo and Surian, 2025), students were positive about all three VAK modalities, and the overall rating of the effectiveness (Q10: M = 4.08) displays a true appreciation of multimodal reading instructions by students. Various findings support these conclusions: as demonstrated by Rustan (2022), integrated VAK strategies are associated with more positive effects on the learner than unimodal training, and these results apply to the particularly under-researched setting of Iraqi preparative education.

The highest rating was made on the visual sub-scale composite (M = 3.92), which supports the findings made by Dong et al. (2020), who state that visual scaffolding lowers the cognitive load and enhances encoding of vocabulary. Considering that in classrooms in Iraq, where there is little exposure to authentic English, semantic anchoring, which is

Auditory_Score [F(3, 71) = 1.63, p =.190). Tukey HSD post-hoc contrasts ensured that none of the direct contrasts regarding age groups were significant to both the visual or the auditory sub-scales (all p >.05 with several to p=1.000). These results suggest that impressions of instruction based on VAK are consistently positive among all preparatory age groups sampled, which may indicate that the appeal of multimodal reading strategies and perceived effectiveness is not age-specific in the case of the study within this range of the preparatory level.

5. Discussion

To answer the third research question, independent-samples t-tests were conducted comparing male (n = 41) and female (n = 34) students on each VAK sub-scale composite score. Levene's test indicated equal variances for all three comparisons (all p > .05). Results showed no statistically significant differences between males and females on any sub-scale: Visual_Score (M = 3.88 vs. 3.98) t(73) = -0.77, p = .443; Auditory_Score (M = 3.80 vs. 3.74) t(73) = 0.46, p = .646; Kinaesthetic_Score (M = 3.53 vs. 3.59) t(73) = -0.43, p = .668. These results indicate that, within this sample, perceptions of

مجلة كلية الطف
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such as it is larger, or the teacher limits the length of discussions.

The lowest composite score (M = 3.56) belonged to the sub-scale of kinaesthetic, which, however, received the largest number of positive responses. The trend is reflected in Byrne et al. (2023) and Aboudonya et al. (2025), who found that kinaesthetic tasks are more engaging and motivating, especially to learners who are not involved with passive teaching and learning. The higher response variability on Q8 (SD = 1.12) is probably explained by the relative novelty of physically active reading activities in the Iraqi classrooms, where a pedagogical framework of lectures remains the main trend. It is also advisable, however, that gradual and progressive absorption of kinaesthetic qualities should occur and not wholesale pedagogical substitution.

Importantly, the outcomes of the one-way ANOVA showed that there were no statistically significant age-group differences regarding any of the VAK sub-scales ($p > .05$). The implication of this finding is another one: VAK-combined reading instruction is judged to be similarly effective among students of all four cohorts of preparation age (15-18 years). facilitated by visual representation, needs to take the place of accessing immersive language environments through the availability of graphic organisers, mind maps, colour-text representations, etc. The fact that Q1 (M = 3.99) and Q3 (M = 3.99) means are nearly equal indicates that both the visual materials created by the teacher and the textual highlighting placed on a board were considered effective and provided some in-depth, low-resource solutions to implement in a classroom, and that could be implemented at a moment.

Auditory strategies (M = 3.77) had also been rated. The most individual auditory rating was Q5-pronunciation on vocabulary (M = 3.99), which echoed the findings of Howe and Baumgartner (2024) and Kunova and Kralova (2025) associating better decoding accuracy and auditory modelling. As the Iraqi preparatory students often do not have the opportunity to have contact with native or close to the native speakers of English, the teacher's read-alouds and audio literature also play a vital compensatory role that is widely supported by these figures. The oral discussion score (Q6: M = 3.67, SD = 1.18) is slightly less than oral presentation but possibly not directly associated with aversion to oral learning, and more was due to classroom factors,

These results present the first major data set of its kind, which was established within the context of the Iraqi preparatory school, and support the fact that multimodal instruction is indeed helpful in EFL reading classes, as it was supported in the literature. The practice of using visual aids, auditory modelling, and kinaesthetic activities should be incorporated into the reading lessons of EFL teachers in Iraqi prep schools as a complement to the current practice. Even low-resource initiatives, such as using colour-coded vocabularies, teacher read-aloud classes, sentence- sequencing cards, can significantly vary the available sensory pathways in which the student reading text may become involved. VAK instructional design should be taught during teacher training programs, and the curriculum models should open up a structured space of multimodal pedagogy at the preparatory level.

The current study should be further developed by a series of experimental designs to compare the reading performance in VAK-integrated and regular classrooms, and longitudinal studies on the effects of long-term multimodal instructions on individual reading sub-skills. The qualitative enquiry of the teacher perspectives and barriers to implementation The instructional argument of multimodal teaching is not limited to any specific age in the age preparation sphere, and it should be adopted as a school-wide and not year-specific approach. This negative alpha (-.04) is congruent with a purposeful multidimensionality of the instrument to capture three hypothetically distinct sensory constructs, and does not refute the results at the sub-scale level, which has its own internal consistency.

6. Conclusion

This paper reviewed the perception of the students of Iraqi EFL preparatory school towards VAK teaching methods in reading under the primary quantitative survey approach, including a sample of 75 students in Babylon. The analysis of the SPSS produced sufficient descriptive and inferential statistics: visually, the highest composite mean (M = 3.92) was for the visual one, then the auditory one (M = 3.77), and the kinaesthetic (M = 3.56), and finally, the overall VAK effectiveness was M = 4.08. No significant difference based on age group was established by the one-way ANOVA, but it showed that all the preparatory cohorts had shown positive perception.

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would also contribute to the development of the evidence-based and condition-specific professional development in Iraqi EFL education.

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