

Indonesian Senior High School Students' Acceptance of Audiovisual Media for EFL Learning: A TAM-Based Mixed-Methods Study

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ABSTRACT

Purpose: This study examines Indonesian senior high school students' acceptance of audiovisual media for English as a Foreign Language (EFL) learning using four Technology Acceptance Model (TAM) constructs: perceived usefulness (PU), perceived ease of use (PEOU), attitude toward using (ATT), and behavioral intention (BI). **Methods:** A concurrent triangulation mixed-methods design was used with 300 Grade X and XI students from one public senior high school in Pontianak, Indonesia, selected purposively. Quantitative data were obtained from a 20-item four-point Likert questionnaire, while four open-ended questions provided contextual explanations. Descriptive statistics, hypothetical-mean categories, thematic analysis, and a joint display were used. Internal consistency was re-estimated in the main sample. **Findings:** Acceptance was generally positive: 68.3% of students were in the high category overall, with high-category proportions of 89.3% for PU, 75.7% for PEOU, 80.7% for ATT, and 70.0% for BI. Students associated audiovisual media with pronunciation, contextual vocabulary, accent exposure, and more engaging learning, while unstable internet access, advertisements, speech rate, and the need for subtitles remained practical barriers. Descriptive subgroup patterns suggested higher acceptance among students with longer and more frequent audiovisual-media experience, although no causal or inferential conclusions were drawn. **Research Implications:** Teachers and schools should integrate audiovisual media with appropriate scaffolding, accessible delivery, and stable infrastructure. **Originality:** The study contributes contextual evidence by integrating four TAM constructs with students' open-ended experiences in an Indonesian secondary-school setting and across a broad category of audiovisual media.



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INTRODUCTION

English proficiency remains a challenge for many Indonesian senior high school students despite expanding access to digital learning resources. The 2025 Academic Ability Test (Tes Kemampuan Akademik; TKA) reported a national mean score of 24.93 for Compulsory English on a 100-point scale (Kementerian Pendidikan Dasar dan Menengah Kemendikdasmen, 2025). This national figure is used only as contextual evidence of the broader instructional challenge, not as a measure of the participants in the present study. Indonesian EFL learners also face persistent difficulties in listening and speaking, including limited exposure to authentic language, accent variation, and reduced communicative confidence (Aini et al., 2025; Sah & Shah, 2020).

The Merdeka Curriculum encourages flexible, learner-centered instruction and the use of diverse digital resources (Kemendikbudristek, 2022). Within EFL learning, audiovisual media can combine spoken language with images, gestures, facial expressions, and situational context, thereby providing forms of input that written materials alone cannot offer. Previous research has reported benefits for listening, oral-language practice, motivation, and engagement (Al Jarf, 2021; Hafour, 2024; Intan et al., 2022; Kartika et al., 2023). These pedagogical benefits, however, do not automatically indicate that students perceive the technology as useful, easy to use, or worth continuing to use.

Technology acceptance is therefore an important complement to pedagogical effectiveness. The Technology Acceptance Model (TAM) identifies perceived usefulness (PU) and perceived ease of use (PEOU) as central evaluations of a technology and also includes attitude toward using (ATT) and behavioral intention (BI) (Davis, 1989). TAM has been widely applied in educational technology research (Scherer et al., 2019), but the present study uses the four constructs descriptively rather than testing a causal or structural model.

Recent EFL studies have applied TAM to particular technologies such as TikTok, TED Talks, e-books, ChatGPT, mobile listening tools, YouTube-assisted language learning, and live video-streamed instruction (Aini et al., 2025; Hsu & Lin, 2024; Liu & Ma, 2024; Mizher & Alwreikat, 2023; Rashid, 2025; Rasyid et al., 2023; Xu & Deng, 2024; Zou et al., 2025). Recent extended-TAM work is particularly relevant: Hsu and Lin (2024) found that perceived usefulness and perceived ease of use were significant antecedents of behavioral intention in mobile vocabulary-assisted listening, while Rashid (2025) reported significant PU and PEOU pathways to behavioral intention in YouTube-assisted EFL learning. This literature demonstrates the relevance of acceptance research but leaves two contextual gaps. First, many studies focus on a single platform, whereas school-based audiovisual learning commonly involves a wider set of videos, films, visually supported audio, and teacher-prepared materials. Second, Indonesian secondary-school evidence integrating PU, PEOU, ATT, and BI with students' own explanations remains limited relative to university-level and single-platform research.

A further issue is that numerical acceptance scores alone may obscure contextual constraints. Ease of use can coexist with unstable internet access, advertisements, limited data quotas, speech-rate difficulties, or dependence on subtitles, while intention to continue using media may depend on teacher guidance, device policies, and access outside school. Recent acceptance research likewise indicates that facilitating conditions and usage context can shape perceived ease and intention beyond a technology's basic functionality (Boudouaia et al., 2024; Zou et al., 2025). These contextual factors are not fully represented by the core TAM constructs (Bagozzi, 2007). A mixed-methods approach can therefore use qualitative responses to explain how students experience the conditions surrounding their quantitative evaluations.

Accordingly, this study aims to describe senior high school students' acceptance of audiovisual media for English-language learning through PU, PEOU, ATT, and BI, and to integrate these quantitative patterns with students' open-ended accounts of benefits, barriers, affective experiences, and conditions for continued use. The contribution is primarily contextual and empirical: it extends TAM-based EFL research to Indonesian secondary-school learners, treats audiovisual media as a broad instructional category rather than a single platform, and uses mixed-methods integration to connect acceptance scores with students' reported experiences.

METHOD

This study employed a concurrent triangulation mixed-methods design (Creswell & Creswell, 2018). Quantitative and qualitative data were collected during the same period, analyzed separately, and integrated at the interpretation stage through a joint display (Fetters et al., 2013). The quantitative strand mapped acceptance across PU, PEOU, ATT, and BI, while the open-ended responses provided contextual explanations of benefits, barriers, affective experiences, and conditions surrounding continued use. The design was descriptive-exploratory and did not test causal pathways among TAM constructs.

The study was conducted during the 2025/2026 academic year at one public senior high school in Pontianak, West Kalimantan. The analytical sample comprised 300 Grade X and XI students selected purposively because the research required respondents with prior experience of audiovisual media in learning. Purposive sampling was retained consistently throughout the revised manuscript; no probabilistic margin of error or population-level statistical generalization is claimed. The school identity is withheld to protect institutional and participant confidentiality.

The inclusion criteria were active Grade X or XI enrollment, prior experience using audiovisual media for learning, access to a device capable of playing audiovisual content, and voluntary participation. Grade XII students were not included because of their final-examination preparation. The final dataset contained 300 complete quantitative responses and corresponding open-ended responses used for the integrated analysis.

The quantitative instrument was a TAM questionnaire adapted from Davis (1989) and contextualized for audiovisual media in English-language learning. It comprised 20 items on a four-point Likert scale (1 = Strongly Disagree, 2 = Disagree, 3 = Agree, 4 = Strongly Agree): five PU items, six PEOU items, five ATT items, and four BI items. A four-point scale was used to reduce midpoint responding (Chyung et al., 2017). Table 1 summarizes the operational definitions, indicators, and item distribution.

Table 1. Operationalization of TAM Constructs and the Research Instrument

Construct	Operational definition	Main indicators	Items
Perceived Usefulness (PU)	Students' belief that audiovisual media support English language learning.	Content comprehension; vocabulary; pronunciation; accent comprehension; improvement in English proficiency.	1-5
Perceived Ease of Use (PEOU)	Students' belief that audiovisual media are easy to access and use without excessive effort.	Device access; platform operation; media searching; ease of use for learning.	6-11
Attitude Toward Using (ATT)	Students' affective evaluation of the use of audiovisual media in learning.	Enjoyment; interest; reduced boredom; enthusiasm; positive perceptions.	12-16
Behavioral Intention (BI)	Students' tendency to continue using audiovisual media in the future.	Reuse; recommendation; independent searching; regular use.	17-20

Source: Adapted from Davis (1989) and contextualized for audiovisual media.

Four open-ended questions accompanied the closed-ended questionnaire. They asked students to describe the usefulness of audiovisual media, how they used it and the barriers they experienced, memorable learning experiences, and whether audiovisual media could be reused in English or other subjects together with suggestions for implementation. The qualitative strand was designed to contextualize the quantitative results rather than to function as a stand-alone interview study or to claim thematic saturation.

Before the main study, the instrument was piloted with 30 students who were not included in the analytical sample. The pilot was used as a preliminary check of item functioning and internal consistency. Because a pilot of 30 respondents is limited for establishing construct validity, internal consistency was re-estimated using the full analytical sample (N = 300). In the main sample, Cronbach's alpha was 0.800 for PU, 0.811 for PEOU, 0.855 for ATT, and 0.716 for BI, with an overall alpha of 0.922 (Table 2). These estimates support internal consistency but do not constitute confirmatory evidence of the four-factor measurement structure; formal CFA was not conducted and is acknowledged as a limitation.

Table 2. Internal Consistency of the TAM Instrument in the Pilot and Main Samples

Construct	Items	Pilot α (n = 30)	Main-sample α (N = 300)	Interpretation
Perceived Usefulness (PU)	5	0.757	0.800	Acceptable in main sample
Perceived Ease of Use (PEOU)	6	0.751	0.811	Good in main sample
Attitude Toward Using (ATT)	5	0.741	0.855	Good in main sample
Behavioral Intention (BI)	4	0.643	0.716	Marginal pilot; acceptable main sample
Total instrument	20	0.889	0.922	Excellent overall consistency

Note: Cronbach's alpha was recalculated from the supplied pilot (n = 30) and main-study datasets (N = 300). Pilot estimates are treated as preliminary because of the small pilot sample.

Data were collected after institutional permission and an explanation of the study purpose, voluntary participation, confidentiality, and the right to discontinue participation. Closed-ended and open-ended responses were completed in the same data-collection session. The analytical dataset was checked for completeness and response consistency. Results are reported in aggregate form, and qualitative excerpts are identified only by respondent number, gender, and class to avoid disclosure of personal identities.

Quantitative data were analyzed using frequency, percentage, minimum, maximum, mean, and standard deviation. Scores were also classified into low, moderate, and high categories using Azwar's (2022) hypothetical-mean approach, with $M = (\text{maximum theoretical score} + \text{minimum theoretical score})/2$ and $SD = (\text{maximum theoretical score} - \text{minimum theoretical score})/6$. Because categorical cut-offs can simplify continuous score variation, means and standard deviations remain the primary descriptive statistics, while the categories are used only as an interpretive aid. Descriptive patterns across gender, grade, prior experience, and frequency of audiovisual-media use were also examined without inferential testing.

Category boundaries followed $X < M - 1SD$; $M - 1SD \leq X < M + 1SD$; and $X \geq M + 1SD$, with non-overlapping operational ranges shown in Table 3. The procedure is descriptive and is not used to infer relationships among TAM constructs.

Table 3. Categorization of Total and TAM Construct Scores

Score/construct	Theoretical range	Low	Moderate	High
Total (20 items)	20-80	20-39	40-59	60-80
PU (5 items)	5-20	5-9	10-14	15-20
PEOU (6 items)	6-24	6-11	12-17	18-24
ATT (5 items)	5-20	5-9	10-14	15-20
BI (4 items)	4-16	4-7	8-11	12-16

Source: Hypothetical-mean categorization based on Azwar (2022).

Open-ended responses were analyzed thematically using Braun and Clarke's (2006) six-phase process: familiarization, initial coding, searching for themes, reviewing themes, defining and naming themes, and reporting. The four TAM constructs provided an initial deductive frame, while recurring contextual issues such as connectivity, advertisements, speech rate, subtitles, and teacher guidance were retained inductively. Themes were used to explain quantitative patterns rather than to estimate population prevalence.

Mixed-methods integration occurred through a joint display that compared quantitative construct patterns with recurring themes and source-linked respondent excerpts (Fetters et al., 2013). Credibility was supported by methodological triangulation between the closed-ended and open-ended strands and by checking reported excerpts against the source responses. A formal intercoder-agreement coefficient was not available; therefore, the qualitative findings are interpreted as explanatory contextual evidence rather than as an independently validated qualitative model.

RESULTS

The analytical sample comprised 300 Grade X and XI students. Table 4 presents the respondent characteristics as recalculated from the supplied main-study dataset. Grade X students constituted the majority of the sample (81.3%), and 63.7% of respondents were female. Experience and usage frequency varied, providing a basis for descriptive subgroup interpretation without implying population representativeness.

Table 4. Respondent Characteristics (N = 300)

Characteristic	Category	Frequency (n)	Percentage (%)
Gender	Male	109	36.3
	Female	191	63.7
Grade	X	244	81.3
	XI	56	18.7
Experience using audiovisual media	< 6 months	113	37.7
	6-12 months	93	31.0
	> 12 months	94	31.3
Frequency of audiovisual-media use	Rarely	110	36.7
	1-2 times/week	89	29.7
	3-5 times/week	37	12.3
	Every day	64	21.3

Source: Primary data processed by the researchers (2026).

Descriptive statistics for the TAM constructs

Descriptive statistics indicate that scores for all four constructs were concentrated in the middle-to-upper portions of their theoretical ranges (Table 5). PU had a mean of 16.20 (SD = 1.884), PEOU 18.54 (SD = 2.207), ATT 15.52 (SD = 2.081), and BI 11.98 (SD = 1.592); the total score averaged 62.24 (SD = 6.590). When interpreted per item to account for unequal construct lengths, PU remained the highest-rated construct (M/item = 3.24), followed by ATT (3.10), PEOU (3.09), and BI (3.00). PEOU showed the largest raw-score variability, indicating more heterogeneous experiences of ease of use.

Table 5. Descriptive Statistics for TAM Construct Scores (N = 300)

Variable	Min	Max	Mean (M)	SD
Perceived Usefulness (PU)	13.00	20.00	16.20	1.884
Perceived Ease of Use (PEOU)	12.00	24.00	18.54	2.207
Attitude Toward Using (ATT)	11.00	20.00	15.52	2.081
Behavioral Intention (BI)	8.00	16.00	11.98	1.592
Overall total	47.00	80.00	62.24	6.590

Source: SPSS v.26 output; primary data processed by the researchers (2026).

Distribution of student acceptance categories

Using the hypothetical-mean thresholds in Table 3, the high category predominated across all constructs (Table 6). The high-category proportions were 89.3% for PU, 80.7% for ATT, 75.7% for PEOU, and 70.0% for BI; 68.3% of respondents were in the high category for the total score. Recalculation from the raw data showed no respondents in the low category for any construct because the empirical minimum scores for PEOU (12) and BI (8) were already within the moderate ranges. Descriptive subgroup patterns were small for gender (total M = 62.20 for females and 62.32 for males) and grade (62.12 for Grade X and 62.79 for Grade XI), but more visible across experience and frequency. Students with more than 12 months of audiovisual-media experience had a higher total mean (64.18) than those with less than six months (60.48), while students reporting daily use (64.84) or 3-5 uses per week (65.46) had higher total means than those reporting rare use (60.03). These differences are descriptive and should not be interpreted as causal effects or inferential group differences.

Table 6. Distribution of Student Response Categories by TAM Construct and Total Score (N = 300)

Construct	Low n (%)	Moderate n (%)	High n (%)	M (SD)
PU	0 (0.0)	32 (10.7)	268 (89.3)	16.20 (1.884)
PEOU	0 (0.0)	73 (24.3)	227 (75.7)	18.54 (2.207)
ATT	0 (0.0)	58 (19.3)	242 (80.7)	15.52 (2.081)
BI	0 (0.0)	90 (30.0)	210 (70.0)	11.98 (1.592)
Total	0 (0.0)	95 (31.7)	205 (68.3)	62.24 (6.590)

Source: Primary data processed by the researchers (2026); categorization based on Azwar's (2022) hypothetical-mean norms.

Integration of quantitative and qualitative findings

To illustrate the relationship between numerical patterns and students' reported experiences, the quantitative and qualitative findings were juxtaposed in a joint display (Table 7), following the principles of mixed-methods integration (Fetters et al., 2013). Qualitative themes are presented as recurring patterns identified in the open-ended responses. The qualitative data are used to explain and contextualize construct scores rather than to estimate the prevalence of themes in the student population.

Table 7. Joint Display of Quantitative and Qualitative Findings Across the Four TAM Constructs

TAM	Quantitative findings	Qualitative themes	Integrated interpretation
PU	89.3% in the high category; M = 16.20 (SD = 1.884).	Recurring benefits included pronunciation practice, contextual vocabulary, listening support, and exposure to accent and intonation.	The open-ended responses clarify what students meant by usefulness while avoiding claims about measured learning gains.
PEOU	75.7% in the high category; M = 18.54 (SD = 2.207).	Students described mobile/video access as practical but also reported unstable internet, advertisements, speech-rate difficulty, accent variation, and reliance on subtitles.	High PEOU coexisted with concrete access and comprehension barriers, indicating that operational ease does not eliminate contextual friction.
ATT	80.7% in the high category; M = 15.52 (SD = 2.081).	Students frequently described audiovisual learning as enjoyable, lively, interactive, and less monotonous, particularly when films, songs, or embedded activities were used.	The qualitative accounts are consistent with positive ATT scores but do not demonstrate improved English achievement.
BI	70.0% in the high category; M = 11.98 (SD = 1.592).	Students generally considered audiovisual media reusable in English and other subjects; suggestions emphasized concise content, teacher explanation, subtitles or key points, and reliable access.	The qualitative responses identify conditions that may support continued use, but the fourth open-ended question did not independently measure personal behavioral intention.

Source: Primary data processed by the researchers (2026). Integration follows the joint-display principles of Fetters et al. (2013).

For PU, the qualitative responses consistently connected usefulness with simultaneous access to sound and visual context. Respondent 3 (Female, Grade X9) explained that audiovisual media made English easier to understand because students could hear pronunciation while seeing the situations in which language was used; she also described vocabulary as easier to understand through contextual examples. Respondent 64 (Male, Grade XI Teknik 1) similarly

associated audiovisual media with listening practice and clearer understanding of pronunciation. These responses explain the high PU pattern without implying that proficiency gains were directly measured.

For PEOU, students described both practical access and recurring barriers. Respondent 1 (Female, Grade X6) reported using videos and then practicing the content but identified advertisements as a recurring disruption. Respondent 64 (Male, Grade XI Teknik 1) reported unstable internet, unclear audio, and difficulty understanding native-speaker accents, while Respondent 65 (Female, Grade XI Teknik 1) noted that rapid speech could make videos difficult to follow. Thus, relatively high PEOU scores did not mean that students experienced barrier-free use.

For ATT, students often associated audiovisual learning with enjoyment and reduced monotony. Respondent 64 (Male, Grade XI Teknik 1) described learning vocabulary and listening through subtitled English films as enjoyable, while Respondent 100 (Female, Grade XI Teknik 2) highlighted a video containing an embedded quiz as especially engaging because it felt like learning and playing simultaneously. These accounts help explain the positive affective evaluations reflected in ATT, but they are not evidence of improved academic performance.

For BI, the quantitative scale showed that 70.0% of respondents were in the high category. The fourth open-ended question was broader than the BI scale because it asked about reuse in English and other subjects and requested implementation suggestions. Respondent 65 (Female, Grade XI Teknik 1) considered reuse appropriate but emphasized the continued need for teacher explanation, whereas Respondent 100 (Female, Grade XI Teknik 2) recommended shorter videos with text or key points to sustain attention. These responses provide contextual conditions for continued use rather than a separate qualitative test of behavioral intention.

DISCUSSION

The findings show broadly positive acceptance of audiovisual media, with PU emerging as the most consistently positive construct and BI as the comparatively least positive. This pattern is better understood as a profile of students' evaluations than as a validation of TAM pathways. TAM is useful here because it separates perceived learning value, ease of use, affective response, and intention, while the open-ended responses reveal the conditions surrounding each evaluation (Scherer et al., 2019).

The results extend earlier EFL technology-acceptance research from specific platforms to a broader category of audiovisual media. Positive acceptance is broadly consistent with studies of TED Talks, TikTok, e-books, ChatGPT, mobile listening tools, YouTube-assisted language learning, and live video-streamed instruction (Aini et al., 2025; Hsu & Lin, 2024; Liu & Ma, 2024; Mizher & Alwreikat, 2023; Rashid, 2025; Rasyid et al., 2023; Xu & Deng, 2024; Zou et al., 2025). Direct comparison of percentages is inappropriate because instruments, participants, technologies, and analytical procedures differ; the contribution of the present study is instead to show how acceptance operates in a secondary-school setting where students encounter multiple audiovisual formats and varying access conditions.

Perceived usefulness as the strongest dimension of acceptance

PU was the clearest dimension of acceptance, and the qualitative data show why: students repeatedly connected audiovisual media with pronunciation, contextual vocabulary, listening, accent exposure, and the ability to infer meaning from visual situations. These mechanisms are compatible with the Cognitive Theory of Multimedia Learning, which proposes that meaningful learning can be supported when relevant verbal and visual information is coordinated without overloading processing capacity (Mayer, 2009, 2024). Recent EFL evidence also indicates that multimedia input can provide prosodic and kinesic cues that support listening comprehension (Shamsi & Bozorgian, 2024), while immersive video environments can attract learners to self-directed English learning (Boudouaia et al., 2024). In an EFL context with limited exposure to authentic spoken English, audiovisual cues can therefore make language use more concrete and contextualized (Cahyono & Widiati, 2009).

The PU pattern is also consistent with evidence that interactive digital media can support oral-language practice and learner confidence (Hafour, 2024) and with TAM-based EFL research emphasizing perceived usefulness across mobile listening, ChatGPT-supported speaking, and YouTube-assisted language learning (Hsu & Lin, 2024; Liu & Ma, 2024; Rashid, 2025; Zou et al., 2025). However, perceived usefulness should not be equated with demonstrated learning effectiveness. The present study measured students' evaluations, not pretest-posttest gains, course performance, or experimentally observed improvement.

Ease of use and positive attitudes do not eliminate contextual barriers

PEOU was positive overall but more variable than the other constructs. The qualitative responses explain this apparent tension: students could find videos and mobile access operationally simple while still facing buffering, advertisements, unclear audio, unfamiliar accents, rapid speech, and subtitle dependence. Ease of use is therefore layered rather than binary. A medium can be technically accessible while remaining cognitively or infrastructurally demanding. This interpretation is consistent with recent extended-TAM evidence showing that facilitating conditions can influence

perceived ease of use (Zou et al., 2025) and with research on video-based self-directed English learning in which behavioral uptake depends on learner and contextual conditions (Boudouaia et al., 2024). It also illustrates Bagozzi's (2007) critique that technology acceptance is shaped by conditions beyond the core TAM constructs.

ATT was also strongly positive, with students describing audiovisual learning as more enjoyable, lively, and interactive than text-only instruction. The mechanism suggested by the open-ended responses is not merely entertainment: films, songs, visual cues, and embedded quizzes can increase situational interest and provide concrete language contexts. At the same time, some respondents emphasized that videos still require teacher explanation and appropriate duration. Positive affect therefore appears to depend partly on instructional design rather than on the presence of audiovisual media alone.

The ATT-BI pattern: a descriptive gap, not a causal pathway

The 10.7-percentage-point difference between the high ATT and high BI categories is a descriptive gap, not evidence that attitude determines behavioral intention. A plausible contextual interpretation is that enjoying audiovisual learning does not remove the practical costs of regular use. Students may value a medium yet hesitate to use it continuously when internet quality, data access, speech difficulty, or the need for teacher support increases the effort required. Recent inferential TAM studies have tested pathways to BI in mobile listening and YouTube-assisted EFL contexts (Hsu & Lin, 2024; Rashid, 2025), but the present descriptive design does not estimate comparable pathways. Testing whether the reported conditions statistically explain BI would require individual-level inferential models such as regression or SEM.

The subgroup patterns add a second contextual layer. Total acceptance means were higher among students with more than 12 months of experience than among those with less than six months of experience, and were also higher among daily or 3-5-times-per-week users than among rare users. These patterns are compatible with the possibility that familiarity and repeated exposure reduce uncertainty and increase perceived value, but the cross-sectional purposive design cannot determine direction: more accepting students may simply choose to use audiovisual media more often. Future studies could test this reciprocal possibility longitudinally.

Contribution and positioning relative to previous studies

The study's novelty is therefore contextual and integrative rather than a claim of theoretical extension to TAM itself. It combines an Indonesian senior high school population, a broad audiovisual-media category, simultaneous description of PU, PEOU, ATT, and BI, and open-ended contextual evidence within one mixed-methods design. This positioning differs from work centered on a single platform and helps clarify how acceptance can remain positive while access, comprehension, and instructional-support constraints persist.

Table 8. Positioning of the Present Study Relative to TAM Studies in English Language Learning

Study	Participants/context	Technology	Approach	Position relative to the present study
Aini et al. (2025)	Indonesian university students	TED Talks	Quantitative; focus on perceived usefulness	Demonstrates positive acceptance of a specific audiovisual platform.
Rasyid et al. (2023)	Indonesian students	TikTok	Mixed methods; specific platform	Explains acceptance of TikTok-based English-language content.
Xu & Deng (2024)	Secondary-school students in China	Live video-streamed teaching	Quantitative/TAM	Demonstrates the relevance of the secondary-school context, although within a different educational system and culture.
Hsu & Lin (2024)	EFL university students in Taiwan	Mobile vocabulary-assisted listening	Extended TAM; PLS-SEM	Shows inferential PU/PEOU-BI relationships in a specific mobile-listening context; the present study remains descriptive and broader in media scope.

Study	Participants/context	Technology	Approach	Position relative to the present study
Rashid (2025)	University EFL students	YouTube-assisted language learning	TAM + TPB; PLS-SEM	Provides recent TAM evidence for a major audiovisual platform; the present study examines multiple audiovisual formats in secondary school.
Present study	Indonesian senior high school students	Audiovisual media broadly defined	Mixed methods; descriptive PU, PEOU, ATT, and BI	Maps acceptance and the context of students' experiences across audiovisual-media formats without testing causal TAM pathways.

Source: Synthesized from Aini et al. (2025), Hsu and Lin (2024), Rashid (2025), Rasyid et al. (2023), Xu and Deng (2024), and the findings of the present study.

Xu and Deng (2024) demonstrated that technology acceptance among secondary-school students should be understood in relation to learning context and environmental support. Related recent research also suggests that facilitating conditions, self-regulatory factors, and the design of particular audiovisual technologies can shape intentions and use (Boudouaia et al., 2024; Zou et al., 2025). In the present study, the Merdeka Curriculum provides policy relevance because English language learning encourages the use of audiovisual and multimodal texts (Kemendikbudristek, 2022). However, this study did not test curriculum policy as a moderating variable. The curriculum is used as an institutional context that helps explain why research on audiovisual-media acceptance is important at the Indonesian senior high school level.

Pedagogical and institutional implications

The findings support structured rather than merely frequent use of audiovisual media. Teachers should select clips that match learning objectives and proficiency levels, segment lengthy materials, and connect viewing to follow-up language activities. Multimedia-design principles favor relevant and manageable verbal-visual input rather than excessive information (Mayer, 2009, 2024).

Students' reports of speech-rate difficulty, unfamiliar accents, and subtitle dependence indicate a need for scaffolding through subtitles, transcripts, pre-teaching of key vocabulary, repeated viewing, or pre-viewing context. This recommendation is compatible with recent multimedia-listening research showing that learners benefit from strategic support when processing authentic multimedia input (Shamsi & Bozorgian, 2024). Connectivity and data constraints also support the use of low-bandwidth or offline options where possible. These recommendations are grounded in reported experiences and should be tested directly in future intervention research.

At the institutional level, audiovisual integration should be treated as an instructional practice rather than simply as device provision. Schools can support stable access, minimize platform disruptions where feasible, and help teachers design activities before, during, and after viewing. Such support is consistent with the Merdeka Curriculum's emphasis on diverse digital learning resources, although the present study did not evaluate curriculum policy effectiveness.

Limits of interpretation

Five limitations should guide interpretation. First, the purposive sample came from one school, so the results are context-specific and not statistically generalizable to all Indonesian senior high school students. Second, the data are self-reported and do not measure actual media use. Third, the study did not conduct CFA or test structural relationships among TAM constructs; the constructs were used descriptively, and internal consistency should not be interpreted as full construct validation. Fourth, the qualitative strand relied on four open-ended questionnaire questions and no formal intercoder-agreement coefficient was available, limiting qualitative depth relative to interview-based designs. Fifth, English-learning outcomes were not directly measured. Future research should use multisite samples, stronger measurement validation, longitudinal or experimental designs, observed-use indicators, and inferential models when testing relationships among acceptance constructs and learning outcomes.

CONCLUSION

This study found generally positive acceptance of audiovisual media for EFL learning among 300 students in the school context examined. PU showed the most consistently positive pattern, while BI was comparatively lower. Students associated audiovisual media with pronunciation, contextual vocabulary, listening, accent exposure, and more engaging learning, but also reported unstable connectivity, advertisements, rapid speech, accent difficulty, and reliance on subtitles. These findings show that positive acceptance can coexist with practical and instructional barriers.

The study makes three bounded contributions. Empirically, it provides secondary-school evidence on PU, PEOU, ATT, and BI across a broad category of audiovisual media and identifies descriptive variation associated with prior experience and usage frequency. Methodologically, it integrates questionnaire patterns with open-ended contextual evidence while explicitly avoiding causal interpretation. Practically, it indicates that audiovisual media are most likely to be useful when teachers provide scaffolding, select appropriately paced and focused materials, and account for students' access conditions. The contribution is contextual rather than a structural extension or validation of TAM.

Future research should involve multiple schools, test the measurement structure of the adapted TAM instrument, examine actual rather than self-reported use, and apply longitudinal, experimental, or SEM-based approaches when the objective is to evaluate causal pathways or links with English-language achievement. Interview or focus-group data and formal intercoder procedures would also strengthen the qualitative strand.

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AUTHOR CONTRIBUTION STATEMENT

RA: conceptualization, methodology, investigation, data curation, formal analysis, and writing-original draft. VK: supervision, methodology, validation, and writing-review and editing. DT: methodology, validation, and writing-review and editing. AU: supervision, conceptualization, and writing-review and editing. HT: validation and writing-review and editing. AA: conceptualization and writing-review and editing. All authors reviewed and approved the final version of the manuscript and are accountable for the integrity of the work

AI DISCLOSURE STATEMENT

The authors used ChatGPT (OpenAI) for language refinement, structural editing, and formatting support during manuscript revision. The authors reviewed and verified the revised text and remain responsible for the final content. The AI tool was not used to generate or alter the primary research data or to replace the authors' responsibility for interpretation and reporting.

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