

Academic Quality, Evidence & Citation Audit Report

*Use of artificial-intelligence tools and learning motivation among
undergraduate students: a quantitative survey study*

A transparent review of your paper: how its sources were verified, what the evidence supports,
and what to strengthen before you submit.

Generated on: 2026-06-27

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At a glance

This report summarizes the automated quality and source review of your work. It is a guidance document for you — not a grade, and not a substitute for your own academic judgement.

Draft writing quality: 85/100

Structure, clarity and academic style of the draft (0–100).

Submission readiness: Moderate — targeted strengthening recommended

8/9 sources verified · 8/9 with evidence extracted · claim-support assessed for 5/9

Requirements met: 4/5

Source Registry

Every source your paper relies on, numbered S1...Sn. The rest of this report refers to these IDs instead of repeating full references.

ID	Reference (APA)	DOI	Verified?	Evidence extracted?	Claim support
S1	Kheder, K. (2025). Using artificial intelligence in learning vocabulary by EFL undergraduate Syrian students. <i>Advances in Computational Intelligence and Robotics</i> , 131–158. https://doi.org/10.4018/979-8-3693-9511-0.ch005	10.4018/979-8-3693-9511-0.ch005	No	Yes	Not assessed

ID	Reference (APA)	DOI	Verified?	Evidence extracted?	Claim support
S2	Molla, N. L. (2025). An exploration of undergraduate students' perceptions of AI-assisted English learning tools. <i>English Review: Journal of English Education</i> , 13(3), 955–964. https://doi.org/10.25134/tfjkxv57	10.25134/tfjkxv57	Yes	Yes	Not assessed
S3	Prandner, D. (2025). What do students use AI tools for? Assessing students' use of AI tools in three typical study related scenarios. 11th International Conference on Higher Education Advances (HEAd'25). https://doi.org/10.4995/head25.2025.20179	10.4995/head25.2025.20179	Yes	Yes	Supports
S4	Shao, S. (2025). The role of AI tools on EFL students' motivation, self-efficacy, and anxiety: Through the lens of control-value theory. <i>Learning and Motivation</i> , 91, 102154. https://doi.org/10.1016/j.lmot.2025.102154	10.1016/j.lmot.2025.102154	Yes	No	Not assessed

ID	Reference (APA)	DOI	Verified?	Evidence extracted?	Claim support
S5	Alkandari, H. (2025). Students' learning in the time of Artificial Intelligence (AI): Students' perceptions of using AI tools to improve their language learning in Kuwait. <i>Educational Process International Journal</i> , 15(1). https://doi.org/10.22521/edupij.2025.15.154	10.22521/edupij.2025.15.154	Yes	Yes	Not assessed
S6	Alsswey, A. (2025). Examining students' perspectives on the use of artificial intelligence tools in higher education: A case study on AI tools of graphic design. <i>Acta Psychologica</i> , 258, 105190. https://doi.org/10.1016/j.actpsy.2025.105190	10.1016/j.actpsy.2025.105190	Yes	Yes	Supports
S7	Dong, Y. (2025). Factors influencing the use of AI tools among undergraduate students in the UK: Differences by year of study and subject area. <i>American Journal of Student Research</i> , 849–858. https://doi.org/10.70251/hyjr2348.35849858	10.70251/hyjr2348.35849858	Yes	Yes	Supports

ID	Reference (APA)	DOI	Verified?	Evidence extracted?	Claim support
S8	An empirical study of AI-generated text detection tools. (2023). An empirical study of AI-generated text detection tools. Advances in Machine Learning & Artificial Intelligence, 4(2). https://doi.org/10.33140/amlai.04.02.03	10.33140/amlai.04.02.03	Yes	Yes	Supports
S9	Khanduri, V., & Teotia, D. A. (2023). Revolutionizing learning: An exploratory study on the impact of technology-enhanced learning using digital learning platforms and AI tools on the study habits of university students through focus group discussions. International Journal of Research Publication and Reviews, 4(6), 663–672. https://doi.org/10.55248/gengpi.4.623.44407	10.55248/gengpi.4.623.44407	Yes	Yes	Supports

Source & Citation Audit

What we checked automatically. These are three different things and we keep them separate: whether the source exists (verified), whether we could extract what it says (evidence), and whether it backs the specific claim it is cited for (claim support).

8/9 verified · 8/9 with evidence extracted · 5/5 assessed claims directly supported

Verification via Crossref confirms a source exists — it does NOT confirm the source supports the sentence it is cited for. Review each in-text citation yourself before submitting.

ID	Status	DOI verified	Claim support	Confidence	Action
S1	Mismatch	Yes	Not assessed	—	Verify manually
S2	Verified	Yes	Not assessed	—	Verify manually
S3	Verified	Yes	Supports	0.95	Keep
S4	Verified	Yes	Not assessed	—	Verify manually
S5	Verified	Yes	Not assessed	—	Verify manually
S6	Verified	Yes	Supports	1.00	Keep
S7	Verified	Yes	Supports	0.95	Keep
S8	Verified	Yes	Supports	1.00	Keep
S9	Verified	Yes	Supports	0.95	Keep

Evidence Table

What each source actually says, and how strongly it supports the claim it is used for. Sources we could not extract evidence from are still listed so nothing is hidden.

Source	Used in section	Claim in paper	Evidence from source	Support level	Action
S1	—	supports	The study provides insights into how Syrian undergraduate students leverage AI tools for English lexical acquisition and overall language improvement.	Background	Verify manually
S2	—	supports	AI tools enhance vocabulary, grammar, and pronunciation while fostering autonomy and engagement through individualized learning paths and a non-threatening environment.	Background	Verify manually

Source	Used in section	Claim in paper	Evidence from source	Support level	Action
S3	—	nuances	Approximately 20% of students use AI for writing term papers, while 30-35% use it for exam preparation and poster presentations; AI usage intent is driven by enthusiasm rather than technical knowledge.	Direct	Keep
S4	—	Evidence not extracted — verify manually	—	Background	Verify manually
S5	—	nuances	The study highlights the importance of learner technological readiness, concerns regarding reliance on AI as an exclusive educational source, the social dimensions of learning, and ethical issues related to trust and security.	Background	Verify manually
S6	—	supports	The intervention group showed significant improvements in Utilitarian Benefits, Hedonic Benefits, Learnability, and User Experience compared to the control group, suggesting AI tools enhance engagement and learning outcomes.	Direct	Keep

Source	Used in section	Claim in paper	Evidence from source	Support level	Action
S7	—	nuances	Students primarily use AI to save time, improve work quality, and obtain instant support; usage is inhibited by concerns regarding cheating and biased results. Significant variations in AI motivation and usage exist across different years of study and academic disciplines.	Direct	Keep
S8	—	nuances	The six AI text detection tools demonstrated accuracy rates ranging from 55.29% to 97.0%, with Originality showing the highest effectiveness across the tested domains.	Direct	Keep
S9	—	nuances	The study identified that while technology offers educational advantages, it also correlates with negative outcomes such as decreased creativity, reduced cognitive functioning, lower retention, and diminished productivity.	Direct	Keep
S10	—	Evidence not extracted — verify manually	—	Background	Verify manually

Source	Used in section	Claim in paper	Evidence from source	Support level	Action
S11	—	nuances	AI-powered assistants can help bridge the achievement gap between dyslexic and non-dyslexic students by providing tailored assessments that track progress and enhance learning outcomes.	Background	Verify manually
S12	—	supports	Undergraduate programming obstacles include fundamentals, debugging, code quality, problem-solving, and cognitive factors; AI tools are identified as effective solutions for improving code readability, resolving runtime errors, and assisting in code writing.	Background	Verify manually
S13	—	Evidence not extracted — verify manually	—	Background	Verify manually
S14	—	Evidence not extracted — verify manually	—	Background	Verify manually
S15	—	Evidence not extracted — verify manually	—	Background	Verify manually

Literature / Source Summary

A plain-language summary of the key sources behind your paper, to help you decide what to read and where to strengthen the argument.

Source	Main contribution	Used for	Strength	Limitation
S1	The study provides insights into how Syrian undergraduate students leverage AI tools for English lexical acquisition and overall language improvement.	Background / context	Advances in Computational Intelligence and Robotics	—
S2	AI tools enhance vocabulary, grammar, and pronunciation while fostering autonomy and engagement through individualized learning paths and a non-threatening environment.	Background / context	English Review: Journal of English Education	Potential for user dependency, inaccuracies in AI-generated suggestions regarding cultural or idiomatic expressions, and concerns about reduced independent...
S3	Approximately 20% of students use AI for writing term papers, while 30-35% use it for exam preparation and poster presentations; AI usage intent is driven by enthusiasm rather than technical knowledge.	Background / context	11th International Conference on Higher Education Advances (HEAd'25)	The study is based on a relatively small sample size (n=110) at a single medium-sized university.
S4	—	Background / context	Learning and Motivation	—
S5	The study highlights the importance of learner technological readiness, concerns regarding reliance on AI as an exclusive educational source, the social dimensions of learning, and ethical issues related to trust and security.	Background / context	Educational Process International Journal	—

Source	Main contribution	Used for	Strength	Limitation
S6	The intervention group showed significant improvements in Utilitarian Benefits, Hedonic Benefits, Learnability, and User Experience compared to the control group, suggesting AI tools enhance engagement and learning outcomes.	Background / context	Acta Psychologica	—
S7	Students primarily use AI to save time, improve work quality, and obtain instant support; usage is inhibited by concerns regarding cheating and biased results.	Background / context	American Journal of Student Research	—
S8	The six AI text detection tools demonstrated accuracy rates ranging from 55.29% to 97.0%, with Originality showing the highest effectiveness across the tested domains.	Background / context	Advances in Machine Learning & Artificial Intelligence	The study focuses on the technical detection of AI-generated text rather than the pedagogical or motivational impacts of AI usage on students.
S9	The study identified that while technology offers educational advantages, it also correlates with negative outcomes such as decreased creativity, reduced cognitive functioning, lower retention, and diminished productivity.	Background / context	International Journal of Research Publication and Reviews	The study identified potential negative effects of technology use, but the small sample size and exploratory nature suggest a need for a balanced approach...
S10	—	Background / context	Proceedings of the 16th International Conference on Agents and Artificial Intelligence	—

Source	Main contribution	Used for	Strength	Limitation
S11	AI-powered assistants can help bridge the achievement gap between dyslexic and non-dyslexic students by providing tailored assessments that track progress and enhance learning outcomes.	Background / context	Adopting Artificial Intelligence Tools in Higher Education	—
S12	Undergraduate programming obstacles include fundamentals, debugging, code quality, problem-solving, and cognitive factors; AI tools are identified as effective solutions for improving code readability, resolving runtime errors, and assisting in code writing.	Background / context	2025 5th International Conference on Artificial Intelligence and Education (ICAIE)	—
S13	—	Background / context	ICERI Proceedings	—
S14	—	Background / context	Plenum Press	—
S15	—	Background / context	Educational and Psychological Measurement	—

How to use this: read the sources most relevant to your argument, confirm each citation supports the claim beside it, and use this summary to strengthen your literature review.

Academic Quality Review

A higher-level review of the paper as a whole — its evidence, logic, structure and how different readers might respond. Read it as an improvement roadmap, not a verdict.

Before submission — replace the illustrative findings

Because no real data was provided, the methodology and the results chapter of this paper were written as an illustrative example, not from an actual study. Before you submit, you must replace these illustrative findings with your own real results and re-run any analysis on your real data. Presenting fabricated or example findings as if they were real is academic misconduct.

Overall score

85/100

Weighted average across all sections (0–100)

Issues flagged per dimension

How many issues the review flagged in each dimension — a count, NOT a 0–100 score, so fewer is better. It shows where the document needed the most attention.

Dimension	Issues found
Logic Argument flow and absence of logical jumps.	2
Evidence Every substantive claim has a verified source or is marked as hypothesis.	2
Citation integrity Every in-text citation exists in the reference list; no orphans.	1
Completeness All outline sections present; all form requirements covered.	6
Academic style Register matches the academic level; no AI-smell phrasing.	2
Scope guard Complexity matches the academic-level ceiling (BA / MA / PhD).	2
Diagram accuracy Diagrams (if any) match the reference list.	1
Spec compliance The document addresses what your spec actually asked for.	9
Constraint compliance Every constraint you listed is honoured.	1
Argument fidelity Claims align with the stated argument.	3
Language quality Native fluency in the chosen language; no translation artefacts; no generic AI register.	1

Per-section breakdown

Score and outstanding issues for each section. "Issues found" are findings the automated review flagged.

Section	Score	Location	Dimension	Suggested fix
abstract	90/100	Keywords	Spec compliance	Remove or justify keywords that are not developed in the paper, especially self-efficacy, technology acceptance model, human-computer interaction, and learning outcomes.
		Methodology and Findings	Spec compliance	The user spec names intrinsic and extrinsic motivation, but the abstract reports only intrinsic motivation. Either add the extrinsic finding or state that extrinsic motivation was descriptive only.
		Keywords	Academic style	Shorten the keyword list to the actual constructs, method, population, and moderator to avoid an inflated, generic scope.
introduction	87/100	Paragraph 3	Evidence	Replace the invalid marker “” with a verified source for self-determination theory.

Section	Score	Location	Dimension	Suggested fix
		Paragraph 4	Spec compliance	The introduction says the design uses intrinsic and extrinsic motivational subtypes, but the thesis and later tests focus on intrinsic motivation only. Align the stated aim with the full spec.
		Paragraph 3	Language quality	Use English curly quotation marks for quoted research questions and keep punctuation consistent: “do students use AI more when they are motivated?”
theoretical_backgr ound	85/100	Core Concepts and Definitions	Evidence	Claims about SDT, intrinsic motivation, and the AMS need verified support rather than unsupported textbook-style exposition.
		Review of Prior Research	Argument fidelity	The plan expects stronger use of cross-domain support such as programming, economics, and gamified-learning evidence; the review relies heavily on EFL and perception studies.

Section	Score	Location	Dimension	Suggested fix
		Synthesis and Research Gap	Spec compliance	The gap is framed around intrinsic motivation only. Add a sentence explaining how extrinsic motivation is handled, since it is part of the stated dependent variable.
research_questions	92/100	Research Hypotheses	Spec compliance	The hypotheses test intrinsic motivation only. Add an exploratory RQ or hypothesis for extrinsic motivation, or explicitly state that extrinsic motivation is measured only descriptively.
		Research Questions	Completeness	State the research questions in numbered form so the results and conclusion can answer each one explicitly.
methodology	83/100	Subheading: Population and	Completeness	Complete the broken heading, for example: "Population, Sample, and Recruitment".
		Population and	Completeness	Add explicit inclusion and exclusion criteria, the national or institutional setting, and the actual data-collection dates or month/year.

Section	Score	Location	Dimension	Suggested fix
		Research Instruments	Citation integrity	Replace “” with a verified citation for the AMS and cite evidence for any scale adaptation, especially the change to a 1–5 response scale.
		Research Instruments	Completeness	The text says the full questionnaire is in the appendix, but no appendix is provided. Add it or remove the claim.
		Data Analysis	Constraint compliance	“Cohen's (1988) benchmarks” falls outside the stated 2018–2025 source range if treated as a source. Either omit the date or use an allowed recent methodological source.
results	84/100	Figure 1	Diagram accuracy	The text calls Figure 1 a scatterplot, but the chart is a bar chart of banded means. Either provide an actual scatterplot or relabel it accurately.
		Descriptive Statistics	Academic style	Move comparison with previous studies out of the Results section; results should report findings before interpretation.

Section	Score	Location	Dimension	Suggested fix
		Hypothesis Testing	Spec compliance	The spec includes intrinsic and extrinsic learning motivation, but only intrinsic motivation is tested. Add the extrinsic analysis or justify its exclusion.
discussion	82/100	Interpretation of Key Findings, paragraph 1	Logic	The discussion says H1 was shown by regression controlling for gender, GPA, and year of study, but Results report Pearson correlation for H1. Correct the method description.
		Contribution and Practical Implications	Completeness	Replace “[SOURCE NEEDED]” with a verified citation or remove the unsupported claim.
		Comparison with the Literature	Argument fidelity	Add the cross-domain scaffolding evidence expected by the plan, not only the Dong study on year and discipline.
		Contribution and Practical Implications	Scope guard	Tone down policy recommendations so they reflect a cross-sectional convenience-sample study rather than causal evidence.

Section	Score	Location	Dimension	Suggested fix
limitations	93/100	Paragraph 2	Completeness	The limitation mentions a restricted institutional context, but the methodology never specifies that context. Add the setting earlier for consistency.
		Paragraph 4	Spec compliance	Add the omission of an extrinsic-motivation inferential model as a limitation if extrinsic motivation remains descriptive only.
future_research	91/100	Paragraph 2	Spec compliance	Clarify that self-efficacy and self-regulated learning are proposed future mediators, not constructs measured in the present study.
		Paragraph 3	Argument fidelity	Link future comparative designs more explicitly to the plan's concern about year-of-study and discipline-specific moderation.
summary_conclusions	86/100	Conclusions, paragraph 1	Logic	Avoid calling AI-tool use a “predictor” in a causal-sounding way; use “was associated with” unless a regression coefficient for the main effect is reported.

Section	Score	Location	Dimension	Suggested fix
		Summary of Main Findings	Spec compliance	The conclusion answers the intrinsic-motivation question but not the extrinsic-motivation part of the stated work goal.
		Recommendations	Scope guard	Add safeguards around guided AI use, academic integrity, and over-reliance before recommending curricular integration.

Multi-axis review

Higher-level critique of the paper as a whole. Each axis answers one structured question.

Axis	Verdict	Finding
Methodological Does the methodology actually answer the research question?	adequate	Survey design fits association/moderation, but setting dates, inclusion/exclusion criteria, and extrinsic-motivation analysis are underreported.
Theoretical Is the theoretical framing coherent and consistently used?	adequate	SDT/scaffolding frame is coherent, but key SDT/AMS support uses non-verified markers and extra constructs are not integrated.
Argumentative Is the chain of reasoning sound on its own merits?	adequate	Main reasoning is plausible, but the discussion says H1 used controlled regression although results report Pearson correlation.
Cross-disciplinary How would a sceptical reader from an adjacent field read this?	adequate	A quantitative reader would ask how self-report AI frequency maps to actual behaviour; no objective usage or validation is provided.
Adversarial (devil's advocate) Strongest objection a sceptic could raise to the central thesis — and whether the paper addresses it.	adequate	Objection: intrinsically motivated students may adopt AI more often, rather than AI increasing motivation. Addressed: yes

Axis	Verdict	Finding
Title promise Does the paper deliver what the title commits to?	adequate	Title commits to: learning motivation + quantitative survey. Delivered: partial. Most-broken: extrinsic motivation is described but not tested.
Narrative coherence Are the introduction's promises picked up in discussion and conclusion?	adequate	Promise gap: introduction promises regression-based main-effect analysis, but Results present Pearson r for H1 and PROCESS interaction only.
Shortcut reliance Does the writing dodge the work the argument requires — formulaic endings, hedge stacks, filler that restates rather than advances?	adequate	Shortcut: recommendations move from correlational evidence to curriculum policy without enough implementation criteria or safeguards.
Frame lock Does the paper acknowledge alternative framings or theoretical lenses, or anchor on a single frame without revisiting it?	adequate	Single frame: SDT/scaffolding account of AI as competence support. Alternatives considered: partial

Reporting compliance (STROBE-lite)

Methodological reporting items the instructor is likely to check for this kind of study. Diagnostic only — does not affect the score.

Item	Reported	Evidence
Study design clearly named (cohort / case-control / cross-sectional / RCT / etc.)	Yes	A quantitative, cross-sectional survey design was therefore adopted.
Setting and time period of the study specified	No	—
Inclusion and exclusion criteria for participants stated	No	—
Variables defined: exposures, outcomes, and any covariates	Yes	AI-tool use frequency as the independent variable, intrinsic motivation as the outcome
Measurement instruments described and their validity addressed	Yes	The choice of the AMS reflects its established construct validity
Statistical methods named, including software used	Yes	All analyses were conducted in SPSS version 29.
Confounding variables explicitly addressed (how they were handled)	Yes	gender and GPA entered as covariates

Item	Reported	Evidence
Limitations honestly discussed (sample size, bias, generalisability)	Yes	The most consequential limitation of this study is its cross-sectional design

Section checklist

Structural items expected for each section. Diagnostic only — these checks do not change the section score; they surface binary present/absent gaps the continuous scoring may miss.

Abstract

Item	Reported	Note
Self-contained — no undefined acronyms, no in-text citations	No	GPA is used without expansion; the keyword list also includes several unexplained constructs.
Reflects the paper's actual conclusion (matches the conclusion section)	Yes	The abstract matches the positive association and first-year moderation conclusion.
Includes context, method (if applicable), and main result	Yes	Context, cross-sectional survey method, sample size, and main findings are included.

Introduction

Item	Reported	Note
Topic background established (why this matters)	Yes	The opening explains the importance of AI tools for undergraduate learning.
Knowledge gap explicitly named	Yes	The lack of systematic evidence on AI-use frequency and intrinsic motivation is stated.
Research aim or central question stated	Yes	The paper's central association and moderation claim is clearly stated.
Scope outlined — what the paper will and will not cover	Yes	The introduction defines the undergraduate AI-tool population and section structure.

Methodology

Item	Reported	Note
Study design or research approach named explicitly	Yes	The section names a quantitative, cross-sectional survey design.

Item	Reported	Note
Population, sample, or data sources specified	Yes	The target population and analytic sample of N = 200 are specified.
Procedure described with enough detail to be re-followed	No	Recruitment channels are given, but dates, setting, and inclusion/exclusion criteria are missing.
Analysis or interpretive method named	Yes	Pearson correlation, PROCESS Model 1, covariates, and diagnostics are named.
Ethics / consent considerations addressed where applicable	Yes	Consent, anonymity, secure storage, and withdrawal are discussed.

Results

Item	Reported	Note
Findings reported without interpretation or comparison to other studies	No	The descriptive statistics paragraph cites prior literature and interprets engagement patterns.
All tables / figures referenced in the running text	Yes	Tables 2–4 and Figures 1–2 are referenced in the text.
Numerical claims consistent with the table / figure values	Yes	No internal numerical contradiction is apparent in the reported tables.
Negative or null results acknowledged where present	Yes	The advanced-student slope is reported as only marginally significant.

Discussion

Item	Reported	Note
Opens with a summary of the main findings	Yes	The section opens by restating support for both hypotheses.
Findings compared explicitly to existing literature	Yes	The discussion compares findings with Dong and the broader AI-learning literature.
No new data, new analyses, or new citations introduced	No	The section introduces [SOURCE NEEDED] and makes an unsupported literature claim.
Theoretical or practical implications stated	Yes	Implications for first-year curricula and differentiated AI integration are stated.

Limitations

Item	Reported	Note
Specific weaknesses named (not vague 'several limitations exist')	Yes	Cross-sectional design, convenience sampling, self-report, and residual confounding are named.
Direction of bias indicated where it can be inferred (over- vs under-estimate)	Yes	Self-selection is said to likely over-estimate the positive association.
Mitigation steps stated where they were applied	No	Controls are named elsewhere, but mitigation is not systematically linked to each limitation.
Limitations cover at least three of: study design, sample/population, measurement/data, analysis (or comparable categories for the work type)	Yes	The section covers design, sample, measurement, and residual confounding.

Conclusion

Item	Reported	Note
Directly answers the introduction's research aim	Yes	The conclusion answers the AI frequency, intrinsic motivation, and year moderation questions.
Single core message stated, not a recap of the whole paper	No	The section expands into summary, conclusions, recommendations, and future framing.
No new data or new citations introduced	Yes	The conclusion reuses cited sources and does not add new numerical results.

Predicted review

Calibrated estimate of how three reader personas might respond. Read this as feedback on where each kind of reader would push hardest, not as a hard verdict.

Estimated acceptance likelihood: 52/100 · Expected revision: Major

Reader	Predicted verdict	Key concern
Supervisor Reads for structural quality, faithfulness to the agreed scope, and academic register.	Light revisions recommended	The paper is coherent, but it must align with the spec by handling extrinsic motivation and adding the promised appendix.
External examiner Reads cold for clarity of contribution, rigour of evidence, and defensibility of claims.	Substantive revisions recommended	A cold reader would flag missing inclusion/exclusion criteria, vague setting/time period, invalid citation markers, and an unsupported source placeholder.
Domain peer Reads for technical correctness and currency of cited literature.	Light revisions recommended	The AI-motivation claim is plausible but not very novel unless cross-domain scaffolding evidence and over-reliance boundaries are strengthened.

Requirements coverage

How the delivered work measures against the requirements you set in the order form. Partially met / not met rows also appear in the fix-list below with what to do.

Status	Delivered	Requirement
Not met	9 / 18	Number of sources
Met	✓ Met	Publication year range
Met	✓ Met	Allowed source types
Met	✓ Met	Target population match
Met	✓ Met	Methodology match

How to finish the work

These are the highest-priority items the automated revision could not fully resolve — the ones we'd tackle first if we had more iterations. They are NOT the only findings: the per-section table earlier in this report lists every issue the review flagged. Once you address the items below, most remaining findings tend to shrink or resolve themselves. Each item names where to look, what is missing, and a concrete instruction. The text is in the paper's language so you can paste new content directly.

Estimated time	Search hint	How to fix	What is missing	Where	Priority
60 min	—	Add an extrinsic-motivation analysis, such as a Pearson correlation and regression/moderation model using the extrinsic AMS composite. If you do not want to test it, state clearly that extrinsic motivation is descriptive and revise the title/aim accordingly.	The paper promises learning motivation, including intrinsic and extrinsic motivation, but only tests intrinsic motivation.	Results and Summary and Conclusions	High
35 min	—	Add a short paragraph listing who could participate, who was excluded, the national/institutional context, and the month/year or dates of the four-week survey window.	The methodology lacks inclusion/exclusion criteria and does not specify the study setting or exact data-collection period.	Methodology — Population and	High

Estimated time	Search hint	How to fix	What is missing	Where	Priority
20 min	—	Either replace the chart with a true scatterplot of AI-tool use frequency against intrinsic motivation or relabel the figure as “Mean intrinsic motivation by AI-tool use frequency band”.	Figure 1 is described as a scatterplot, but the embedded chart is a bar chart of banded means.	Results — Figure 1	Medium
25 min	—	Revise the sentence to match the Results: H1 was supported by Pearson correlation, while covariate-adjusted moderation was tested under H2. Use “associated with” rather than causal or strong predictive wording.	The discussion overstates the H1 analysis by saying the positive association came from regression controlling for covariates.	Discussion — Interpretation of Key Findings	High

Estimated time	Search hint	How to fix	What is missing	Where	Priority
20 min	—	Plan for a larger real sample (about $N \approx 200$ for this analysis), or choose a simpler analysis suited to your sample size (e.g. a bivariate correlation or a t-test instead of a moderation / multivariate regression). If you keep both as they are, state the limited power as an explicit limitation and frame the finding as exploratory.	The most demanding analysis in your plan (moderation analysis (Hayes PROCESS)) usually needs about $N \approx 200$ for adequate statistical power, but the sample-size approach in your plan implies only about $N \approx 30$. The work demonstrates the analysis exactly as you requested, but in a real study at that sample size it would be underpowered, and a demanding reviewer would note it.	Planned analysis vs. sample size	Medium

Estimated time	Search hint	How to fix	What is missing	Where	Priority
25 min	—	Either add a hypothesis and analysis that test 'extrinsic', or narrow the goal/title and state explicitly that 'extrinsic' is reported for context only — so the work matches the scope you commissioned.	Your work goal / variables name 'extrinsic', but no hypothesis covers it, so it is described at most descriptively and never actually analysed. The delivered scope is narrower than what you asked for.	Your stated goal vs. what is analysed	High
15 min	Year of study	Decide whether Year of study is part of the control set, then list exactly the same controls everywhere the model is described and reported — methodology, every regression in the results, and the tables.	Your control variable Year of study is named in some statements of the analysis but dropped from others (e.g. one regression lists it among the controls and another omits it). A reviewer reads this as a different model being reported in different places.	A control variable listed inconsistently	High

Estimated time	Search hint	How to fix	What is missing	Where	Priority
30 min	—	Cite at least 9 more of the verified sources in the body, or add sources, to reach the requested count.	9 of 18 requested sources are cited in the paper. Fewer sources than requested were woven into the text; the verified source pool holds more that can be cited where genuinely relevant.	Order requirements	High

Before You Submit

A short checklist to finish the work to a submission-ready standard:

1. Review every in-text citation and confirm the source supports the claim beside it.
2. Address the higher-priority items in the quality review above.
3. Replace or strengthen any source flagged for review in the audit.
4. Read the most relevant sources yourself so you can defend the argument.

TEXIO verifies that sources exist and reports what we could assess. Final responsibility for citation accuracy and academic integrity rests with you — please review the work before submitting it.

Source Pool — Every Source We Scanned

Full transparency on the search behind your paper: every source we found, grouped by what happened to it. Use it to decide whether to add, swap, or read further — the relevant ones we did not use are a ready shortlist.

Included in your paper

Source	DOI	Found via	Why
The role of AI tools on EFL students' motivation, self-efficacy, and anxiety: Through the lens of control-value theory — Shao — (2025)	10.1016/j.lmot.2025.102154	Focused search	Cited in the paper
An Empirical Study of AI-Generated Text Detection Tools — (2023)	10.33140/amlai.04.02.03	Focused search	Cited in the paper
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Source	DOI	Found via	Why
Towards the Use of AI-Based Tools for Systematic Literature Review — Souifi et al. — (2024)	10.5220/0012467700003636	Focused search	Passed screening; another source was used instead
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THE IMPACT OF AI-DRIVEN GAMIFIED LEARNING OF MATHEMATICAL ECONOMICS ON HIGHER-EDUCATION STUDENT MOTIVATION AND ACHIEVEMENT: AN EMPIRICAL SURVEY IN SPORT MANAGEMENT UNDERGRADUATE STUDENTS IN GREECE — Choustoulakis — (2024)	10.21125/iceri.2024.0586	Focused search	Passed screening; another source was used instead

Could not be verified

Source	DOI	Found via	Why
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Source	DOI	Found via	Why
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Artificial intelligence tools: Improvement of motivation, psychological well-being, and psychological capital of EFL learners: A self-determination theory perspective — Dou et al. — (2025)	10.1016/j.lmot.2025.102169	Focused search	Identity / DOI could not be confirmed
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Impact of Artificial Intelligence Tools on Students' Learning and Study Practices — Sharma — (2026)	10.21275/sr26212194927	Focused search	Identity / DOI could not be confirmed
Investigating the Relationship Between Social Media Use, AI Tools, Digital Literacy, and Chinese University Students' Language Learning Strategies and Motivation — Rongrong et al. — (2026)	10.21203/rs.3.rs-9404573/v1	Focused search	Identity / DOI could not be confirmed
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Impact of AI-Based Educational Tools on Students Engagement and Learning Outcomes — G et al. — (2026)	10.70593/978-93-7185-270-8_3	Focused search	Identity / DOI could not be confirmed
The use of generative AI tools for students' research support within higher education institutions' libraries: a systematic literature review — Maphosa et al. — (2026)	10.47989/ir31263101	Focused search	Identity / DOI could not be confirmed

Source	DOI	Found via	Why
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Exploring University Students' AI literacy in Applying AI tools in Learning: a Focus Group Study — Dang — (2026)	10.1109/iciet69664.2026.11561635	Focused search	Identity / DOI could not be confirmed
Autonomous Adoption of AI Tools by Undergraduate Business Students: An Exploratory Study — Morin et al. — (2026)	10.18178/ijlt.12.1.49-53	Focused search	Identity / DOI could not be confirmed

The Searches We Ran

The exact query variants used to build your source pool. Each angle targets a different kind of evidence; the background search widens the net for general-context sources.

Reviews & meta-analyses

(Use of artificial-intelligence tools and learning motivation among undergraduate students: a quantitative survey OR method OR approach OR technique OR field OR area OR discipline OR result OR finding OR effect) AND (study Undergraduate students at higher-education institutions who use AI tools (LLM-based chatbots, summarisation) AND (and practice Learning motivation (intrinsic and extrinsic) Frequency of using AI tools for learning OR review OR meta-analysis OR systematic review OR literature review)

Empirical studies

(Use of artificial-intelligence tools and learning motivation among undergraduate students: a quantitative survey OR method OR approach OR technique OR field OR area OR discipline OR result OR finding OR effect) AND (study Undergraduate students at higher-education institutions who use AI tools (LLM-based chatbots, summarisation) AND (and practice Learning motivation (intrinsic and extrinsic) Frequency of using AI tools for learning OR empirical OR experiment OR randomized OR cohort OR cross-sectional OR longitudinal)

Qualitative studies

(Use of artificial-intelligence tools and learning motivation among undergraduate students: a quantitative survey OR method OR approach OR technique OR field OR area OR discipline OR result OR finding OR effect) AND (study Undergraduate students at higher-education institutions who use AI tools (LLM-based chatbots, summarisation) AND (and practice Learning motivation (intrinsic and extrinsic) Frequency of using AI tools for learning OR qualitative OR interview OR case study OR ethnography OR grounded theory OR phenomenology OR thematic analysis OR focus group)

Measurement instruments

(Use of artificial-intelligence tools and learning motivation among undergraduate students: a quantitative survey OR method OR approach OR technique OR field OR area OR discipline OR result OR finding OR effect) AND (study Undergraduate students at higher-education institutions who use AI tools (LLM-based chatbots, summarisation) AND (and practice Learning motivation (intrinsic and extrinsic) Frequency of using AI tools for learning OR scale OR questionnaire OR instrument OR measure OR inventory OR assessment tool)

Limitations & gaps

(Use of artificial-intelligence tools and learning motivation among undergraduate students: a quantitative survey OR method OR approach OR technique OR field OR area OR discipline OR result OR finding OR effect) AND (study Undergraduate students at higher-education institutions who use AI tools (LLM-based chatbots, summarisation) AND (and practice Learning motivation (intrinsic and extrinsic) Frequency of using AI tools for learning OR limitation OR challenge OR barrier OR gap OR critique OR shortcoming)

contradictory_evidence

(Use of artificial-intelligence tools and learning motivation among undergraduate students: a quantitative survey OR method OR approach OR technique OR field OR area OR discipline OR result OR finding OR effect) AND (study Undergraduate students at higher-education institutions who use AI tools (LLM-based chatbots, summarisation) AND (and practice Learning motivation (intrinsic and extrinsic) Frequency of using AI tools for learning OR no effect OR no significant OR null result OR negative effect OR mixed findings OR inconsistent OR detrimental OR adverse OR decline)

Background / general context

(Use of artificial-intelligence tools and learning motivation among OR method OR approach OR technique OR field OR area OR discipline OR result OR finding OR effect) AND (undergraduate students: a quantitative survey study Learning motivation) AND ((intrinsic and extrinsic) Frequency of using AI tools for learning OR overview OR introduction OR background OR concept OR framework OR theory OR perspective OR state of the art)

Databases searched: openalex, crossref