THIRD EXAMINER · AUDIT TRAIL

Shear bond strength of a bulk-fill resin composite to dentin using four adhesive protocols: an in-vitro study

MSc thesis · fictional sample · Standard: CRIS · Ref. TE-0000 · Grade C · 59%

6
decisions, each with its reason

16 tests run — every test listed, passed or failed

7 PASS | 9 FAIL

Decisions, in order

D01	Grade against CRIS (in-vitro dental studies).	Study type from the methods chapter
D02	Group B's 12.58 is a transcription error; the true mean is 15.28.	Recomputed from the raw sheet
D03	Group D's 0.82 is a standard error reported as an SD.	Recomputed SD and SE
D04	Use n = 9 per group, not 10.	Specimen inventory INV-1
D05	Keep one-way ANOVA with Tukey; no switch to a non-parametric test.	Assumption checks A01
D06	Classify the headline claim as Critical (M1).	Recomputed Tukey test T04

Tests

T01	Raw data sheets present for every group	PASS	T09	Assumption checks reported in the thesis	FAIL
T02	Specimens per group match the methods	FAIL	T10	Post-hoc test fits the design	PASS
T03	Group means recompute from the raw data	FAIL	T11	Reference [14] supports its sentence	FAIL
T04	Headline claim "C above A" holds in Tukey	FAIL	T12	Reference [22] details match the DOI record	FAIL
T05	SDs recompute from the raw data	FAIL	T13	Thermocycling protocol reported	PASS
T06	ANOVA recomputes	PASS	T14	Ethics approval stated	PASS
T07	Normality within each group	PASS	T15	No copied sentence without quotation marks	FAIL
T08	Equal variances (Levene)	PASS	T16	Writing reads as the author's own	FAIL

IDs match the evidence column of the examiner report.

Why each decision was made

ID	WHY	CHECK
D01	The study is a laboratory test on extracted teeth.	Study type from the methods chapter
D02	The mean of the 9 raw values is 15.28; the typed value has the same digits in another order (H1).	Recomputed from the raw sheet
D03	SD 2.46 divided by √9 gives 0.82.	Recomputed SD and SE
D04	The sheets hold 9 per group, and F(3, 32) only fits 36 specimens.	Specimen inventory INV-1
D05	Normality (lowest Shapiro–Wilk p = 0.395) and equal variances (Levene p = 0.647) hold.	Assumption checks A01
D06	It is the thesis's main conclusion and the data contradict it: Tukey A vs C, p = 0.925.	Recomputed Tukey test T04

Test results

T01	4 of 4 groups	PASS	T02	stated 10, found 9	FAIL
T03	A, C, D match; B 12.58 vs 15.28	FAIL	T04	Tukey A vs C, p = 0.925	FAIL
T05	D reported 0.82, true 2.46	FAIL	T06	F(3, 32) = 24.21, p < 0.001	PASS
T07	Shapiro–Wilk lowest p = 0.395	PASS	T08	p = 0.647	PASS
T09	not reported	FAIL	T10	Tukey after one-way ANOVA	PASS
T11	wrong claim	FAIL	T12	year and volume differ	FAIL
T13	stated in the methods	PASS	T14	stated in the methods	PASS
T15	two Discussion sentences follow [7]	FAIL	T16	two passages flagged, with reasons	FAIL

Other evidence IDs

ID	WHAT IT RECORDS
INV-1	Specimen inventory: 9 specimens per group on the raw sheets, 36 in total; no exclusion log.
H1	Hypothesis for M2: 15.28 was typed as 12.58 (same digits, two swapped). Supported: the raw mean is 15.28, and the typed value reuses its digits.
A01	Assumption checks run on the raw data. Shapiro–Wilk: A 0.538, B 0.682, C 0.395, D 0.830. Levene p = 0.647.

IDs match the evidence column of the examiner report.