Synthesis Canvas

DESN2003: Research for Innovation

Synthesis Canvas — Blank Template

Your Name: _____ **Date:** _____

Research Question: _____

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1. What Data Do You Have?

Data Type	Source	Volume
Qualitative	_____	_____interviews / _____ pages of notes
Quantitative	_____	n = _____ responses
Other	_____	_____

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2. Qualitative Synthesis: From Quotes to Themes

Step 1: Pull Key Quotes (List 5-10 powerful quotes from your data)

Quote	Who Said It	Initial Code
"_____"	P___	_____
"_____"	P___	_____
"_____"	P___	_____
"_____"	P___	_____
"_____"	P___	_____

Step 2: Group Into Themes (Cluster similar codes)

Theme	Codes Included	# of Participants
Theme 1: _____	_____, _____	/
Theme 2: _____	_____, _____	/
Theme 3: _____	_____, _____	/

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3. Quantitative Synthesis: From Numbers to Patterns

Descriptive Statistics:

Variable	Mean	SD	Range
_____	_____	_____	_____ to _____
_____	_____	_____	_____ to _____

Key Comparisons/Correlations:

Finding	Statistic	Significant?
_____	r = _____ / p = _____	[ ] Yes [ ] No
_____	r = _____ / p = _____	[ ] Yes [ ] No

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4. Triangulation: Do Qual and Quant Agree?

Finding	Qual Evidence	Quant Evidence	Agreement?
_____	_____	_____	[ ] Yes [ ] No [ ] Partial
_____	_____	_____	[ ] Yes [ ] No [ ] Partial
_____	_____	_____	[ ] Yes [ ] No [ ] Partial

Where they disagree: _____

What might explain the disagreement: _____

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5. The "So What?" Test

For each finding, answer: **Why should anyone care?**

Finding	So What? (Implication)
_____	_____
_____	_____
_____	_____

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6. Limitations — Be Honest

Limitation	How It Affects Your Findings
Sample: _____	_____
Method: _____	_____
Context: _____	_____

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7. From Findings to Recommendations

Finding	Design/Research Recommendation
_____	_____
_____	_____
_____	_____

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8. One-Sentence Summary

My research found that _____

which matters because _____

and suggests that _____

Synthesis Canvas — Worked Example

Your Name: Alex Chen **Date:** Week 9

Research Question: What is the relationship between Instagram like-checking frequency and daily anxiety levels among HKU undergraduate students?

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1. What Data Do You Have?

Data Type	Source	Volume
Qualitative	Semi-structured interviews	12 interviews / 45 pages of transcripts
Quantitative	Online survey (Qualtrics)	n = 127 valid responses
Other	Diary entries (subset)	8 participants x 14 days

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2. Qualitative Synthesis: From Quotes to Themes

Step 1: Pull Key Quotes

Quote	Who Said It	Initial Code
"I check within 10 minutes of posting. I can't help it."	P03	Compulsive checking
"If it doesn't hit 100 likes, I feel like a failure."	P07	Threshold anxiety
"I deleted a post because it only got 30 likes. That's embarrassing."	P11	Deletion behavior
"I know it's stupid, but I compare my likes to my friends' likes."	P05	Social comparison
"When I get a lot of likes, I feel good for maybe an hour. Then it fades."	P02	Temporary validation

Step 2: Group Into Themes

Theme	Codes Included	# of Participants
Theme 1: **Compulsive checking loop**	Compulsive checking, can't resist, habitual	10/12

Theme	Codes Included	# of Participants
Theme 2: **Like thresholds as self-worth**	Threshold anxiety, deletion behavior, embarrassment	8/12
Theme 3: **Social comparison with peers**	Social comparison, competitive feelings	9/12

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3. Quantitative Synthesis: From Numbers to Patterns

Descriptive Statistics:

Variable	Mean	SD	Range
Daily like-checking frequency	4.2 times	2.8	0 to 15
GAD-7 anxiety score	8.4	4.1	0 to 21

Key Comparisons/Correlations:

Finding	Statistic	Significant?
Like-checking frequency GAD-7 score	$r = 0.42$, $p < .001$	[x] Yes [ ] No
High-checkers (5+/day) vs low-checkers (<2/day) anxiety	$t = 3.2$, $p = .002$	[x] Yes [ ] No

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4. Triangulation: Do Qual and Quant Agree?

Finding	Qual Evidence	Quant Evidence	Agreement?
More checking = more anxiety	10/12 described anxiety around checking	$r = 0.42$ correlation	[x] Yes [ ] No [ ] Partial
Social comparison drives checking	9/12 mentioned comparing to friends	67% selected "comparing to others" as motivation	[x] Yes [ ] No [ ] Partial
Likes tied to self-worth	"I feel like a failure" (P07)	Not directly measured	[ ] Yes [ ] No [x] Partial

Where they disagree: Qualitative data suggests checking causes anxiety; quantitative data only shows correlation (can't prove direction).

What might explain the disagreement: Cross-sectional survey can't establish causality. Some participants may be anxious people who also happen to check more (reverse causation).

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5. The "So What?" Test

Finding	So What? (Implication)
r = 0.42 correlation between checking and anxiety	Moderate relationship — not deterministic, but meaningful signal for designers
67% check to compare with others	Hiding like counts might reduce comparison triggers
10/12 describe compulsive checking	Design interventions (friction, delays) might help break the loop

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6. Limitations — Be Honest

Limitation	How It Affects Your Findings
Sample: HKU students only	May not generalize to other populations or cultures
Method: Self-report data	Actual checking frequency may differ; social desirability bias
Context: Correlational design	Cannot prove that checking *causes* anxiety

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7. From Findings to Recommendations

Finding	Design/Research Recommendation
Compulsive checking loop	Test "check later" nudges that add friction after posting
Social comparison drives behavior	Hide like counts by default; show only to poster
Temporary validation effect	Research whether delayed like visibility reduces anxiety

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8. One-Sentence Summary

My research found that Instagram like-checking frequency is moderately correlated with anxiety (r=0.42) among HKU students, driven primarily by social comparison,

which matters because it provides evidence that engagement metrics affect mental health in Asian university populations (previously understudied),

and suggests that design interventions like hidden likes or checking friction could reduce comparison-driven anxiety — but longitudinal research is needed to establish causality.