

Evidence and Narrative in Research: From Osman & Abramson to Thermal Comfort Studies

DESN2003: Research for Innovation, Week Six

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1: From Osman & Abramson to Thermal Comfort Studies: Evidence and Narrative in Research

A Data-Driven Qualitative Review in Architectural Research

2: What makes a story credible?

How do we transform raw facts into a compelling narrative?

3: Let's open with some ideas from Osman & Abramson

- **Osman's Idea:**

- Evidence is not self-explanatory.
- Facts become “evidence” when selectively assembled into a narrative.

- **Abramson's Contribution:**

- Advocates for an “undetermined history.”
- Emphasizes embracing ambiguity, accident, and counter-narratives.

Leverage these ideas as the thread that stitches our session together.

4: Session Overview & Objectives

- **Our Focus:**

- Use Osman & Abramson as theoretical anchors to examine research narratives.
- Case study: “A Data-Driven Qualitative Review of Thermal Comfort Studies.”

- **Learning Outcomes:**

- Understand roles of primary vs. secondary data.
- Recognize how narrative is constructed—and what is omitted.
- Develop strategies for critical, reflexive evidence gathering.

5: Introduction & Context Setting

- **Exploration:**

- How evidence and narrative work together in research.
- Our case study is the provided draft on thermal comfort studies.

- **Focus:**

- Examining how the draft uses different data types to build its narrative.

6: Dissecting the Draft's Methodology

- **Data Collection:**

- **Primary Data:** Field measurements, surveys, direct observations.
- **Secondary Data:** Established databases (e.g., ASHRAE, Chinese TCDB) and literature.

- **Systematic Approach:**

- Literature screening, numerical evaluation criteria (scores 0–3).
- Mapping personal (age, gender, BMI) and contextual parameters.

This method exemplifies how facts are mobilized into evidence, as Osman suggests.

Section 1

-3 (cold) to 0 (neutral) to +3 (hot)

7: Mapping between perception and numbers: A Quantitative Review

What benefits and drawbacks do you see in using numerical scoring to convert raw data into a narrative?

8: Primary vs. Secondary Data Sources

- **Primary Data:**

- Direct measurements (e.g., temperature, humidity).
- First-hand surveys and observations.

- **Secondary Data:**

- Data from previous studies and databases.
- Provides context and broadens scope.

The draft combines both to create a layered narrative.

9: How Did We Do This in Our Manuscript?

- **Leveraging Secondary Data:**

- Utilized established thermal comfort databases (ASHRAE & Chinese TCDB) as our primary sources.
- Compiled 88+ articles to form our evidence base.

- **Systematic Data Evaluation:**

- Applied a numerical scoring system (0–3) to assess personal, contextual, and PMV parameters.
- Enabled structured comparison and identification of gaps across studies.

- **Constructing the Narrative:**

- Integrated diverse data points to build a coherent story that supports our hypothesis.
- Demonstrated how selection and framing of secondary data can drive new insights.

- **Testament to Methodology:**

- Our approach shows that robust secondary data can be effectively leveraged.
- Aligns with Osman's and Abramson's ideas on how evidence is reinterpreted into a narrative.

10: Critically Assessing Our Data Setup

- **Maintain Critical Awareness:**

- **Triangulation:** Validate findings by comparing multiple sources.
- **Reflexivity:** Regularly question data selection and categorization.
- **Iterative Review:** Continuously refine data collection and narrative as new evidence emerges.

- **Draft's Limitations:**

- Inconsistent classifications and mapping issues.
- Underrepresentation of certain demographics.

- **Future Enhancements:**

- Develop standardized classification/predictive frameworks.
- Incorporate mixed-method approaches.

This process embodies the critical reflection championed by Osman and Abramson.

11: How can we ensure our data-driven narratives remain robust and adaptable as new evidence emerges?

12: Conclusion & Key Takeaways

- **Summary:**

- Evidence transforms into narrative through careful selection and interpretation.
- Our case study demonstrates both the potential and limitations in this process.

- **Key Takeaways:**

- Balance rigorous data collection with reflexive narrative construction.
- Be aware of what is included—and omitted—to strengthen research credibility.
- Osman and Abramson remind us to remain open to alternative interpretations.

Final Reflection:

“As researchers, how do we balance the rigor of data collection with the interpretive nature of narrative construction?”

13: Thank You & Q&A

Questions & Discussion?