

Review Report: Manuscript Review and Recommendations

Title: *Understanding the Role of Origami in Teaching and Applying the Activity Analysis Process in Occupational Therapy Education: A Pilot Study*

Summary

This manuscript presents a creative, occupation-centered pilot study exploring the use of origami to teach the activity analysis process to occupational therapy (OT) and occupational therapy assistant (OTA) students. The concept is well-aligned with the OT profession's emphasis on meaningful, client-centered, and activity-based learning.

While the topic is timely and the instructional method holds promise, the current version of the manuscript requires significant revision. Specifically, the study lacks methodological detail, pedagogical and theoretical framing, and clear application of occupational therapy concepts such as grading, adapting, and linking task demands to client performance components.

Global Writing and Framing Concerns

1. Language Clarity and Redundancy

Issue: The manuscript includes repetitive phrases (e.g., repeated use of “meaningful and purposeful”) and underdeveloped or awkward sentence constructions, particularly in the Introduction and Discussion.

Recommendation: Perform a focused edit for clarity, tone, and flow. Reduce redundancy, restructure verbose or circular statements, and ensure concise, natural phrasing throughout.

2. Framing of OT Terminology

Issue: Key terms such as “activity analysis,” “grading,” and “modification” are used without adequate definition or reference to the *Occupational Therapy Practice Framework (OTPF)*.

Recommendation: Define these terms clearly and cite the OTPF directly to help readers—especially those outside of OT - understand how they are being applied.

3. Ethical and Educational Framing

Issue: While IRB approval is mentioned, there is limited discussion of ethical procedures such as consent, confidentiality, or the power dynamics inherent in student-instructor research settings.

Recommendation: Add 1-2 sentences in the methodology to clarify consent procedures, confidentiality protections, and how participation was framed for students (e.g., voluntary, anonymous, non-evaluative).

Section-by-Section Recommendations

1. Methodology and Research Design

Issues Identified:

- The qualitative design is vague. While “inductive reasoning” is mentioned, no specific qualitative method (e.g., basic interpretive, thematic analysis, phenomenology) is described.
- The pre/post survey instruments are not described in detail. Items, structure, and types of data collected are unclear (i.e. It is unclear how many Likert items were included, what the anchors were [e.g., 1 = strongly disagree, 5 = strongly agree], and whether open-ended responses were analyzed thematically).
- The origami task itself is not described (e.g., model used, duration, level of complexity).

- There is no mention of structured reflection tools or scaffolds provided to guide student analysis (e.g., worksheets, rubrics, or activity analysis forms).

Recommendations:

- Clearly define the qualitative approach and describe how data were coded and themes generated.
- Include sample survey questions and describe the data collection and analysis process in more detail.
- Describe the origami activity: What model was used? How long did it take? What instructions were given? Was it adapted for student needs?
- Explain whether students were asked to reflect in writing, complete an activity analysis form, or engage in guided debriefing - and how this supported learning outcomes.
- Report basic demographic characteristics of the participants (e.g., number of OT vs. OTA students, age range, prior experience) and clarify how many completed both the pre- and post-surveys.

2. Pedagogical and Clinical Reasoning Depth

Issues Identified:

- The manuscript lacks detail on how the activity promoted clinical reasoning and understanding of OT performance components (e.g., body functions, performance skills).
- No mention is made of how students were taught to grade or adapt activities - core competencies in OT practice.
- No theoretical educational framework is cited.

Recommendations:

- Integrate references to relevant educational frameworks such as Kolb's experiential learning theory, Bloom's taxonomy, or Knowles' adult learning theory.
- Explain how students were encouraged to consider motor, sensory, cognitive, and psychosocial demands of the activity.
- Add discussion or examples of how the activity could be graded (e.g., simplified or made more complex) or adapted (e.g., for someone with limited vision, reduced dexterity, or cognitive impairments).
- Include a structured example or table aligning components of the origami task with OT domains (e.g., attention, visual-motor integration, bilateral coordination, etc.).

3. Discussion and Theoretical Integration

Issues Identified:

- The discussion largely reiterates findings without tying them to OT education literature or broader pedagogical implications.
- There is no discussion of how origami could generalize to other courses, practice areas, or instructional strategies in OT education.

Example addition for the Discussion section:

“Although the activity required students to engage in a hands-on task, deeper understanding of the activity analysis process depends on students' ability to link observed performance to therapeutic decision-making. Embedding structured prompts based on the OTPF and encouraging students to analyze motor, sensory, and cognitive demands - and to grade the

task accordingly - would enhance the pedagogical effectiveness. This approach aligns with Kolb's experiential learning theory and supports the development of clinical reasoning skills foundational to OT practice."

Recommendations:

- Expand the discussion to explain how occupation-based teaching methods can enhance clinical reasoning, client-centered care, and student engagement.
- Cite relevant literature on instructional design in OT education, active learning, and experiential approaches.
- Relate the activity to broader OT curriculum goals, including development of therapeutic use of self, adaptation, and problem-solving skills.
- Discuss how this activity could be adapted or extended for use in other courses or student populations.

4. Grading and Adapting Activities

Issues Identified:

- There is no indication that students were taught to grade or adapt the activity - critical aspects of OT clinical reasoning.
- This gap limits the applicability of the activity for students' future fieldwork and practice.

Recommendations:

- If grading/adaptation was part of the activity, describe it in the methods and results.
- If not, acknowledge this as a limitation and include it in the "Implications for Future Research" section, suggesting how the activity could be expanded in the future.

Overall Recommendation: Revise and Resubmit

The manuscript presents a meaningful, creative, and occupation-based teaching strategy. However, revisions are necessary to meet the academic and pedagogical standards expected of published educational research in occupational therapy.

Key Revision Priorities:

- Revise the methodology section to improve clarity and rigor.
- Deepen the pedagogical framing and clinical reasoning connections.
- Define and integrate OT practice terms using OTPF language.
- Include student quotes and/or data tables to substantiate findings.

Once these revisions are addressed, the manuscript has strong potential to contribute to the scholarship of teaching and learning in occupational therapy and allied health professions.