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Application of Cyber-Constructive Triangulation in Qualitative Research: Simultaneous Analysis of Human, Machine, and Data Interactions

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1. Round 1

1.1 Reviewer 1

Reviewer:

The sentence "Tools such as Computer-Assisted Qualitative Data Analysis Software (CAQDAS), including NVivo, Atlas.ti, webQDA, and MAXQDA..." should be followed by in-text citations supporting their use in recent research (e.g., add references after each software mention).

The section "Data triangulation in qualitative research refers to approaching a question from multiple perspectives" lacks a critical contrast between classical and digital triangulation. Include 2–3 sentences comparing traditional triangulation with the proposed CCT approach to emphasize novelty.

The sentence "For example, in a study that utilizes tools such as ChatGPT for textual data analysis..." would benefit from specifying the year or version of ChatGPT and referencing literature on LLM use in qualitative research.

The phrase "these risks are often invisible, multifaceted, and dispersed" could be more concrete. Provide an example specific to qualitative research, such as bias in automated transcription or misclassification in sentiment analysis.

Clarify how this framework differs from existing mixed-method models (e.g., sequential or convergent designs). A brief contrast would help readers see its unique contribution.



The phrase "Interview locations: Cafés in districts 1, 3, and 12 of Tehran" requires justification. Explain why these districts were chosen and how they represent the broader youth population.

The sentence "Use of Instagram API for metadata analysis" lacks methodological detail. Include the period of data collection, ethical approval, and how API access was granted given national filtering.

The future directions mention "localized educational and software tools" but lack concrete steps. Suggest adding a sentence outlining what kind of tool (e.g., plug-in for NVivo or standalone open-source software) could operationalize CCT.

Author revised the manuscript and uploaded the updated document.

1.2 Reviewer 2

Reviewer:

The paragraph ending with "remains incomplete" is long and complex. Break it into two sentences and explicitly highlight the "gap in the literature" more clearly (e.g., "No current framework integrates human, machine, and data actors simultaneously...").

The subsection introductions for Michel Foucault, Manuel Castells, and Ulrich Beck should include a short transition sentence explaining why these three theories were chosen together. Currently, they appear as three separate mini-essays rather than parts of a coherent triad.

The sentence "More precisely, Foucault teaches us to pay attention to how systems of knowledge operate..." is interpretive. Provide a citation to support this interpretation (preferably a primary or widely cited secondary source).

The description "Cohen's kappa coefficient of 0.82 between coders" should also specify the number of coders and their training to evaluate interrater reliability more transparently.

The discussion says "CCT is a link between content analysis and structural critique" but does not show how. Add 2–3 sentences illustrating this with examples from the Tehran Instagram case study.

The paragraph notes "empirical validation will only be possible in future studies" but does not mention the small sample size (n=20 interviews) or lack of cross-cultural comparison. These should be included as explicit limitations.

Author revised the manuscript and uploaded the updated document.

2. Revised

Editor's decision after revisions: Accepted.

Editor in Chief's decision: Accepted.

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