Comparative Reflection Report: Manual vs AI-Assisted Qualitative Transcription and Analysis

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1. Introduction

This report reflects on my experience of collecting and analyzing qualitative data using two different transcription approaches manual transcription and AI assisted transcription using OpenAI Whisper. The purpose was to compare these methods in terms of accuracy, depth, time-effort, ethics, and quality of insights.

For this study, we conducted two semi-structured interviews with international master's students at Dalarna University about their application process, immigration journey, and adaptation to life in Sweden. Both interviews were transcribed manually by us and also processed through the AI tool, allowing a direct comparison of results.

The data were analyzed using Braun and Clarke's (2006) Thematic Analysis, which helped identify recurring ideas and emotions. This exercise deepened our understanding of how transcription quality shapes data interpretation and overall research insight.

2. Methodology

2.1 Participants and Data Collection

Two international students participated:

Emmanual (Colombia): A Data Science student who discussed his decision to study in Sweden, cultural adaptation, and work challenges.

Raj (Nepal): A Tourism and Project Management student who spoke about visa difficulties, financial stress, and future goals.

Each interview lasted around 20-25 minutes. Participants provided informed consent and were assured that their data would remain confidential and used only for academic purposes.

2.2 Manual Transcription

We manually transcribed both interviews by carefully listening and typing word-for-word, including pauses, filler words, laughter, and emotions. Each transcription took roughly two to three hours, including proofreading.

This slow and immersive process made us more engaged with the data. we could sense emotions like hesitation or pride, and this helped us understand not only what was said but also how it was expressed. Replaying the audio gave us a clear grasp of each participant's mood and story.

2.3 AI-Assisted Transcription (Whisper)

After completing the manual transcriptions, We used OpenAI Whisper to automatically transcribe the same interviews.

Tool: OpenAI Whisper

Time: 8–10 minutes per interview

Editing: Minor punctuation and formatting cleanup

The AI transcriptions were fast and clean but lacked emotional cues and pauses. Filler words and small reactions were often removed, which made the text less expressive. While overall accuracy was high (around 95–98%), it missed a few words during unclear audio.

2.4 Data Analysis

Both versions were analyzed using Braun and Clarke's (2006) six-phase framework:**Reading and familiarizing with the data,Generating initial codes,Grouping codes into broader themes,Reviewing and refining the themes,Naming themes clearly,Writing the final analysis**. We coded both transcripts separately and compared the themes. ChatGPT (GPT-5) supported keyword grouping for the AI version, but all interpretation and final coding were done manually.

3. Thematic Findings

The two interviews revealed similar experiences and emotions, which were grouped into six main themes.

Theme	Main Idea	Example Quote
1. Motivation and Opportunity	Sweden seen as a country offering quality education and safety.	"I wanted to be in Northern Europe. . . I like the people."
2. Visa Delays and Bureaucracy	Waiting times and unclear processes caused frustration.	"I kept calling them every day; they said they were busy."
3. Cultural Adjustment	Adapting to reserved social norms and climate differences.	"Swedish people are cold, but hobbies help break the ice."
4. Academic Experience	Appreciation for open discussion and accessible professors.	"I really like that classes are open for discussion."
5. Financial and Work Pressure	Difficulty finding part-time work and managing expenses.	"I hate to see my bank account going down."
6. Resilience and Hope	Staying positive and planning for long-term goals.	"I always keep many options open. . . I'm still positive."

Both participants shared optimism and adaptability despite facing uncertainty and financial stress.

4. Comparison Between Manual and AI Transcription

4.1 Accuracy

Manual transcription captured every spoken detail tone, hesitation, and emphasis. The AI transcripts were nearly as accurate for words but missed emotional cues. This aligns with Bird et al. (2020), who note that while AI achieves high textual accuracy, it lacks sensitivity to context and emotion.

4.2 Depth and Understanding

Manual transcription helped me notice emotional undertones and subtle expressions that AI missed. For example, Raj's nervous laugh when discussing visa issues expressed anxiety, while Emmanual's calm tone reflected confidence.

The AI transcripts were easier to code but lacked warmth and emotional weight. As Kvale and Brinkmann (2015) emphasize, meaning in interviews lies not only in the words but also in how they are spoken.

4.3 Time and Effort

The difference in time was significant:

Manual: 2-3 hours per interview

AI: 10 minutes per interview

Although AI saved time, manual transcription helped us engage more deeply with the content. According to Gibbs (2018), close interaction with the data improves insight and analytical sensitivity. The slower method encouraged reflection and familiarity with participants' experiences.

4.4 Ethical Considerations

We followed the British Psychological Society's (2021) ethical guidelines, ensuring participants' consent, pseudonyms, and secure data storage.

The manual process gave us full control over data privacy. The AI process, while efficient, posed potential risks if recordings were uploaded online. To prevent this, We used Whisper locally, keeping all files stored securely. We also reflected on the broader issue of researcher responsibility when using automated tools.

4.5 Insight Differences

Manual transcripts offered richer emotional detail. The AI versions were structured and clear but sometimes felt mechanical. For example, phrases like "I checked the website every day" read plainly in AI text but, in manual review, carried a tone of stress and anticipation.

Both methods led to similar overall themes, but the manual approach provided stronger emotional and contextual interpretation, while the AI version was better for organization and speed.

5. Reflection and Learning

Working with both transcription methods taught us the balance between human understanding and technological assistance. Manual transcription was slow but gave us a deeper connection with participants' emotions and experiences. It reminded us that qualitative research is about people and their stories, not just text.

AI transcription showed how quickly data can be processed and organized, which is useful for large projects. However, it also showed that relying entirely on machines can remove the human layer of interpretation. The best solution, in our opinion, is a hybrid approach using AI for efficiency and human review for emotional accuracy.

This assignment improved my practical skills in interviewing, data handling, and ethical awareness. It also helped us understand how digital tools can complement, but not replace, the researcher's role in qualitative analysis.

6. Conclusion

Manual and AI transcription each have strengths. Manual transcription provides deeper understanding and emotional richness, while AI offers speed and consistency. When used together, they complement each other AI gives efficiency, and manual work ensures meaning and quality.

This comparative exercise strengthened my appreciation of qualitative rigor, reflexivity, and ethics. It also confirmed that the human element remains central to interpreting lived experiences, no matter how advanced AI becomes.

References

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