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TITLE (Lightning Talk): Matrixes for Data Collection in Information Research: Issues Related to Data Reduction and Display

Abstract or Résumé:

The goal of this lightning talk is to foster discussion about the effective analysis and reporting of data collected via interview-based matrixes. Data matrixes are a common qualitative data analysis tool. They are less common at the data collection stage. For this study of the information sharing practices of Brazilian undergraduate students, participants completed a written data matrix in conjunction with semi-structured interviews. The researchers will describe the project and engage audience members in discussing the merits of using matrixes for data collection, ideas for effective data reduction and display, and issues relating to reporting data and findings in translation.

1. Introduction and Background

With 81% of Brazilian citizens regularly using the internet, and a national mobile cellular subscription rate of 102 subscriptions per 100 people (World Bank 2023), Brazil as a nation is highly active online. We are currently conducting a multi-phase study of Brazilian undergraduate students' news and information sharing practices in social media, with an emphasis on understanding the impact of disinformation. Data collection methods include a participant demographics questionnaire, focus group interviews, semi-structured individual interviews with a data matrix, and a follow-up questionnaire about social media participation. The goal of this lightning talk is to share some initial data with audience members and to ask for advice for representing the results of the data matrixes in future project presentations and publications.

Data matrixes are commonly used during coding for qualitative data analysis (e.g. Basit, 2003; Terzis et al. 2022). They are less common at the data collection stage (e.g. Copeland & Agosto 2012). For this study, the matrix was used to add structure to the individual interviews and to encourage deeper participant responses to the interview questions. The interview guide asked participants to write their preferred venues for learning about news and events across the top row of the matrix. Subsequent interview questions prompted participants to consider and record their

information sharing practices in each of these venues, the audiences with whom they typically interact in each venue, and the levels of trust they grant to information shared in different venues and by different actors. (See **Figure 1: Sample Completed Data Matrix**.) Fourteen participants completed the interview and accompanying matrix.

2. Questions for Discussion

- A. Participants identified a total of 23 different information platforms as common venues for their online information sharing practices. Each of the 23 platforms merits in-depth analysis and discussion, but even cursory analysis and discussion of all 23 would be difficult to portray in any single publication or presentation. What suggestions do CAIS audience members have for reducing the data for publication and presentation purposes without losing meaningful nuance of meaning?
- B. The research was conducted in Portuguese. The original data (spoken and written) are in Portuguese. We plan to publish the results in both English-language and Portuguese-language scholarly venues. What advice do audience members who have worked with data in translation have for effective presentation of the project results? We are hoping that the CAIS audience can share some of their experiences in presenting Frenchlanguage data in English-language venues and vice versa. Our main concern is how to reduce loss of meaning in translations of original data.

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1	Onde você fica sabendo das notícias?	Reodit	Discoro	what zapp	Twitter	Tv		ZE Y K K
2	Importância de plataformas e aplicativos	EMIPN	EMIPN	E M (I)P N	E MIPN	E MIPN	EMIPN	EMIPN
3	Consome conteúdo (ler, assistir, ouvir)	S F A R N	S F A R N	SFARN	SFARN	SFARN	SFARN	SFARN
4	Responde a conteúdos (comentar, fazer perguntas, responder a perguntas)	S F (A) R N	(S) F A R N	SFARN	SFARN	S F A R (N)	SFARN	SFARM
5	Compartilha conteúdo criado por outras pessoas (fotos, vídeos, memes, artigos, etc.)	S F A R N	(S) F A R N	S F A R N	S F A R N	S F A R (N)	SFARN	SFARI
6	Cria novo conteúdo (postagens de status, memes, vídeos, etc.)	SFARN	(S) F A R N	SFARN	S F A RN	SFARN	SFARN	SFARM
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Figure 1: Sample completed data matrix.

References

Basit, T. (2003). Manual or electronic? The role of coding in qualitative data analysis. *Educational Research*, 45(2), 143-154. https://doi.org/10.1080/0013188032000133548

Copeland, A. J., & Agosto, D. E. (2012). Diagrams and relational maps: The use of graphic elicitation techniques with interviewing for data collection, analysis, and display. *International Journal of Qualitative Methods*, 11(5), 513-533. https://doi.org/10.1177/160940691201100501

Terzis, L. D., Saltzman, L. Y., Logan, D. A., Blakey, J. M., & Hansel, T. C. (2022). Utilizing a matrix approach to analyze qualitative longitudinal research: A case example during the COVID-19 pandemic. *International Journal of Qualitative Methods*, 21. https://doi.org/10.1177/16094069221123723

World Bank. (2023). Brazil. https://data.worldbank.org/country/brazil