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Digital propaganda and voting behaviour in the case of Albania

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Objectives:

❑ Main Objective:


- To investigate the perception and awareness of computational propaganda among the general public and voter behaviour in Albania.

❑ Partial Objectives:


- Investigate the historical context and background of electoral irregularities in Albania
- Compare the experiences of Albania with other countries in terms of electoral manipulations and computational propaganda
- To perform sentiment and statistical analysis

Methodology

The methodology will encompass the implementation of: **surveys** and **interviews** targeting individuals directly or indirectly affected by mentioned phenomenon, as this has not yet been thoroughly examined in the case of Albania.



As mentioned in the objectives, there will be sentiment and statistical analyses performed



The study will serve as a starting-point from which to conduct and compare similar studies concerning Albania and/or the Balkan political diaspora.

DATASET EXTRACTION & PREPARATION

❑ FOR THE STATISTICAL ANALYSIS APPROACH:

- Dataset extraction: Survey results from 101 respondents.
- Dataset preparation: Using SPSS software & formulation of hypotheses.

❑ FOR THE SENTIMENT ANALYSIS APPROACH:

- Dataset extraction: Manual scraping of comments from Instagram posts.
- Dataset preparation: Using VADER libraries and python scripts to clean the dataset

❑ FOR THE INTERVIEW ANALYSIS APPROACH:

- Data extracted from the individual interviews .
- Transcript and audio-files saved in **Appendix**

❑ **Time Frame of Data Collection:** September 2023 – January 2024

❑ **Keywords:** Computational Propaganda, Elections, Albania, Sentiment Analysis, Statistics, Social Media, Interviews

Practical PART

□ PART 1 – STATISTICAL ANALYSIS APPROACH

- **4 HYPOTHESES IN TOTAL, 3 LINKED WITH THE MAIN OBJECTIVE:**

- a) Hypothesis for Confidence level of participants in Voting Process:
- b) Hypothesis for the relationship between the residence of living and the belief of computational propaganda as part of voting behaviour and political events in Albania
- c) Hypothesis related to the education level and the fact if respondents of the survey have heard about the digital propaganda or not.

- **1 HYPOTHESIS LINKED WITH THE PARTIAL OBJECTIVES**

- d) Hypothesis about the level of digital propaganda in Western Balkan countries scores based on the gender of the respondents.

| Hypotheses | Test Method | p-value | Confidence Interval | Test (t) Statistic | Effect Sizes |
|------------|---------------------------|---------------|---------------------|--------------------|---|
| a) | One sample t-test | 0.0000 874 | [0.36 ; 1.04] | - | <i>Cohen's d</i> = 1.067 <i>Hedges' correction</i> = 1.088 |
| b) | Chi-square | 0.386 | - | 0.753 with 1 df | Cramer's V = 0.086 Phi Symmetric Measures = -0.086 |
| c) | Chi-square | 0.030 | - | 8.968 with 3 df | Cramer's V = 0.298 Phi Symmetric Measures = 0.298 |
| d) | Independent Sample t-test | 0.308 | [-0.484 ; 0.814] | 0.504 with 99df | <i>Cohen's d</i> = 1.642 <i>Hedges' correction</i> = 1.655 |

Practical Part

❑ PART 2 – SENTIMENT ANALYSIS APPROACH

- Manual extraction of Instagram comments due to API restriction of META.
- Cleaning of the data/comments with python scripts, including tokenization, lemmatization; removal of special characters etc.
- Sentiment analysis using VADER & pandas libraries.
- Everything is anonymous.

❑ PART 3 – INTERVIEW ANALYSIS APPROACH

- Individual interviewing sessions between the author of the thesis and interviewees.
- The aim: To bring real life experiences of real-life people related to the topic of thesis.
- Transcript and audio-recording available at the Appendix.
- Everything is anonymous.

Results from the Interview

| Interviewee | Residence | City* | Experience | Option to return to/leave Albania | Suggested Improvements |
|-------------|----------------|--------|--|-----------------------------------|--|
| 1 | Not in Albania | Tirana | Bribery in social media/by phone call promising monetary rewards | Never | Improve technology and security during voting elections |
| 2 | Not in Albania | Lezhe | They were registered as a voter, even though being abroad during elections | Never | Security of data in voting areas |
| 3 | Not in Albania | Kukes | Bribery in social media/by phone call promising monetary rewards | Never | Educational Systems |
| 4 | Not in Albania | Kukes | Double standards in universities, students who were bribed for their votes, got rewarded better grades | Yes, but in 5-10 years | Nothing, according to them, propaganda will be more structured in the future |
| 5 | Not in Albania | Durres | Violence of the personal information & voting history of the individual | No | Data Security improvement & the elimination of corruption |
| 6 | Not in Albania | Tirana | Attempt of monetary rewards and bribery via email/phone call & f Facebook group chats | No | Improve the communication of the parties with the voters and be respectful of your personal data |
| 7 | Not in Albania | Lezhe | Propagandistic conference/meeting with students | No | Improve transparency in digital communication platforms |
| 8 | In Albania | Lezhe | Unfair firing from work & Bribe | Yes | Improve security, add more scholarships, help the youth |

Conclusions

- ❑ Following the results from all 3 parts of the practical part, whether the respondents of the survey; the people whose comments were gathered from Instagram or the interviewees from the interviews, the result is the same:
 - The selected sample is not satisfied with the current situation of digital propaganda in Albania.
 - They don't believe the political stability in their homeland and the transparence in voting processes.
 - The selected sample is leaving the country in serious numbers and do not intend to come back.
 - They are pessimistic about the future and there is just a slight percentage of people hoping for a better future.