# **ASSIGNMENT 2**

Literature Survey Report

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Research Methods in Information Science

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[1] "Emerging Trends in Personality Identification Using Online Social Networks" By: VISHAL KAUSHAL and MANASI PATWARDHAN,

At the Vishwakarma Institute of Technology

# Why I select this literature survey:

I choose this literature review because I find the topic of personality identification by means of online social networks fascinating and can conceive many productive uses from this line of research. I also have a deep fascination with Natural Language Processing (NLP) and machine-human interaction. The topics I personally seek to investigate are:

- 1. In what fashion machine learning algorithms can adapt AI-human communication based on human personality?
- 2. Just how AI can simulate its own "personality" based on the situation.
- 3. How AI-human interaction can be a catalyst for enhanced human lifestyle, personal development, and social advancement.

I very much enjoyed the large variety of features utilized in the various studies. The various features used in the analysis of online social network (OSN) data for personality identification. The authors reason that OSNs have become a valuable resource for researchers to study individual distinctions in personality traits and focus on the importance of choosing the right features for accurate and reliable personality identification.

The paper discusses the various approaches used to study personality, such as self-report surveys and observational methods, and emphasizes the limitations of these different methods. The writers then introduce the use of OSN data for personality identification, which comprises analyzing users' online behavior to predict their personality traits.

The researchers discuss the various features used in the analysis of OSN data for personality identification. They stress the importance of choosing the right features for accurate and reliable identification suggesting that the selection of features depends on the research question and the personality theory being tested. Some of the most common features used in the analysis of OSN data for personality identification include:

- Language use: This contains analyzing the content of users' posts, comments, and messages to extract linguistic features such as word choice, sentence structure, and emotional tone.
- Social network activity: This comprises analyzing the structure and dynamics of users' social networks, such as their number of friends, frequency of interactions, and types of relationships.
- Multimedia content: This contains analyzing users' multimedia content such as photos,
  videos, and music preferences, to extract features related to their aesthetic and cultural
  preferences.

The authors also underscore the importance of accounting for cultural differentiations in the analysis of OSN data for personality identification. They suggest

that cross-cultural studies are necessary to develop more accurate and reliable algorithms for personality identification.

# Conclusions and Findings:

In the paper, the authors Vishal Kaushal and Manasi Patwardhan examine the emerging trends in personality identification using online social networks (OSNs). The authors explore that OSNs have become an increasingly popular platform for users to express their personalities and emotions, making them a valuable resource for researchers to study individual differences in personality traits.

The paper also considers the importance of personality identification, which is used in fields such as psychology, marketing, and social science. The authors then explain the various approaches used to study personality, including self-report surveys and observational methods. Concluding, however, these methods can be time-consuming and prone to biases, leading researchers to explore other methods of personality identification.

The authors then deliberate the use of OSNs for personality identification, which has become a popular area in recent years. They rationalize how various studies have shown that personality traits can be predicted through the analysis of users' online behavior, such as their social network activity, language use, and multimedia content. The authors also highlight the importance of choosing the right features for personality identification and the challenges of dealing with privacy concerns and ethical considerations.

Furthermore, the authors discuss some of the emerging trends in personality identification using OSNs. They highlight the use of deep learning techniques and natural language processing to extract meaningful features from users' online behavior. They also deliberate the importance of cross-cultural studies in personality identification and the need to account for cultural disparities in the analysis of OSN data.

In the conclusion, the paper provides a somewhat comprehensive overview of the emerging trends in personality identification using OSNs. The authors underscore the potential of OSNs as a valuable resource for personality identification and emphasize the importance of choosing the right features and addressing privacy and ethical concerns. The paper also provides valuable insights into the future directions of the field, emphasizing the need for more accurate and reliable algorithms and multimodal data sources for a more comprehensive understanding of personality traits.

## What I would change in the literature survey:

I would start with a clearer introduction a little more concise and clearly express the purpose of the paper and what it aims to achieve. It could also provide a brief background on the topic to give readers greater context. The review could be more comprehensive and organized and could include a summary of key findings and provide more insight into the various approaches to personality identification in online social networks. It could have additional focus on Emerging Trends, the paper is titled "Emerging Trends in Personality Identification Using Online Social Networks," but there could be more emphasis on what those trends are and how they differ from preceding research. Possibly including recent studies and citing the most innovative methods used

to identify personalities in social networks. The methodology could benefit from a section that clearly outlines the methodology used for the survey. This could include criteria for selecting relevant studies, search strategies, and data analysis methods. The conclusion could be more impactful by summarizing the key findings and drawing out implications for additional future research. It could also have more focus on the limitations of the current research and suggest ways to overcome them.

Generally, the paper could be more focused, comprehensive, and engaging for the reader. By incorporating these changes, the paper could potentially be more engaging and have a greater impact on the field of personality identification using online social networks.

## References

[1] Kaushal, V., & Patwardhan, M. S. (2018). Emerging Trends in Personality Identification Using Online Social Networks—A Literature Survey. *ACM Transactions on Knowledge Discovery From Data*, *12*(2), 1–30. https://doi.org/10.1145/3070645