Previous Work on Mental Health of Veterans

In order to make medical diagnosis for patients, psychologists often use the linguistic content and expression of patients to judge their emotional changes and mental state according to previous research in psychology and linguistic. The clinical diagnosis efficiency has been greatly improved because of the progress of science and technology, especially in computational linguistics. In addition, the wide spread of social media such as Facebook, Twitter and Instagram, has provided mental researchers with a large scale of data. Therefore, they could easily use the collected dataset and machine learning techniques for sentiment analysis.

Linguistic contents which users posted on social media have been proved to be the basis for evaluating a person's mental state[1] [2]. However, the majority of research targets are normal people. In this paper, veterans will be regarded as research targets. Actually, a method about evaluation of Veterans’ Suicide Risk has been came up by Westgate in [3]. This paper will concentrate on analyzing the impact of the war on veterans’ mental state through the Twitters posted by themselves before and after the war instead of focusing on the prediction of the suicide risk of veterans. In addition, the comparison with the twitters released by ordinary users will be presented. Finally, a comprehensive sentiment analysis of veterans will be summarized.

[1] Weerasinghe, Janith, Kediel Morales, and Rachel Greenstadt. "“Because... I was told... so much”: Linguistic Indicators of Mental Health Status on Twitter". Proceedings on Privacy Enhancing Technologies 2019.4: 152-171. https://doi.org/10.2478/popets-2019-0063 Web.

[2] Guntuku, Sharath Chandra & Yaden, David & Kern, Margaret & Ungar, Lyle & Eichstaedt, Johannes. (2017). Detecting depression and mental illness on social media: an integrative review. Current Opinion in Behavioral Sciences. 18. 43-49. 10.1016/j.cobeha.2017.07.005.

[3] Westgate, Christine & Shiner, Brian & Thompson, Paul & Watts, Bradley. (2015). Evaluation of Veterans’ Suicide Risk With the Use of Linguistic Detection Methods. Psychiatric services (Washington, D.C.). 66. appips201400283. 10.1176/appi.ps.201400283.