# HOW CORPUS LINGUISTICS CAN HELP PROMOTE HEALTH EDUCATION: THE CASE OF SCHIZOPHRENIA

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### **Abstract**

This paper explores findings from the largest scale linguistic study to date into representations of schizophrenia in the press. By examining a 15 million word corpus of all articles that refer to schizophrenia in the UK national press between 2000 and 2015, the paper identifies three dominant stereotypes: (1) people with schizophrenia are violent (2) schizophrenia is a multiple personality disorder and (3) schizophrenia is cause by illegal drug use. The paper concludes by identifying ways in which health campaigners can improve health literacy around the disorder.

**Keywords:** Corpus linguistics, critical discourse analysis, mental health, health literacy.

### 1. Findings

Schizophrenia is a serious mental health condition affecting 15.2 per 100,000 people in the UK (Kirkbride et al, 2012). Indeed, some estimates suggest that 1 in 100 people will experience symptoms of schizophrenia in their lifetime (Frith and Johnstone, 2003). People diagnosed with the disorder experience delusions (fixed beliefs which are not amenable to counter evidence) and hallucinations (e.g. 'hearing voices') (APA, 2013).

That said, schizophrenia is poorly understood by the public at large and is associated with inaccurate and harmful stereotypes (e.g. Corrigan, 2014). This is so much the case that early literature refer to stigma towards the diagnosis as a 'secondary impairment' (Wing, 1978). Importantly, these negative stereotypes have shown to lead to poorer clinical outcomes for people with the disorder (van Zelst, 2009). Indeed, it seems to be the case that stigma towards schizophrenia is a self-fulfilling prophesy. Internalised stigma has been shown to deter people experiencing psychotic symptoms from seeking professional help (Harrison and Gill, 2010) which can increase the frequency and intensity of psychotic symptoms and lead to a higher risk of violent episodes (Goldstone et al, 2012). One effect of this cycle of stigma is that legislation is imposed which deprives people with the disorder of basic human rights. The 2002 Mental Health Bill in the UK, for instance, allowed people with serious mental illnesses to be compulsorily detained, even if the person had not committed a violent crime.

Within this climate, this poster explores some of the main findings from a large scale corpus linguistic study (the largest study to date) into representations of schizophrenia in the UK press. Using the search query *schiz!*, all UK press articles that made reference to schizophrenia, either as the main topic of the article, or in passing, between 2000 and 2015 were collected. The resulting 15 million word dataset was cleaned and then separated by year and by newspaper. To examine the data, a number of quantitative methods were used. This paper largely reports on the findings of various keyword analyses, where words which are significantly more frequently in this dataset (with reference to a corpus of general British English, ukWaC) were identified. The use of these words were then examined in more detail using a concordance. Another tool which was used was the collocation tool, where words which occurred unusually frequently in the environment of the word *schizophrenia* or *schizophrenic* were identified.

The study identified a number of key stereotypes. This paper focusses on three dominant stereotypes and suggests ways in which awareness campaigners might improve a public understanding of the disorder.

Most prominently, schizophrenia is almost always represented in the context of violent crime. Collocates of *schizophrenic* for instance, include *dangerous* (n = 47) and *violent* (n = 50). Awareness campaigns are therefore encouraged to represent the disorder in a more diverse range of topics, and represent people with schizophrenia who are contributing positively to society. Journalists are encouraged

to clarify that people with schizophrenia who commit violent crime only make up a small minority of cases.

The word *schizophrenic* (and to a much lesser extent, *schizophrenia*) is used metaphorically in entertainment articles (e.g. 'schizophrenics of the shark world'; 'I'm schizophrenic about shoes'). These often reproduce harmful stereotypes around the disorder such as the notion that schizophrenia is a split personality disorder. Awareness campaigners should encourage journalists to avoid the metaphorical use where possible, and to provide materials which highlight the main symptoms of schizophrenia to avoid the promulgation of misconceptions.

Schizophrenia was often mentioned in the context of articles reporting on the classification of cannabis in the UK. This was shown to feed into a discourse of blame, where people with schizophrenia who suffered violent episodes were indirectly blamed for taking illegal drugs. The relationship between drug use and schizophrenia is a complex one and no causal link has been established. Awareness campaigners are therefore encouraged to highlight that schizophrenia is not a result of illegal drug use.

#### References

- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (5th ed.).
- Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest*, 15, 37–70.
- Frith, C. & Johnstone, E. C. (2003). Schizophrenia: A very short introduction. Oxford University Press.
- Goldstone, E., Farhill, J. & Ong, B. (2012). Modelling the emergence of hallucinations: Early acquired vulnerabilities, proximal life stressors and mal-adaptive psychological processes. *Social Psychiatry and Psychiatric Epidemiology*, 47, 1367-1380.
- Kirkbride, J. B., Errazuriz, A., Croudace, T. J. Morgan, C, Jackson, D., Boydell, J., Murray, R. M. & Jones, P. B. (2012). Incidence of schizophrenia and other psychoses in England, 1950-2009. A systematic review and meta-analyses. *PLoS One* 7(3), e31660
- van Zelst, C. (2009). Stigmatisation as an Environmental Risk. Schizophrenia Bulletin, 35(2), 293-296.
- Wing, J. K. (1978). Schizophrenia: towards a new synthesis. Academic Press. Kirkbride