I17 The Psychopathic Semantics of Serial Killer Theodore Robert Bundy

Kaveh Cyrus Ghaedi, DO*, 32 Bartle Court, Apt B, Highland Park, NJ 08904; and Ross Crosby, PhD, Neuropsychiatric Research Institute, 120 Eighth Street, S, PO Box 1415, Fargo, ND 58107-1415

The primary objective of this study is to perform an exploratory analysis using quantitative linguistic analysis software, Linguistic Inquiry and Word Count (LIWC), to study how one prototypical psychopathic serial killer used language within various contexts over time.

This presentation will impact the forensic science community by providing exposure to a novel and relatively affordable way of gleaning insights into psychopathology by looking at individual differences in language use.

Theodore Robert Bundy (1946-1989), or "Ted," was the quintessential psychopathic serial killer, prototypical of how the clinical construct was extensively detailed *qualitatively* by psychiatrist Dr. Hervey Cleckley[1] and later further refined and *quantified* by psychologist Dr. Robert Hare.[1-3]

Psychopathy is a clinical construct loosely characterized by a cluster of severe affective, interpersonal, and behavioral components that include, but are not necessarily limited to, traits such as: superficial charm, egocentrism, glibness, conning/deceptiveness, pathological lying, poor behavioral controls, callous lack of empathy, and/or lack of remorse. Although related, psychopathy is often incorrectly equated with the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (*DSM-5*) diagnosis of Antisocial Personality Disorder (ASPD), a relatively heterogeneous categorical construct.

One of the many characteristics that distinguish psychopaths from non-psychopaths is the way they employ language in unusual ways.[4-7] Their words are sometimes perceived as hollow shells devoid of affective content, a phenomenon that Cleckley referred to as "semantic aphasia."[1] Language is the most common and reliable manner to convey our thoughts and emotions so that others can understand us.[8] Our words reflect who we are and how we relate to others. Researchers have long studied the semantics of subjects with various psychopathologies to glean more insights into them and their behaviors; however, such endeavors often proved tedious, time consuming, expensive, and often had problematic interrater reliability.[9] With the advent of more affordable and powerful computers, we can now empirically and reliably accomplish in seconds or minutes what may have previously taken months or years. One tool that circumvents the aforementioned issues is the LIWC software.[9]

LIWC (pronounced "Luke") is a transparent text analysis program developed by psychologist Dr. James Pennebaker and his students at the University of Texas at Austin.[9] It counts words and places them in psychologically meaningful categories.[10,11] These empirical dimensions have been extensively studied, well validated, and applied to detect meaning in a wide variety of circumstances, such as predicting mild cognitive impairment, detecting deception in written and spoken language, and understanding individual differences between attempters and completers of suicide.[12-16] To date, relatively few studies have used LIWC to understand psychopathy, and, as of this writing, no published research has used it to study serial killers.

The primary objective of this study is to perform an exploratory analysis using LIWC to study how one prototypical psychopathic serial killer (Bundy) used language within various contexts over time. The dataset includes transcripts of police interrogations, personal correspondence, courtroom testimony, and interviews with the press collected by this study from books, video footage, and original documents from state archives in both Florida and Washington. The goal of this presentation is to introduce attendees to the powerful and affordable potentials of using LIWC in forensic investigations by illustrating how it can reliably relate language patterns to psychopathology.

Reference(s):
1. Cleckley, Hervey M. 1976. The Mask of Sanity: An Attempt to Clarify some Issues about the so-Called Psychopathic Personality. 5th ed. St. Louis: Mosby.
2. Hare, Robert D. 1993. Without Conscience: The Disturbing World of the Psychopaths Among Us. New York: Pocket Books.
3. Hare, Robert D., and Craig S. Neumann. 2017. The PCL-R Assessment of Psychopathy: Development, Structural Properties, and New Directions.
4. De Almeida Brites, José. 2016. The Language of Psychopaths: A Systematic Review. *Aggression and Violent Behavior*. 27 (2016): 50-54.
5. Hare, Robert D., Sherrie E. Williamson, and Timothy J. Harpur. 1988. *Psychopathy and Language*.
6. Brinkley C.A., Newman J.P., Harpur T.J., and Johnson M. M. 1999. Cohesion in texts produced by psychopathic and nonpsychopathic criminal inmates. *Personality and Individual Differences*. (26) 873-885.
7. Le, Marina T., Michael Woodworth, Lisa Gillman, Erin Hutton, and Robert D. Hare. 2016. The Linguistic Output of Psychopathic Offenders during a PCL-R Interview. *Criminal Justice and Behavior XX*. (4): 009385481668342.
8. Tausczik Y.R. and J.W. Pennebaker. 2010. The Psychological Meaning of Words: LIWC and Computerized Text Analysis Methods. *Journal of Language and Social Psychology*. 29 (1): 24-54.
9. Pennebaker, James W. 2011. *The Secret Life of Pronouns: What our Words Say about Us.* US ed. New York: Bloomsbury Press.
10. Pennebaker J.W., R.L. Boyd, K. Jordan, and K. Blackburn. 2015. *The Development and Psychometric Properties of LIWC2015.* Austin, TX: University of Texas at Austin.
11. Pennebaker J.W., Booth R.J., Boyd R.L., and Francis M.E. 2015. *Linguistic Inquiry and Word Count: LIWC2015.* Austin, TX: Pennebaker Conglomerates.

12. Asgari, Meysam, Jeffrey Kaye, and Hiroko Dodge. 2017. Predicting Mild Cognitive Impairment from Spontaneous Spoken Utterances. *Alzheimer's and Dementia: Translational Research and Clinical Interventions.* 3 (2): 219-228.

13. Masip, Jaume, María Bethencourt, Guadalupe Lucas, Miriam Sánchez-San San Segundo, and Carmen Herrero. 2012. Deception Detection from Written Accounts. *Scandinavian Journal of Psychology.* 53 (2): 103-111.

14. Ali, Mohammed and Timothy Levine. 2008. The Language of Truthful and Deceptive Denials and Confessions. *Communication Reports.* 21 (September 2014): 82-91.

15. Almela, Ángela, Gema Alcaraz-Mármol, and Pascual Cantos. 2015. Analysing Deception in a Psychopath's Speech: A Quantitative Approach. *DELTA: Documentação De Estudos Em Lingüística Teórica E Aplicada.* 31 (2): 559-572.

16. Handelman, Lori D. and David Lester. 2007. The Content of Suicide Notes from Attempters and Completers. *Crisis.* 28 (2): 102-104.

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*Presenting Author