Hypergraphia: A Comprehensive Review and Inquiry into Neurological Origins

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Very Rough Prelude to a Draft

Introduction

Hypergraphia can be explained as the overwhelming urge to write. The behavior of hypergraphia can be exhibited within many different cognitive disorders ranging from temporal lobe epilepsy, which is the most common, to schizophrenia (Flaherty 2005). Although there exists a fair amount of psychological and neurological data collected pertaining to hypergraphia, there is no definitive general consensus on the biological origins of this phenomenon within the brain. One factor that contributes to this vagueness is the varying disorders of patients and sometimes unexplained phenomena that are observed to exhibit hypergraphia behavior (Cook et. al. 1992), (Hirata 2009). Through the comparison of the similarities and differences within the neurological data collected pertaining to hypergraphia one might reach a better understanding of the biological origins of this behavior.

The first major section of the paper will focus on the history of hypergraphia and touch on the reasons for past research done in the field. It will include a section on famous people believed to have hypergraphia and if the cause of hypergraphia is related to our evolution and continued use of writing as a communication and creative method (Flaherty 2005).

The next two sections will have discussions pertaining to clinical descriptions of hypergraphia and possible neurological, psychological, and evolutionary causal theories (Flaherty 2005), (Arnston et. al. 1983), (Kalamangalam 2009). This section will also entail the disorders that are known to be related to hypergraphia such as, temporal lobe epilepsy, bi polar disorder, and schizophrenia, and unexplained cases (Hirata et. al. 2009). All disorders have known patients that exhibit hypergraphia behavior, what are the similarities between these disorders that might account for hypergraphia behavior?
The next three sections will focus on the neurological data collected pertaining to hypergraphia behavior exhibited in patients categorized as having one of three different disorders. One of three sections will focus on hypergraphia related to temporal lobe epilepsy (Arnston et. al. 1983), (Kalamangalam 2009), the next bi polar disorder (Flaherty 2005), and the last schizophrenia (Flaherty 2005).

The next section will focus on the neurological correlates observed in hypergraphia behavior in general. What stands out in neurological data collected on hypergraphia, can we make a definitive description as to the neurological origins of hypergraphia? If not then what do we know about it now and how can we better understand it?

The last major section focuses on possible future directions of hypergraphia studies. What will help us better understand it and define it in terms of science and biology. Is there a need to create sub types of hypergraphia according to the past history and diagnosis of individual patients? Can hypergraphia be induced by stimulation, drugs, or other brain altering methods?

Individual Sections

A History of Hypergraphia

This particular part will include a section on past writers believed to have hypergraphia. Detail past research done on hypergraphia to date and the research that sparked renewed interest into this phenomenon. State possible evolutionary explanations of hypergraphia, the biological desire to communicate etc (Flaherty 2005).

Clinical Descriptions of Hypergraphia

This section will focus on specific definitions of hypergraphia. Temporal lobe explanations of hypergraphia (Arnston et. al. 1983), (Kalamangalam 2009). Bi polar relationships to
hypergraphia and schizophrenic correlates to hypergraphia. Cite some clinical conclusions used to bolster each definition of hypergraphia.

**Possible Causes of Hypergraphia**

This part of the paper will cover the types of disorders that can cause hypergraphia behavior (Hirata et. al. 2009), (Cook et. al. 1992). Touch on the link between these disorders, both from a neurological and psychological perspective (Flaherty 2005). Can hypergraphia be a learned behavior, what does it have to do with writer’s block, is it strictly a neurological cause or an evolved specialty that is genetic?

**Hypergraphia Exhibited in Temporal Lobe Epilepsy**

I will report on studies involving temporal lobe epilepsy concerning hypergraphia and note any differences and similarities between hypergraphia exhibited in these subjects compared with other two types (Flaherty 2005). Include any differences and similarities in the biological and neurological functions measured when compared to two other disorders (Arnston et. al. 1983). Touch on the creative urge associated with hypergraphia in a state of mania. Focus on similarities in biological data, this is the most common cause of hypergraphia and vital to its explanation.

**Hypergraphia Exhibited in Bi Polar Subjects**

This section is where I will report on studies involving bi polar patients concerning hypergraphia and note any differences and similarities between hypergraphia exhibited in these subjects compared with other two types (Flaherty 2005). Include any differences and similarities in the biological and neurological functions measured when compared to two other disorders.
Hypergraphia Exhibited in Schizophrenic Patients

This will be the part where I detail studies done with schizophrenic patients concerning hypergraphia and note any differences between hypergraphia exhibited in these subjects compared with other two types (Flaherty 2005). Creative hallucinatory origins of hypergraphia observed in these type of subjects. Include any differences and similarities in the biological and neurological functions measured when compared to two other disorders

Neurological Origins of Hypergraphia

An explanation of neurological studies and statistical data defining the origins and behavior of hypergraphia will be described here. Compare and contrast the similarities and differences in the studies cited along with any major insights into the neurological origins of hypergraphia.

Future Directions for Hypergraphia Clarification

I will clarify the current statistical results on hypergraphia and what they mean in terms of neurological and psychological origins. Propose future directions for clinical and psychological studies in order to help clarify the causes and neurological relationships of hypergraphia.

Conclusion

In this concluding section I will restate main points; what is hypergraphia classified as, what causes it, who has it, and explain any neurological correlates. Are there any differences or similarities in the research conclusions previously stated in paper? Clarify current state of hypergraphia knowledge and research, as well as, state possible future directions for studies with hypergraphia and its importance to real people who experience it or know someone who has.
Resources


