

IN THE CIRCUIT COURT OF COLE COUNTY, MISSOURI

STATE OF MISSOURI, *ex rel.*)
RYAN FERGUSON,)
)
Petitioner,)
)
v.)
)
DAVE DORMIRE, Superintendent,)
Jefferson City Correctional Center,)
)
Respondent.)

Case No. _____

AFFIDAVIT OF DR. KIM FROMME

Now comes your affiant, Dr. Kim Fromme, and states under oath as follows:

1) I am Professor of Clinical Psychology at The University of Texas at Austin where I teach courses on Abnormal Psychology and Psychological Assessment. I specialize in the effect of alcohol intoxication on cognitive processes, especially alcohol-induced blackouts. I am a Fellow of the American Psychological Association (APA) and former president of the APA Division on Addictions. (Attached as Exhibit A is a copy of my Curriculum Vitae)

2) I received my doctorate from the University of Washington in 1988 and have served as Principal Investigator on several large federally funded grants from the National Institute on Alcohol Abuse and Alcoholism. My research focuses on alcohol use



and the effects of alcohol on cognition and behavior. I have published more than 65 peer-reviewed journal articles on these topics.

3) I have testified in three criminal cases as an expert for the defense on the incidence and effects of alcohol-induced blackouts. These cases have involved my testimony about the defendants' lack of memory regarding the incidents due to alcohol-induced blackouts.

4) I have been retained by attorney Kathleen Zellner as a defense expert on alcohol intoxication and alcohol-induced blackouts in the case of *State of Missouri ex. rel. Ryan Ferguson v. David Dormire, Superintendent Jefferson City Correctional Center*. I understand that Ms. Zellner represents Ryan Ferguson on the appeal of his criminal conviction for second degree murder. I have not met and do not personally know Ryan Ferguson or Charles Erickson. If called as an expert witness, I would offer the opinions stated below.

5) I have reviewed the trial testimony of Mr. Charles Erickson, Delany Dean, Ph. D. and Elizabeth Loftus, Ph. D. I have also seen a photograph from the Halloween party attended by Mr. Erickson on October 31, 2001 and have obtained information about Mr. Erickson's reported alcohol consumption on October 31 to November 1, 2001.

6) On the night of October 31 to November 1, 2011, Mr. Erickson attended a Halloween party and went to the By George nightclub. Based on the information provided by Mr. Erickson to his attorney which was then provided to me, Mr. Erickson consumed approximately 10 sixteen ounce beers and 3-4 amaretto sour mixed drinks. This binge style of heavy episodic drinking is typical among teens and college students, and based on my research (e.g., Hartzler & Fromme, 2003a; 2003b; Wetherill & Fromme,

2009) and that of others (e.g., White, 2003) results in alcohol-induced blackouts for approximately 50% of college-age drinkers.

7) Alcohol-induced blackouts are defined as amnesia for all or part of a drinking episode. They involve primarily anterograde amnesia, meaning memory loss for events occurring after alcohol intake. Blackouts also involve impairments in episodic memory, specifically memories for the emotional, spatio-temporal, and social context of events (e.g., where you were, what events transpired). Based on their duration and the extent of memory loss, there are two types of blackouts: en bloc and fragmentary. In the case of en bloc blackouts, periods of time or activities are permanently lost from memory. In the case of fragmentary blackouts, periods of time or activities are lost from memory, but can be retrieved with appropriate cuing (e.g., reminders from friends; situational cues).

8) My recent research using Functional Magnetic Resonance Imaging (fMRI) has shown that alcohol intoxication differentially influences the brain in people who experience alcohol-induced blackouts (Wetherill & Fromme, under review). Specifically, when intoxicated, the brain regions that underlie episodic memory are under-activated, making certain people less able to recall episodic memories (e.g., where they were, whom they were with, and what they were doing).

9) Testimony by Dean Delaney, Ph. D. at Ryan Ferguson's post-conviction hearing focused on the possibility that Mr. Erickson's diagnosis of Obsessive Compulsive Disorder (OCD) contributed to obsessions that he had hurt someone and to a subsequent belief that he had contributed to the death of Mr. Heitholt. The evidence provided about Mr. Erickson's OCD symptoms instead focused on concern about contamination while in

jail, and no evidence was presented that would support obsessions as an explanation for Mr. Erickson's admission of guilt in Mr. Heitholt's death.

10) In examination of Elizabeth Loftus, Ph. D. , Dissociative Amnesia was suggested as a possible explanation for Mr. Erickson to repress, and later recover, memories of contributing to Mr. Heitholt's death. The prevalence of Dissociative Amnesia is estimated from 2% to 3.4% in the general population (Maaranen, Tanskanen, Honkalaampi, Haatainen, Hintikka, & Viinamake, 2004; Seedat, Stein, & Forde, 2003). This rare disorder is an unlikely explanation for Mr. Erickson's pattern of memory failures.

11) In contrast, Mr. Erickson's testimony is consistent with having experienced an alcohol-induced blackout, as evidenced by the many episodic autobiographical facts he could not remember.

12) It is well-established in the psychological literature that when individuals are asked to describe or explain events or actions they do not recall, they will often construct memories to fill in the blanks. This is evidenced in the confabulation that is notorious in alcoholic Korsakoff's patients, and has been repeatedly demonstrated in experimental studies of college students (see for example "False Memories" by Gerrie, Garry, & Loftus, in "Psychology and the Law: An empirical perspective" 2005, Guilford Press). This process was described in detail in Dr. Loftus' testimony.

13) The progression from vague memories which came to Mr. Erickson like "snapshots" and "like if you pause a movie" to being "100% certain..." suggests that memories were being created each time Mr. Erickson was questioned about the night of October 31 to November 1, 2001, or as he read more and more information from

newspaper accounts and police reports. The construction of memories is not necessarily a malicious attempt to lie, but is rather a psychological process whereby people attempt to make sense of their own experience in the absence of clear memories. Alterations in memories can be prompted by repeated questioning, as in the case with Mr. Erickson, or by provision of information (Toland, Hoffman, & Loftus, 1991).

14) I can say with a reasonable degree of psychological certainty that Charles Erickson was experiencing alcohol-induced blackouts during the night of October 31 to November 1, 2001, and his own report of alcohol use and hangover, combined with his initial inability to clearly recall his own behavior, is entirely consistent with the experience of alcohol-induced blackouts. Based on prevalence rates, it is far more likely that he experienced both fragmentary blackouts (whereby he remembered events only after being provided with information) and en bloc blackouts (whereby he never recalled certain aspects of the night) than that he suffered from Dissociative Amnesia or that Obsessive Compulsive Disorder led him to believe that he murdered Mr. Heitholt.

15) Consistent with the psychological tendency to construct memories, it is also plausible that Mr. Erickson used information from events he could remember (e.g., needing more money for drinks at By George), or from what people may have told him (e.g., how many times Mr. Heitholt was struck), to construct an explanation for the experiences he could not remember due to alcohol-induced blackouts. If Mr. Erickson was experiencing fragmentary and en bloc blackouts during October 31 to November 1, 2001, his self-report of events that transpired is unreliable.

FURTHER AFFIANT SAYETH NAUGHT

Dr. Kim Fromme
Dr. Kim Fromme

Subscribed to Before
Me this 8th day of
February, 2011.

Noelle Detrich Klingber
Notary Public

