

Psychiatric Medications and School Shootings

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There is a widespread belief that an “epidemic” of psychiatric medications is causing an “epidemic” of violence, particularly in students. Some who hold this belief also believe that there is a conspiracy to hide the connection between medications and murder from the public. Those accused of conspiracy range from pharmaceutical companies to the government to the media. One website proclaims, “It is nearly synonymous that every school shooting or mass killing of some type is lucidly linked to the shooter taking antidepressants, but our precious lap dog media rarely if ever mentions this connection.”¹

Another site states:

Every young, male shooter that has gone on a killing spree in the United States also has a history of treatment with psychotropic drugs... It was only after psychiatric medicine started targeting young people with mind-altering medications that we witnessed this explosion in violence.”²

Another site contains an article with the headline, “Violence in Schools? It’s the Prozac and Ritalin Stupid!”³ Yet another site has an article titled, “Antidepressant Drugs Causing Epidemic of Mania, Mayhem and Murder: America’s addiction to dangerous SSRI’s hits crisis levels.”⁴ (SSRI stands for Selective Serotonin Reuptake Inhibitors, a class of antidepressant medications.)

The general argument is that in the last two decades the use of psychiatric medications, particularly among young people, has increased drastically, resulting in a dramatic increase in youth violence, including school shootings. This view is expressed by the following passage:

It is abundantly clear that the epidemic of craziness and violence we are witnessing in America ... is being fueled by dangerous psychotropic drugs ... that are causing normally sane people to fly off the hook and act out with insane acts of mania or violence.⁵

It is true that psychiatric medications, like all drugs, can have side effects. I worked for over ten years in a psychiatric hospital for children and adolescents and have seen this first-hand. There were clients whose medications made them drowsy, gave them tics, tremors, rashes, or weight-gain, or had other negative effects. Medications can also have withdrawal effects, meaning that people have adverse reactions when they stop taking the medication, particularly if they stop suddenly.

What is the evidence supporting the link between psychiatric drugs and school shootings? This article examines the issue from two perspectives: the societal and the individual. The societal perspective considers the overall claim that the rise in medication use has caused a rise in violence, and the individual perspective examines claims about specific shooters going on rampages due to medications.

THE INCREASING USE OF PSYCHIATRIC MEDICATIONS

The use of psychiatric medications in this country has indeed increased significantly since the 1980s. Between 1987 and 1996 the use of psycho-stimulants such as Ritalin increased nearly four-fold and the use of antidepressants by adolescents ages 15 to 18 increased over four-fold.⁶ Similarly, there was a 75% increase in the use of antidepressants from 1996 to 2005.⁷ There is no question that the use of psychiatric medications has grown substantially in the last twenty-five years.

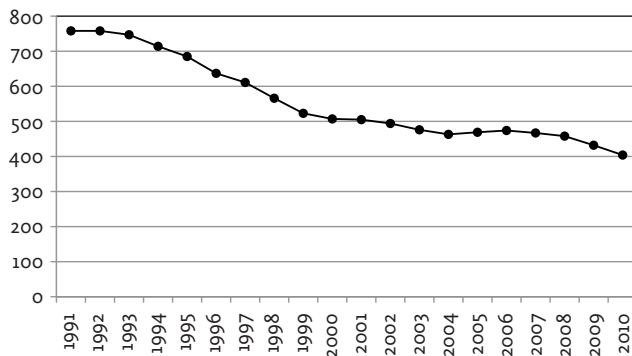
The problem with the argument blaming medications for murder, however, is that though there has been a significant increase in the use of psychiatric medications, there has not been a corresponding increase in violence. In fact, just the opposite has occurred. Violent crime has decreased dramatically.

As noted in an article in 2012:

The last time the crime rate for serious crime — murder, rape, robbery, assault — fell to these levels, gasoline cost 29 cents a gallon and the average income for a working American was \$5,807. That was 1963.⁸

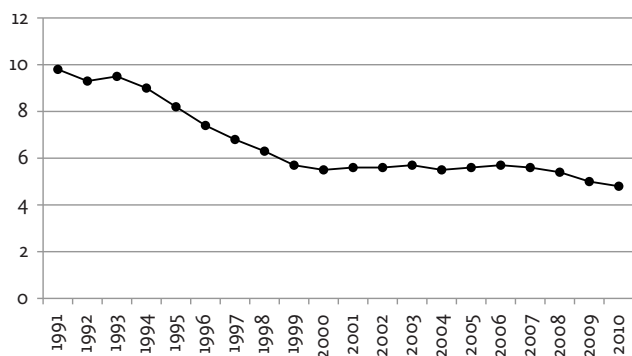
In other words, through the very decades when there was a dramatic increase in the use of psychiatric medications, there was a dramatic *decrease* in violent crime, including murder in general and homicides by youths in particular. For example, Graph 1 shows the decrease in violent crime in the United States for the twenty years from 1991 through 2010.

Graph 1: Violent Crime Rate in the U.S. per 100,000 Inhabitants⁹



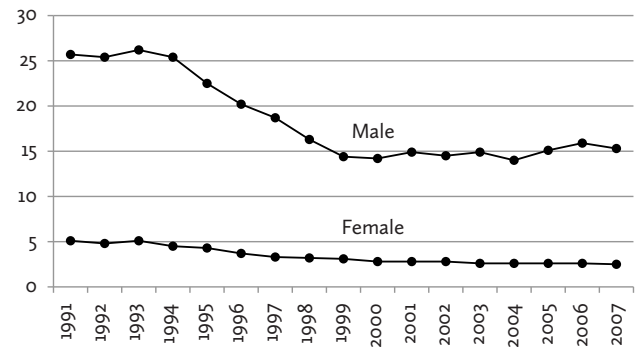
The next graph shows the decline in the murder rate in the United States from 1991 through 2010.

Graph 2: Murder Rate in the U.S. per 100,000 Inhabitants¹⁰



Not only was there a decline in overall homicides, but also a decrease in homicides by youth ages 10 to 24. This is seen in data from the Centers for Disease Control, presented in Graph 3. The numbers on the graph are the homicide rates per 100,000 people.

Graph 3: Homicide Rates Among Persons Ages 10 to 24 Years, by Sex, United States, 1991–2007¹¹



These graphs document a remarkable trend. The violent crime rate declined 47% from 1991 through 2010. The homicide rate across all ages decreased 51% from 1991 through 2010. Most strikingly, youths between the ages 10 and 24, the population that includes the children and adolescents who had four-fold increases in particular psychiatric medications, had a 40% decrease in the male homicide rate and a 51% decrease in the female homicide rate.

Thus, the dramatic increase in psychiatric medications coincided with a dramatic *decrease* in homicide and other violent crimes. Perhaps the medications resulted in decreased violence; perhaps there is no connection between the medications and decreased violence. Either way, the claim of epidemic violence as a result of the increased use of psychiatric medications simply is not supported by the data. There is no “epidemic of mania, mayhem, and murder.”

WHO WAS TAKING MEDICATIONS?

According to writer Jim Marrs, “Nearly every school shooter in this country can be shown to have been involved with psychotropic drugs — either taking them at the time of the shootings, or what can be even worse, coming off them.”¹² Many websites list school shooters and the drugs they allegedly were taking at the time of their attacks. Here are excerpts from one such list, a list that appears in identical or similar form on multiple sites:

Fifteen year old Kip Kinkel (Prozac and RITALIN) shot his parents while they slept then went to school and opened fire killing 2 classmates and injuring 22 shortly after beginning Prozac treatment.

Luke Woodham aged 16 (Prozac) killed his mother and then killed two students, wounding six others.

Michael Carneal (Ritalin) a 14-year-old opened fire on students at a high school prayer meeting in West Paducah, Kentucky. Three teenagers were killed, five others were wounded, one of whom was paralyzed.

Andrew Golden, aged 11, (Ritalin) and Mitchell Johnson, aged 14, (Ritalin) shot 15 people killing four students, one teacher, and wounding 10 others.¹³

Based on my research, this list is wrong in many ways. Kip Kinkel (Thurston High School) did not murder his parents as they slept and he had not just begun treatment with Prozac. Kinkel first shot his father while he was talking on the telephone, and then shot his mother after helping her bring in groceries from the car. More importantly, Kinkel was not on any medication when he went on his rampage. He had taken Prozac and Ritalin in the past but not anywhere near the time of his attack (details will be discussed below).

Regarding Luke Woodham (Pearl High School), I have not found any reliable source that states he was on Prozac. I have read books, book chapters, and many articles about Woodham and not found any mention of Prozac. The coverage by *The New York Times* and many other sources don't mention it. Even in his court cases where he appealed his sentence on numerous grounds, including insanity, there is no mention of his being on Prozac. Mental health professionals testified about Woodham's psychological state, but they made no reference to prior treatment or medication. Unless other information becomes available, Luke Woodham should not be on the list of school shooters who took psychiatric medications.

The shooting by Michael Carneal, as well as that by Andrew Golden and Mitchell Johnson, were investigated by Dr. Katherine Newman and her team of researchers. They interviewed 163 people in the towns where the shootings occurred (West Paducah, Kentucky, and Jonesboro, Arkansas). This was the most thorough investigation of these shooters that anyone has conducted. Regarding Golden and Johnson, Newman's team concluded, "There is no evidence that either boy was on any form of medication."¹⁴ Similarly, though the research team explored Carneal's mental health history, there was no report that he had been diagnosed with any psychiatric disorder or prescribed any psychiatric medication. Golden, Johnson, and Carneal should not be on the list of medicated shooters.

Thus, as far as I can determine, all five claims that Kinkel, Woodham, Carneal, Golden, and Johnson were on medication at the time of their attacks are wrong. Nor are these the only shooters for which such claims have been made.

Asa Coon (SuccessTech Academy) is sometimes said to have been on medications at the time of his attack. This, however, does not appear to have been the case. At some point in his life – perhaps two or three years prior to his attack – he had been prescribed Trazodone and Clonidine.¹⁵ The fact that the medications were prescribed, however, does not mean that they were ever taken. According to an article in *The New York Times*, court records indicated that Coon "regularly refused to take the medicines."¹⁶ In addition, the coroner found no drugs or alcohol in Coon's body.¹⁷ Thus, based on the available information, there is no evidence that Coon was taking medications at the time of his attack.

The same problematic reporting occurs with older shooters, too. For example, there are many who claim that Seung Hui Cho (Virginia Tech) was on psychiatric medication at the time of his attack. One person declared, "The fact is that the cultural brainwashing of violent video games and psychotropic drugs directly contributed, as it does in all these cases, to the carnage at Virginia Tech."¹⁸ Another writer stated, "The psychiatric-pharmaceutical cartel is working at a frenzied pace, deflecting media and government attention away from the facts: Cho ... was reported to have been prescribed 'depression' drugs."¹⁹ Yet another writer stated, "Initial reports stated that 'depression medication' was found among Cho's belongings. But neither his toxicology reports, nor his recent medical history were ever released to find out whether Cho had been in withdrawal from psychiatric medication."²⁰

What can be said in response to these claims? Several points can be made. "Initial reports" about school shootings are notoriously inaccurate and the case of Virginia Tech is no exception. No antidepressant medications were found in Cho's belongings. His roommates had found a medication container but this was for a skin condition.²¹

Was Cho on an antidepressant at the time of his attack? No. Did the powers-that-be avoid investigating his drug use? No. The official report on the attack thoroughly reviewed Cho's mental health history and medication use and noted that he had taken Paxil from June 1999 to July 2000. Did Paxil make him violent? Not at all. The report noted, "Cho did quite well on this regimen; he seemed to be in a good mood, looked brighter, and smiled more. The doctor stopped the medication because Cho improved and no longer needed the antidepressant."²²

Did Cho ever use any other psychiatric drug? Yes. On 13 December 2005 he had one dose of 1 milligram of Ativan at 11:40 P.M.²³ What about the allegation that the toxicology results of his autopsy were never released? After the autopsy was completed the toxicology results were widely reported in the media. The conclusion: Cho "had no prescription drugs or toxic substances in his system."²⁴

There is no reason to think that the Paxil Cho took seven years before his attack, or a single milligram of Ativan taken sixteen months prior to his attack, caused mass murder. Cho was not on any psychiatric medication, nor was he going through withdrawal, at the time of his attack.

Cho is not the only shooter whose records have allegedly been withheld. One site lists the school shooters known or believed to have been on medications, and says of other shooters, "*The relationship of psychiatric drugs in the remaining incidents of violence has not been publicly disclosed or the person's records are sealed*"²⁵ (italics in original). The implication is that the lack of disclosure is part of a cover-up.

One of the shooters to whom this applies is Dylan Klebold (Columbine High School). One site claims, "[Eric] Harris was on the antidepressant Luvox. Klebold's medical records remain sealed."²⁶ Another site states, "Dylan Klebold's autopsy that would have revealed drugs in his system was never made pub-

lic.”²⁷ This was written in 2007; Klebold’s autopsy was released in February 2001,²⁸ over six years before the claim that it had never been released. The conclusion of the toxicology tests? “No drugs detected.”²⁹ Nor is there any evidence that Klebold ever took any psychiatric medications.

In the case of German shooter Tim Kretschmer, we see how quickly someone can jump to a conclusion: “The report that Germany’s shooter, Tim Kretschmer, ‘walked calmly into three classrooms and opened fire, without saying a word’ is a strong indication that he was almost certainly suffering the brain-altering side effects of psychiatric medication.”³⁰ Calmness during an attack is not evidence of being medicated. Contrary to this unwarranted assumption, it was reported that Kretschmer was “receiving counseling for depression but police sources say he was not on any medication.”³¹ This was confirmed by a later court report.³²

Similarly, when Kimveer Gill committed a rampage attack at Dawson College in Montreal in 2006, people speculated or assumed that he must have been taking medication. One organization published a document, noting that the attack “leads one to wonder whether the Montreal shooter was under the influence of mind-altering psychiatric drugs.”³³ Another document by the same organization noted that Gill “had been treated for depression,”³⁴ with the implication that the treatment must have caused his attack. I have found no evidence, however, that he received any mental health treatment – medication or otherwise. Pending the discovery of new information, Gill should not be on the list of medicated school shooters.

Other perpetrators who may have taken medications at some point in their lives are often included in lists of medicated shooters, even if they were not using the drugs during their rampages. For example, Finnish shooter Pekka-Eric Auvinen began taking an antidepressant in April 2006.³⁵ Though he reportedly responded well initially, he decided against continuing with the medication: “Despite the parents’ support, the perpetrator took his medication irregularly and by the autumn of 2007 did not want to use it any longer.”³⁶ He may have been off the medication for several weeks or a couple of months, but he was no longer on it at the time of his attack on 7 November 2007.

James Wilson was a 19-year-old shooter who committed an attack at Oakland Elementary School in Greenwood, South Carolina, in 1988. He had been prescribed medications and admitted to taking deliberate overdoses at times. By his report, however, he had not had any medication for weeks before his attack.³⁷

Similarly, Jillian Robbins, who committed a shooting at the main campus of Penn State University, had been prescribed medications. Details are lacking, but she reportedly “shrugged off” medication because “it left her drowsy and unleashed ‘graphic, vivid nightmares.’”³⁸ About a month before her attack, she had tried to overdose on tranquilizers. This resulted in her being hospitalized, but she was discharged without any medication,³⁹ presumably because of the potential for her to attempt another suicide by overdose. Though the exact timeline is unclear, it appears that Robbins was medication-free for the

month leading up to her attack.

We see similar issues with claims about adult shooters being on medication at the time of their attacks. Joseph Lieberman has argued that rampages by Charles Whitman, Patrick Purdy, and Peter Odighizuwa were a result of psychiatric drugs.⁴⁰ In support of his argument, Lieberman quoted a physician who wrote of school shootings, “These monstrous acts were done not by criminals, but ordinary people high on prescription drugs.”⁴¹

Whitman’s biographer, Gary Laverne, noted that reports of Whitman’s drug use varied significantly. He concluded that Whitman apparently used Dexedrine heavily during final exams at the University of Texas. He also used Librium at times.⁴² These, however, were not prescribed medications. According to Laverne, Whitman “had a steady supply of an illicit substance he knew to be illegal.”⁴³ Thus, Whitman was not following a prescription by a physician, but dosing himself with drugs purchased on the street. This was illegal substance abuse, not psychiatric care. In addition, however, Whitman’s home had “thirteen bottles of prescription drugs from seven physicians.”⁴⁴ Whether these were for medical or mental health is unknown.

Regardless of the source and type of substances Whitman used, was he under the influence at the time of his attack? Whitman’s autopsy found no traces of any drugs.⁴⁵ This was based solely on his blood, however, because his urine and stomach contents had not been collected.⁴⁶ Thus, the toxicological analysis was limited. The most definite evidence, however, indicates that he was self-medicating with illegal drugs. There is no evidence that he was receiving psychiatric care or even that he had illegal drugs in his system at the time of his attack.

As for Peter Odighizuwa (Appalachian School of Law), it is possible he was taking medication at the time of his attack, but evidence suggests otherwise. He was given either medication or a prescription by a physician in the fall of 2001.⁴⁷ What this medication was, and whether or not Odighizuwa ever took it, remains unknown. One reason he might not have taken it is that Odighizuwa was so poor that he could not support his wife and four children:

Early in his first semester he brought his 4 children to a meeting of the Student Bar Association to plead for money to pay his electric bill. Later that semester, he took over the podium in his Civil Procedure class and again appealed for money.⁴⁸

Given these financial straits, Odighizuwa may have been unable to afford the medication.

It appears, however, that even if he had taken medication, he was no longer doing so at the time of the attack. Two days after his rampage on 16 January 2002, Odighizuwa told a judge, “I was supposed to see my doctor. He was supposed to help me out . . . I don’t have my medication.”⁴⁹ This clearly indicates Odighizuwa was without his medication at the time of his attack.

Some people might assume that if Odighizuwa were not taking any medication at the time of his attack, the violence must have been caused by withdrawal from the medication.

This, however, is not the only way of looking at the situation. First, Odighizuwa did not blame his actions on either the medication or withdrawal from it. Second, his presentation to the judge made clear that he believed the medication would help him, not make him manic or violent. Third, after his attack he was placed on psychiatric medication to treat his mental illness. The treatment was successful enough that despite his psychotic symptoms, he was eventually able to stand trial.⁵⁰ Thus, rather than assuming that the medication caused his attack, it might make more sense to think that the attack may not have occurred if he had been taking medication.

Patrick Purdy (Cleveland Elementary School) was a heavy user of alcohol and other drugs, including marijuana, cocaine, PCP, heroin, amphetamines, modeling glue, and LSD.⁵¹ In the two years before his attack he had been prescribed psychiatric medication but reportedly was not compliant with his treatment.⁵² A thorough toxicology screening was conducted during his autopsy. It revealed traces of caffeine and nicotine and no other drugs. Purdy was not high on illegal drugs or prescription medications at the time of his attack.⁵³

What is striking about the argument blaming Purdy's attack on prescription medication is the way it minimizes the potential role of street drugs. Purdy was a severe alcoholic and heavy drug user for years. Rather than speculating about the possibility that Purdy damaged his brain with glue sniffing, alcohol, amphetamines, heroin, marijuana, cocaine, PCP, and LSD, Lieberman focused on prescription medications that Purdy was not compliant with long before his attack as the cause of his rampage.

After the Sandy Hook Elementary School shooting, Adam Lanza was believed by some to have been taking psychiatric medication. This was partly due to a man purporting to be his uncle claiming that Lanza was taking an anti-psychotic drug called Fanapt. As it turned out, the man was not Lanza's uncle; he was subsequently arrested for violating his probation related to conspiracy and wire fraud charges.⁵⁴ The report that Lanza was taking Fanapt was a complete fabrication.

Apart from this hoax, there were assumptions that Lanza must have been taking medication, as well as allegations that information was being withheld by the authorities. For example, one blogger wrote, "The fact that Sandy Hook shooter Adam Lanza was about to be committed into psychiatric care before his rampage almost certainly indicates he was on one of the raft of anti-psychotic pharmaceuticals linked to aggression and suicide."⁵⁵ Another writer commented on the alleged withholding of information about Lanza's use of psychiatric medication as follows:

just like the official withholding of pertinent evidence of past crimes like the JFK assassination, the MLK assassination, the RFK assassination and the demolitions of the three World Trade Center towers on 9/11/01, the government is willing to be an accessory to a crime by withholding evidence, altering evidence at the crime scene or covering-up for the real perpetrators.⁵⁶

What do we know about Lanza's use of psychiatric medication? Information regarding Lanza's history of medical and mental health treatment has been released and there is no evidence that he took psychiatric medication near the time of his attack. The report by the Office of the Child Advocate states, "In late February, 2007, AL [Adam Lanza] was prescribed a small dose of an anti-depressant/anti-anxiety medication." He took the medication "for three days," but stopped it due to the side effects.⁵⁷ Thus, five years before his attack, Lanza took a medication for three days. There is no reason to connect this with his murderous rampage years later. In addition, according to the autopsy, "No drugs were found in the shooter's system."⁵⁸ In short, there is no evidence to support that claim that Lanza's rampage was caused by medication.

The case of Alvaro Castillo (Orange High School) is less clear. According to a court report, Castillo did not take any medication after 24 July 2006;⁵⁹ his attack occurred on 30 August 2006. On 8 August, however, Castillo wrote in his journal that his antidepressant medication wasn't working.⁶⁰ Thus, Castillo was taking his medication up to three weeks before his attack. I have not found any confirmation that he was taking it at the time of his attack. Perhaps he stopped because it was not providing any relief, or perhaps he continued taking it but this was not reported.

HOW MEDICATIONS AFFECTED SCHOOL SHOOTERS

As noted above, some shooters did use prescription medications. Just because a shooter took a medication at some point in his life, however, doesn't mean there was any connection between the drug and the attack. For example, though Kip Kinkel was not on Prozac at the time of the shooting, he had been on Prozac for three months the summer before his attack. By the time he went on his rampage, however, he had been drug-free for eight months. Thus, he was not on Prozac when he killed and neither had he just come off the medication.

When Kinkel was on Prozac, he was less depressed and less angry. His psychologist's notes from the summer preceding the attack document that both Kinkel and his mother reported significant improvement while he was on Prozac.⁶¹ In fact, Kinkel described the summer he was on medication as a "wonderful time" and the "best summer ever."⁶² Based on these reports, it appears that rather than causing his attack, it was more likely that the absence of Prozac was a factor in his rampage because he was more depressed and angry without the medication.

What about Ritalin? Kinkel reportedly told friends in middle school that he took Ritalin. Kinkel's attack occurred in high school.⁶³ He was not on Ritalin at the time of the attack, and had not been on it for anywhere from a year and a half to three years. Finally, Kinkel's family had a devastating history of severe mental illness and Kinkel's psychotic symptoms began at age 12. Blaming his rampage on medications he had been on

long before the attack ignores his family history and his own psychotic symptoms that predated his medication use.

Jason Hoffman (Granite Hills High School) was another high school shooter who benefitted from being on antidepressants. His mother commented that when he took his medication, “I really see a different kid . . . He is so much more open, positive, happy.”⁶⁴ Unfortunately, his medication gave him headaches, made him dizzy, and impaired his concentration. He stopped taking his medications six months before his attack.⁶⁵

Though sometimes Eric Hainstock (Weston High School) is included as an example of a school shooter on medication, this is also wrong. Hainstock had been on Ritalin when he was younger, but was not on it at the time of his attack. Also, like Kip Kinkel, Hainstock was said to have functioned much more effectively on Ritalin. Despite his improved behavior with medication, his father reportedly objected to his son being on it or else didn’t want to pay for it. After the attack, Hainstock wrote a letter in which he complained about his father “taking me off meds that worked because he didn’t want to spend the money.”⁶⁶ Blaming his attack on Ritalin he had taken long before overlooks that fact that Hainstock reportedly used marijuana, LSD, mushrooms, cocaine, and heroin. If any substances contributed to his rampage, it more likely was the illegal drugs.

One of the prime cases in the argument that medications cause rampage attacks is that of Eric Harris (Columbine High School). Harris had been taking Luvox for approximately a year at the time of his attack. Prior to this he had been on Zoloft briefly. It has been argued that Luvox made Harris manic and caused his attack. The main evidence cited for this is that Harris was grandiose. Though grandiosity can occur with mania, it can also occur with psychotic disorders such as schizophrenia (e.g., delusions of grandeur) or with narcissistic personality disorders. In my book *Why Kids Kill: Inside the Minds of School Shooters*, I discussed Harris as having narcissistic personality disorder.

Apart from being grandiose, what are the symptoms of mania? A manic episode is a period in which a person feels either euphoric or extremely irritable. Harris certainly was not a euphoric person. He was irritable and bad-tempered, but testimony from his parents and peers makes it clear that Harris was like this long before he was on psychiatric medication.

Mania is a condition of feeling “revved up” or “wired” — of having seemingly endless energy. People who are manic have a decreased need for sleep, are highly active, and can talk on and on and not let anyone get a word in. They tend to have “racing thoughts” or “flight of ideas,” meaning their minds are in overdrive and their thoughts are flying. They tend to be impulsive and distractible and disorganized. In fact, for a diagnosis of mania, their symptoms have to be severe enough to cause impairment in various domains, such as work, education, and social functioning.

This does not describe Eric Harris. Harris’s behavior the last year of his life was not characterized by impulsivity, distractibility, or impaired functioning. He was highly organized and meticulously planned a large-scale attack for over a year; this was

the opposite of being impulsive. He sat for hours doing tedious computer programming. He was a good student at school and a good employee at work. His teachers praised him and his boss at work promoted him the week before the attack. There are no indications that once Harris began his medication he became manic. He continued to function in all his life domains.

There are multiple testimonies of people who knew Harris that paint a picture of him as being anything but manic. One classmate said he seemed very withdrawn. Another commented that he often did not talk to anyone and just read books in the cafeteria. Several classmates said he was quiet and withdrawn, and rarely spoke. The family’s hairdresser said she could hardly get a word out of him, in contrast to Harris’s brother who was very outgoing. Two neighbors of the family said that Harris was not talkative. Altogether there are reports from sixteen people from multiple settings that describe Harris as quiet, withdrawn, and not speaking much. This is not a picture of mania.⁶⁷ If Harris had suddenly changed from being quiet and withdrawn to a state of mania, wouldn’t *someone* have noticed — parents, teachers, coworkers, friends? Yet, there is no indication that Harris’s behavior changed once he took Luvox.

Jeffrey Weise (Red Lake High School) was taking Prozac at the time of his attack. Weise was a highly traumatized, abused child who described his life as “16 years of accumulated rage.” He was fascinated with guns and violence and severely depressed. After he attempted suicide, he was put on Prozac. Eventually, despite his efforts to turn his life around, he went on a rampage and killed himself as well. Did the Prozac make him into a killer? We have no way of knowing. We could theorize that it did, but this would only be speculation.

Let’s look at Weise’s case by comparing him to Evan Ramsey, another traumatized shooter. The sequence of life events between these two young men contained remarkable parallels. Both were physically abused. Both had absent fathers; Ramsey’s spent ten years in jail and Weise’s committed suicide. Both had absent mothers due to alcoholism and/or brain damage. Both were placed in foster care. Both were picked on. Both were suicidal. The point being made here is that the boys had similar life experiences and ended up committing similar acts. Weise was on Prozac; Ramsey wasn’t. It doesn’t make sense to assume that Prozac made Weise go on a rampage when Ramsey did the same thing without being on Prozac.

After Steven Kazmierczak’s rampage at Northern Illinois University, it was written, “Stephen [sic] was considered a ‘normal, undistressed person’ . . . There is no doubt in my mind that the Illinois shooter’s history of taking psychiatric medications was the primary cause of his violent behavior.”⁶⁸

If Kazmierczak had been a “normal, undistressed person” there would have been no reason for him to be given medications. Kazmierczak, however, had an extensive history of significant mental health problems. He had been so depressed and suicidal, including multiple suicide attempts, that he had nine hospitalizations before he turned eighteen, along with multiple placements in residential treatment programs. He also had

significant symptoms of obsessive-compulsive disorder. Even worse, Kazmierczak was psychotic:

Steven acknowledged that he was paranoid and claimed to have “special powers.” He claimed to hear voices that continually commented about what he was thinking and how he behaved. It was reported that Steven suffered auditory hallucinations and on at least one occasion had a visual hallucination.⁶⁹

Added to Kazmierczak’s severe mental health problems was his fascination with Hitler, Ted Bundy, Jeffrey Dahmer, Harris and Klebold, and Seung Hui Cho. Kazmierczak was a depressed, angry, psychotic person who was fascinated with mass murderers, serial killers, and rampage school shooters. He was anything but a “normal, undistressed person.”

Furthermore, there is no indication that medications made Kazmierczak agitated, manic, or violent. He did have side effects, including weight gain, drowsiness, and flattened emotions, but none of these accounts for murder. Besides, Kazmierczak’s attack was anything but impulsive and manic. It was highly planned and executed with composure.

Finally, Kazmierczak’s girlfriend reported he had stopped taking his Prozac three weeks before the attack. She said his behavior did not change as a result of this.⁷⁰ In fact, it appears that he had stopped taking all of his medications. The only psychiatric drug that showed up in the autopsy was “minute amounts” of Xanax, an anti-anxiety medication.⁷¹ Xanax calms people down – it doesn’t cause them to commit acts of violence.

Laurie Dann (Hubbard Woods Elementary School) had both psychopathic and psychotic traits and had engaged in erratic and bizarre behavior for years before her attack. She had also been prescribed several different medications during her life, including Thorazine, Elavil, clomipramine, and lithium. She reportedly did not always take her medication regularly. For an investigation of her complicated life, see the biography *Murder of Innocence: The Tragic Life and Final Rampage of Laurie Dann* (by Joel Kaplan, George Papajohn, and Eric Zorn).

Finnish shooter Matti Saari (Seinajoki University) was prescribed an unspecified SSRI for depression and alprazolam for anxiety. The official report on his attack states he “apparently took his medication as prescribed and had a positive and seemingly open attitude towards treatment.”⁷² There was no report of adverse reactions to the medication.

Both Dann and Saari were on medication at the time of their attacks. They both had long histories of mental health problems. Neither one became manic on medication. They both methodically planned and carried out their attacks. Whether or not the medication contributed in any way to their attacks is unknown. No significant changes in their behavior were reported after they began their medication regimens.

These are not cases of ordinary people who underwent radical transformations into crazed killers under the influence of medication. They were people with significantly disturbed functioning – that’s why they were given medication in the first place. School shooters are variously angry, depressed, sadistic,

psychotic, traumatized, suicidal, homicidal, and/or obsessed with weapons, death, mass murderers, serial killers, or other school shooters. There is no reason to assume that medication caused their rampages. *If the perpetrators’ behavior on medication was consistent with their behavior prior to the medication, it suggests that the medication had no significant impact on their functioning – for good or for ill.*

SUMMARY

How many school shooters were on psychiatric medications – or coming off them – at the time of their attacks? The following data is drawn from the sample of 48 shooters profiled in my book *School Shooters: Understanding High School, College, and Adult Perpetrators*. Out of 24 secondary school shooters, only two were taking medication at the time of their attacks: Eric Harris and Jeffrey Weise. Alvaro Castillo might have been, or he may have stopped his medication within three weeks of his attack and thus still have been coming off the drug. If we include him, then 12.5% of the sample was taking medications. Put differently, over 87% of the secondary school shooters were not on psychiatric medications at the time of their attacks. Furthermore, there is no evidence that medication made Harris, Weise, or Castillo manic or psychotic.

The numbers are essentially the same for the college and adult shooters. Of the 24 in these two groups (13 college and 11 aberrant adult), two were taking psychiatric medications at the time of their attacks: Laurie Dann and Matti Saari. Because Steven Kazmierczak had only recently stopped taking his medication, perhaps he should be included, for a total of three shooters with at least some trace of medication in their bodies at the time of their attacks. Thus, 12.5% of the college and adult shooters were on medication at the time of their attacks. Again, there is no evidence that medication made them manic, agitated, or violent. Taken all together, only 6 out of 48 shooters (12.5%) were on medication at the time of their attacks. Even if we were to accept that psychiatric drugs caused these attacks, this still leaves over 87% of the incidents unaccounted for.

Interestingly, a study of prescription rates for psychiatric medications in the United States in 2010 found that 20% of adults were prescribed psychiatric drugs (*America’s State of Mind: A Report by Medco*). This provides some context for considering medication use among school shooters.

It is possible that another couple of shooters may have taken medication recently enough for them to be considered as “coming off” the medication. Even if we add a couple of the ambiguous cases to the list, however, this still means that only 8 out of 48 shooters were under the influence of medication. This is a ratio of 5 : 1 shooters who weren’t on medication compared to those who were. The overwhelming majority of school shooters were not medicated or going through withdrawal at the time of their attacks.

The belief that psychiatric medications cause school shootings is not supported at either the societal or the individual level.

At the societal level, the argument that the rise in the use of psychiatric drugs has caused a corresponding rise in violence and homicide does not hold water for the simple fact that there has been no corresponding rise in violence and homicide. Just the opposite. Over a twenty-year period, violent crime in general and homicides by youths in particular decreased significantly. Medications cannot be blamed for a crisis of “mania, murder and mayhem” because there is no such crisis.

The argument at the level of individual shooters is damaged by the frequent errors made by people espousing their views, including inaccurate claims about which shooters took medications, whether they were on medications at the time of their attacks, and the effects the medications actually had on them.

The concern about adverse effects of psychiatric medications is a legitimate concern and worthy of ongoing research. This concern, however, is not well served by assumptions, misinformation, and innuendo in the place of facts.

APPENDIX

This appendix discusses the medication use of other shooters not included in the sample of 48 perpetrators covered in my book (*School Shooters: Understanding High School, College, and Adult Perpetrators*). For a detailed listing of shooters and their use of psychiatric medications and other substances, see my “Tally of School Shooters’ Use of Psychiatric Medications and Substance Abuse” (www.schoolshooters.info).

T.J. Solomon (Heritage High School)

Solomon began taking Ritalin for ADHD in fourth grade, and “his grades reportedly improved afterward.”⁷³ Though he was taking Ritalin at the time of his attack, there is no indication of any adverse reactions that might have caused his violent behavior. The only report about the medication was that it had the desired benefit of improving his academic functioning.

Jose Reyes (Sparks Middle School)

Reyes was 12 years old when he shot three people and then killed himself. He had a significant history of developmental delays, cognitive impairment, and social and emotional deficits.⁷⁴ Three days before his attack, his family moved to a new home and he was perhaps struggling with the possibility of changing schools. Because of his deficits, this might have been overwhelming for him. Three days before his attack is also when he was given Prozac. He had one pill each day for three days, including the day he took a gun to school.⁷⁵ Whether or not this had anything to do with his attack is unknown. He had many other issues going on, including a traumatic family history, as well as having reportedly been called “gay” by a peer at school; he cried when he told this to the psychiatrist three days before the shooting.

Karl Pierson (Arapahoe High School)

Pierson was apparently prescribed a medication in September 2013. Because he wrote of the medication in connection with serotonin, he presumably was given an SSRI, a “selective serotonin reuptake inhibitor.” Based on what he wrote, his rage predated taking the medication (which he referred to as “a supplement”) and the medication did nothing to diminish his explosive anger. On 22 September 2013, he wrote, “The serotonin supplements I am taking don’t do jack shit, I am still ready to start a riot, I feel like a bomb, ready to let the world feel and experience my hatred.”⁷⁶

Eight days later (30 September 2013), Pierson wrote, “The serotonin is a joke, it makes my bowels upset, doesn’t effusively make me happy, and I hate taking them. It is important to note I rarely take my meds for this reason.”⁷⁷ According to the official report, “Toxicological analyses of body fluids obtained at the time of autopsy were essentially negative.”⁷⁸ I don’t know what “essentially negative” means, but apparently there was no significant amount of medication, street drugs, or alcohol in his system (he reported using alcohol and marijuana, so there could have been a trace of one or both of these). By the end of September, Pierson was rarely taking his medication. His attack was on 13 December 2013, more than two months later. We don’t know the last date he took his medication, but the lack of it in his system suggests he had not been taking it shortly before the attack. In support of this conclusion, a search of his house by law enforcement officers found no prescription medication.⁷⁹

Pierson’s homicidal rage clearly predated his medication use. In fact, he was given the medication after he had threatened to kill a teacher. According to Pierson, the medication had no impact on his rage – he felt just as explosive as he did before he took it. Thus, rather than viewing the medication as having triggered his homicidal urges, it seemed to be so ineffectual that it didn’t make a dent in his rage. In addition, because of the adverse physical side effects, he stopped taking it.

Elliot Rodger (University of California at Santa Barbara)

Elliot Rodger resembled Seung Hui Cho and Adam Lanza in that he had lifelong social deficits, though not as severe as these two shooters. Whereas they were both psychotic shooters, Rodger exhibited both psychotic and psychopathic traits.⁸⁰

In November 2012 (18 months before his attack) he was prescribed lorazepam (Ativan) and escitalopram (Lexapro),⁸¹ which are generally prescribed for anxiety and depression, respectively. A few years prior to this, he reportedly took Xanax and Prozac (again, for anxiety and depression, respectively).⁸² At that time, he didn’t like the side effects (drowsiness, headaches), so he decided to deal with his shyness through positive thinking.

In his autobiography, when he laid out his plan of attack (the outline of which he followed in his rampage), he recorded that he would kill himself rather than end up in prison. He

wrote, “To end my life, I will quickly swallow all of the Xanax and Vicodin pills I have left”;⁸³ he also planned to drink liquor and then shoot himself, making sure that he died. His autopsy found evidence of alprazolam (Xanax) and benzodiazepines (a class of anti-anxiety medication that includes Xanax).⁸⁴ Whether or not Rodger had been taking his medication regularly, or if he used it to calm his nerves for the attack, or if he took it as part of his suicide, remains unknown.

Aaron Ybarra (Seattle Pacific University)

Ybarra had reportedly been diagnosed with both psychosis and obsessive-compulsive disorder. He had auditory hallucinations and had also been suicidal prior to his attack on more than one occasion.⁸⁵ During an interview after his shooting, a police officer reported, “He stated he had been prescribed Prozac and Risperdal but had stopped using that approximately 6 months ago because he ‘wanted to feel his hate.’”⁸⁶

Just ten days before his attack, Ybarra had written in his journal, “I had a high level of stress that made me a little crazy and not myself. Ever since I took the medication I became more calm, more patient and more confident.”⁸⁷ Thus, like other shooters, the mental health problems began before the medication, and as with several other shooters, the medication had a positive effect. Ybarra got to the point, however, that he didn’t want to feel calm, seeking instead to feel his “hate.” Thus, he stopped taking his medication well before his attack.

Myron May (Florida State University)

May’s medication usage is more complicated to sort out than that of most shooters. He began to unravel psychologically several months before his attack, as described by his former girlfriend. He became convinced that he had attention-deficit-hyperactivity disorder (ADHD). His girlfriend, who was a pediatrician and familiar with ADHD, didn’t think this was an accurate diagnosis. Nonetheless, he was prescribed a medication for ADHD.⁸⁸ He reportedly was given Vyvanse (which is used for ADHD) as well as Wellbutrin (used primarily for depression). In addition, friends of his reportedly found a new bottle of Seroquel (an antipsychotic) in his apartment at some unspecified point.⁸⁹ Whether he ever used this (or the Wellbutrin) is unknown.

Another source claimed that a reporter who had gained entrance to the cottage he was staying in at the time of the attack found “a half-empty prescription bottle of Hydroxyzine,”⁹⁰ which is both an antihistamine and used to treat anxiety.

The only medication in his system at the time of his death, however, was amphetamine,⁹¹ which presumably was the Vyvanse. Thus, whatever else he had been prescribed, he either did not take it or had stopped taking it long enough before his attack that it was no longer in his system.

May apparently had adult-onset schizophrenia, with severe paranoid delusions and auditory hallucinations. Complicating the picture, however, is that according to the website WebMD,

Vyvanse and Wellbutrin can cause confusion, unusual thoughts or behavior, and hallucinations. The website Vyvanse.com noted that hallucinations can occur in children ages 6–17 (May was 31), but also that the medication can worsen pre-existing mental problems or cause new problems.

Unfortunately, we don’t have detailed information regarding which medications May actually used, when he took them, what the dosages were, and how they affected him. His psychotic symptoms were so severe that he apparently sought relief from his distress with different medications. It is possible, however, that one or more medications might have caused side effects that worsened his condition.

NOTES

- 1 “Incarcerate Big Pharma for Known Genocide for Once,” 22 April 2012. <http://veraciousthoughts.wordpress.com/tag/big-pharma/>.
- 2 Mike Adams, “Illinois Shooter was Treated with Psych Meds Prior to Shooting Rampage,” 17 February 2008. <http://www.naturalnews.com/022656.html>.
- 3 www.totalityofbeing.com/FramelessPages/Articles/violence.html.
- 4 Paul Joseph Watson and Alex Jones, “Antidepressant Drugs Causing Epidemic of Mania, Mayhem and Murder,” 9 April 2012. <http://www.infowars.com/antidepressant-drugs-causing-epidemic-of-mania/>.
- 5 Watson and Jones, “Antidepressant drugs.”
- 6 Mark Olfson, Steven Marcus, Myrna Weissman, and Peter Jensen, “National Trends in the Use of Psychotropic Medications by Children,” *Journal of the American Academy of Child and Adolescent Psychiatry*, 41:5, May, 2002, pp. 514–521.
- 7 Mark Olfson and Steven Marcus, “National Patterns in Antidepressant Medication Treatment,” *Archives of General Psychiatry*, 66:8, August, 2009, pp. 848–856.
- 8 Daniel Wood, “US Crime Rate at Lowest Point in Decades,” *Christian Science Monitor*, 9 January 2012.
- 9 “United States Crime Rates 1960–2010,” www.disastercenter.com/crime/uscrime.htm.
- 10 “United States Crime Rates 1960–2010,” www.disastercenter.com/crime/uscrime.htm.
- 11 Youth Violence: National Statistics – Homicide, Centers for Disease Control. http://www.cdc.gov/ViolencePrevention/youthviolence/stats_at_a_glance/hr_trends_sex.html.
- 12 Jim Marrs, “Drugged to Death; Our Kids and Our Troops,” Citizens Commission on Human Rights International, 19 August 2009. www.cchrint.org/tag/school-shootings/.
- 13 www.propagandamatrix.com/articles/april2012/090412_epidemic_mania.htm.
- 14 Cybelle Fox, Wendy D. Roth, and Katherine Newman, “A Deadly Partnership: Lethal Violence in an Arkansas Middle School.” In National Research Council, ed., *Deadly Lessons: Understanding Lethal School Violence*, pp. 101–131 (Washington, DC: National Academies Press, 2003), p. 114.
- 15 Scott Stephens and Rachel Dissell, “Who was Asa Coon?,” *Cleveland Plain Dealer*, 11 October 2007.
- 16 Christopher Maag, “Short but Troubled Life Ended in Shooting and Suicide,” *The New York Times*, 12 October 2007.
- 17 Jean Dubail, “SuccessTech Shooter Was Sober During Attack,” *Cleveland Plain Dealer*, 4 December 2007.

- 18 Paul Joseph Watson, "Seung-Hui Cho Was a Mind Controlled Assassin," *Prison Planet*, 19 April 2007. www.prisonplanet.com/articles/april2007/190407mindcontrolled.htm
- 19 "Psychiatric/Pharma Industry Cover Up: Cho Seung Hui is Potential 19th School Shooter Taking Violence-Inducing Psychiatric Drugs – While Pushing for Brave New World of Mandatory 'Treatment,'" 25 April 2007. <http://www.cchrflorida.org/article-cover-up.html>.
- 20 Citizens Commission on Human Rights, "12 Recent School/Teen Shooters Under the Influence of Psychiatric Drugs," http://www.cchr.org/sites/default/files/List_of_school_and_teen_shooters.pdf.
- 21 "Mass Shootings at Virginia Tech 16 April 2007, Report of the Review Panel Presented to Governor Kaine, Commonwealth of Virginia," p. 42. Available at www.schoolshooters.info.
- 22 "Mass Shootings at Virginia Tech" p. 35.
- 23 "Mass Shootings at Virginia Tech" p. 47.
- 24 Associated Press, "No Drugs Found in V. Tech Gunman's System," *Associated Press*, 21 June 2007.
- 25 Citizens Commission on Human Rights, "Psychiatric Drugs And Anger Management Curricula – A Perspective on School Violence," p. 1. http://www.cchr.org/sites/default/files/Psychiatric_Drugs_and_Anger_Management_Curricula_A_Perspective_on_School_Violence.pdf.
- 26 "Incarcerate Big Pharma for Known Genocide for Once," 22 April 2012. <http://veraciousthoughts.wordpress.com/tag/big-pharma/>.
- 27 David Icke Newsletter, "The Man from Manchuria ... Via Blacksbury Mountain," 22 April 2007. <http://www.despatch.cth.com.au/Misc/martinbryant/vt%20ocampus%20Massacre.html>.
- 28 Kieran Nicholson, "Autopsy: Klebold Shot Self," *The Denver Post*, 24 February 2001.
- 29 "Dylan Klebold's Autopsy Report," p. 8. Available at www.schoolshooters.info.
- 30 Mike Adams, "Shootings in Germany, Alabama Underscore Violent Side Effects of Psychiatric Medications," 11 March 2009. <http://www.naturalnews.com/025826.html>.
- 31 Bojan Pancesvski, "Mass Killer 'Rejected' by Girl at Party," *The Sunday Times* (United Kingdom), 15 March 2009.
- 32 State Court of Stuttgart, Criminal Division 18, Criminal Case Against Jorg Wilhelm Kretschmer, born 12 January 1959, in Stuttgart; Case Number 18 KLS 112 Js 21916/09, p. 33.
- 33 Citizens Commission on Human Rights, "Another School Shooting: Is It Another Psychiatric Drug," 23 September 2006. http://www.24-7pressrelease.com/view_press_releasE.php?rID=18410.
- 34 Citizens Commission on Human Rights, "Psychiatric Drugs And Anger Management Curricula," p. 21.
- 35 Ministry of Justice, Finland, "Jokela School Shooting on 7 November 2007 Report of the Investigation Commission," 2009, p. 50. Available at www.schoolshooters.info.
- 36 Ministry of Justice, "Jokela School Shooting," p. 51.
- 37 Richard Greer, "Shooting Suspect Kept Thinking of Own Unhappy School Days," *Houston Chronicle*, 30 September 1988, p. A7.
- 38 Tom Gibb, "Shooter in 1996 Penn State Killing Recounts Her Past," *Pittsburgh Post-Gazette*, 25 February 2003.
- 39 Gibb, "Shooter in 1996 Penn State Killing."
- 40 Joseph Lieberman, *School Shootings: What Every Parent and Educator Needs to Know to Protect Our Children*, Citadel, New York: 2008, p. 35.
- 41 Lieberman, *School Shootings*, p. 33.
- 42 Gary Laverne, *A Sniper in the Tower: The Charles Whitman Murders*, University of North Texas Press, Denton: TX, 1997, p. 74.
- 43 Laverne, *A Sniper in the Tower*, p. 73.
- 44 Laverne, *A Sniper in the Tower*, p. 74.
- 45 "Charles Whitman Official Report," p. 13. Available at www.schoolshooters.info.
- 46 Laverne, *A Sniper in the Tower*, p. 260.
- 47 Helen Hickey De Haven, "The Elephant in the Ivory Tower: Rampages in Higher Education and the Case for Institutional Liability," *Journal of College and University Law*, 35:3, 5 June 2009, pp. 503–612, p. 533.
- 48 De Haven, "The Elephant in the Ivory Tower," p. 530, Note 118.
- 49 "Law School Shooter Arraigned," *CBS News*, 16 January 2002.
- 50 Laurence Hammack, "Shooting Suspect Found Competent to Stand Trial: Peter Odighizuwa Understands Charges, Can Assist his Attorneys, Psychologist Says," *The Roanoke Times*, 6 September 2003.
- 51 Nelson Kempsey, "A Report to Attorney General John K. Van de Kamp: Patrick Edward Purdy and the Cleveland School Killings," 1989, p. 41. Available at www.schoolshooters.info.
- 52 Kempsey, "A Report to Attorney General John K. Van de Kamp," p. 41.
- 53 Kempsey, "A Report to Attorney General John K. Van de Kamp," p. 98.
- 54 "Jonathan Lee Riches Impersonates Adam Lanza's Uncle, 'Jonathan Lanza,' Gets Arrested," *Huffington Post*, 27 December 2012.
- 55 Paul Joseph Watson, "Fanapt Hoax Hides Real Connection Between Shooters and SSRI Drugs," InfoWars. <http://www.infowars.com/fanapt-hoax-hides-real-connection-between-shooters-and-ssri-drugs/>.
- 56 Gary G. Kohls, "The Sandy Hook Massacre: The Cover-Up Continues. Who and/or What Messed Up Adam Lanza's Brain?," Global Research, 4 December 2013. <http://www.globalresearch.ca/the-sandy-hook-massacre-the-official-cover-up-continues-who-and-or-what-messed-up-adam-lanzas-brain/5360186>.
- 57 The Office of the Child Advocate, "Shooting at Sandy Hook Elementary School," 21 November 2014. Available at www.schoolshooters.info.
- 58 Stephen J. Sedensky, III, "Report of the State's Attorney for the Judicial District of Danbury on the Shootings at Sandy Hook Elementary School and 36 Yogananda Street, Newtown, Connecticut on 14 December 2012," Office of the State's Attorney, 25 November 2013, p. 27. Available at www.schoolshooters.info.
- 59 North Carolina v. Castillo 2010, p. 11. Available at www.schoolshooters.info.
- 60 "Alvaro Castillo's Journal," p. 6. Available at www.schoolshooters.info.
- 61 "Kip Kinkel: Psychotherapy Notes from Dr. Jeffrey Hicks." Available at www.schoolshooters.info.
- 62 Elisa Swanson, "Comment: 'Killers Start Sad and Crazy,' Mental Illness and the Betrayal of Kipland Kinkel," *Oregon Law Review*, Winter, 2000, Vol. 79, No. 4.
- 63 Swanson, "Killers Start Sad and Crazy."
- 64 Alex Roth, "The Shooting at Granite Hills High School," *San Diego Union-Tribune*, 31 October 2001, p. B-1.
- 65 Tony Perry, "Armed Youth Was Hoping for 'Suicide by Cop,'" *Los Angeles Times*, 31 October 2001.
- 66 "Eric Hainstock: Letter #2," on www.schoolshooters.info.
- 67 "Jefferson County Sheriff's Office Columbine Documents Organized by Theme," Compiled by Peter Langman, www.schoolshooters.info.

- 68 Mike Adams, "Illinois Shooter was Treated with Psych Meds Prior to Shooting Rampage," 17 February 2008. <http://www.naturalnews.com/022656.html>.
- 69 "Report of the February 14 Shootings at Northern Illinois University," p. 24. Available at www.schoolshooters.info.
- 70 Associated Press. "Gunman Called Girlfriend to Say Goodbye," *Yahoo News*, 17 February 2008.
- 71 Catrin Einhorn, "Tests Show Campus Gunman Had Stopped His Medicines," *The New York Times*, 15 March 2008.
- 72 Ministry of Justice (Finland), "Kauhajoki School Shooting on 23 September 2008: Report of the Investigative Commission," 2010, p. 58. Available at www.schoolshooters.info.
- 73 Mercer Sullivan and Rob T. Guerette, "The Copycat Factor: Mental Illness, Guns, and the Shooting Incident at Heritage High School, Rockdale County, Georgia." In *Deadly Lessons: Understanding Lethal School Violence*, pp. 25–69, p. 43. Washington, DC: National Academies Press, 2001.
- 74 Peter Langman, "Jose Reyes: A Profile," 2014. Available at www.schoolshooters.info.
- 75 "Jose Reyes: Police Report," p. 358. Available at www.schoolshooters.info.
- 76 Kristin McCauley, "Investigative Report: Arapahoe High School," p. 30. Available at www.schoolshooters.info.
- 77 McCauley, "Investigative Report," p. 30.
- 78 McCauley, "Investigative Report," p. 35.
- 79 "Arapahoe County Sheriff's Office: Karl Pierson Documents," p. 1,205. Available at www.schoolshooters.info.
- 80 Peter Langman, "Elliot Rodger: A Personality Analysis," 2014. Available at www.schoolshooters.info.
- 81 Bill Brown, "Isla Vista Mass Murder 23 May 2014: Investigative Summary," 2015, p. 42. Available at www.schoolshooters.info.
- 82 Brown, "Isla Vista Mass Murder," p. 57.
- 83 Elliot Rodger, "My Twisted World," p. 133. Available at www.schoolshooters.info.
- 84 Brown, "Isla Vista Mass Murder," p. 62.
- 85 Peter Langman, "Aaron Ybarra: An Analysis," 2014. Available at www.schoolshooters.info.
- 86 Washington v. Ybarra, 2014, p. 6. Available at www.schoolshooters.info.
- 87 "Aaron Ybarra's Journal," p. 3. Available at www.schoolshooters.info.
- 88 TaMaryn Waters and Byron Dobson, "FSU's Strozier Library Shooter: A Look Inside Myron May's Inner Turmoil," *Tallahassee Democrat*, 9 January 2015.
- 89 Michael LaForgia, "FSU Shooter's Friends Tried to Get Help for Him Months Before the Shooting," *Tampa Bay Times*, 21 November 2014.
- 90 Jacqueline Ingles, "Family of Myron May Say the Suspected FSU Shooter Planned on Cooking Thanksgiving Dinner," *ABC Action News*, 21 November 2014.
- 91 "Myron May's Autopsy," p. 16. Available at www.schoolshooters.info.