INTRODUCTION

Acts of violence committed with firearms, and mass shootings in particular, remain a central policy dilemma for American society. Executive orders and a variety of legislative proposals at the local, state and federal level, have been considered to reduce the incidence of such criminal activity. A significant portion of the public, expert, and political debate revolves around the interplay of mental health issues and gun violence. At heart is the challenging empirical question about what percentage of violent crime, and the most serious form, the mass shooting, is causally related to the mental health of the perpetrator. At one end of the spectrum, in a widely debated 2013 article, conservative political writer Ann Coulter asserted “Guns don’t kill people—the mentally ill do.”¹ This sentiment was echoed again, more recently, after the mass shooting in San Bernardino, California, when former Speaker of the House, Paul Ryan, stated: “People with mental illness are getting guns and committing these mass shootings.”² A striking number of Americans believe mass shootings primarily reflect problems with mental illness.³ This causal perspective directly impacts the legal and policy options favored to remedy the problem. Policies stressing mental

---

health treatment and controlling the mentally ill person’s access to guns take precedence over more general gun control laws seeking to limit or restrict access generally. This controversy over the role mental illness plays in gun violence is not a novel debate. Although mental illness is not a significant factor in most violent acts in modern society, recent policy discussion and legislation have frequently focused on means to restrict the rights of people with mental illness to possess a firearm in hopes of curbing this particular type of violent act.

These desires for more severe restrictions on a subset of the population largely stem from public reaction to mass shootings perpetrated by gun violence, and the degree to which the reported increase in mass shootings can be blamed on the allegedly “unstable” portion of the American population suffering from serious mental illnesses, such as bipolar depression and schizophrenia. Legislative proposals based on this policy view require balancing the professed goal of greater public safety against the constitutional rights of mentally ill persons—including under the Equal Protection Clause of the Fourteenth Amendment—and the right to bear arms under the Second Amendment. While the new administration is currently working to alter federal laws regarding the mentally ill and the Second Amendment, some states have chosen to enact legislation that seeks to categorically ban anyone with a mental illness from obtaining a firearm. Such legislation is both unconstitutional and unwise, as it places excessive responsibility on mental health professionals as “arbiters” of constitutional rights and, ultimately, legal culpability—a decision that should be left to the courts and legislature. This legislation uses mental health professionals’ clinical diagnoses, which are often not valid or reliable, as tools to predict future violence and, therefore, ban certain individuals from purchasing firearms.

---

4 See id. (showing 63% of respondents blamed a deficient mental health care system as the prime reason for gun violence, while 23% pointed to weak gun regulations).

5 For proof that the debate on responsibility and the rights of people with mental illness to possess firearms has been waged for decades, see L.A. Rotenberg & Robert L. Sadoff, Who Should Have a Gun? Some Preliminary Psychiatric Thoughts, 125 AM. J. PSYCHIATRY 841, 842 (1968) (discussing ways to assess whether mental patients were “of sound mind” enough to possess firearms).

6 See Editorial, Don’t Blame Mental Illness for Gun Violence, N.Y. TIMES (Dec. 15, 2015), https://www.nytimes.com/2015/12/16/opinion/don’t-blame-mental-illness-for-gun-violence.html (explaining the common belief that mental illness is equivalent to a propensity for violence is unsupported by evidence).

A mere diagnosis of even a serious mental disorder by a mental health professional does not necessarily equate to violent tendencies. Psychologists or clinical professionals are rarely able to predict which of their patients will or will not exhibit future risks of gun violence with the certainty necessary for this policy approach to be effective. While neuroprediction—"or the belief that one can predict individual behavior from neuroscientific data"—is becoming increasingly popular in United States courtrooms, neuroscientists have yet to develop a sufficient understanding of the cause of many serious mental health issues. The neuropsychology and psychology fields remain marked with inaccuracy in diagnoses and unevenness in treatment, reflecting that a mental health practitioner’s opinion is often shaped by his or her own experiences and beliefs.

Most importantly, the inability of mental health experts to predict the progression of a disorder, both in terms of neuroprediction and more traditional diagnosis, and the future impact of treatment, directly impacts such legislative proposals. Unlike policies permitting health care practitioners to seek involuntary commitment for inpatient treatment for those patients who present an imminent danger to themselves or others, the broadly restrictive access policy has no element of imminence and instead assumes that the diagnosis will equate to a sufficient risk. Thus, such legislation in essence allows fear, however understandable, to create policy that, as scholars have noted, is both too broad and too narrow: too broad because it implicates a large number of individuals, who are clinically diagnosed as having mental illness, but will never commit acts of violence; and too narrow because it excludes potentially dangerous individuals who have not been diagnosed by a clinical professional. In turn it implicates the rights of the mentally ill under both the Second Amendment and equal protection doctrine. Finally, it risks further propagating the negative stigma which could discourage mentally ill people from seeking proper treatment.

8 Jessica Rosenberg, Mass Shootings and Mental Health Policy, 41 J. SOC. & SOC. WELFARE 107, 109 (2014).
10 Id.
11 See, e.g., Involuntary Outpatient Commitment Summary of State Statutes, BAZELON CTR. FOR MENTAL HEALTH LAW (Apr. 2000), http://www.bazelon.org/LinkClick.aspx?fileticket=CBMFgyA4t-w%3D&tabid=324 (illustrating a collection of state civil commitment statutes). See also Stephen J. Morse, Crazy Reasons, 10 J. CONTEMP. LEGAL ISSUES 189, 211 (1999) ("For another example, suppose the delusional self-defender or businessperson has not yet acted but the threat of danger or improvidence looms. Because they nonresponsibly threaten legally relevant behavior, the law may intervene by involuntary civil commitment or by guardianship, respectively.").
12 Fredrick E. Vars & Amanda Adcock Young, Do the Mentally Ill Have a Right to Bear Arms?, 48 WAKE FOREST L. REV. 1, 3–24 (2013).
Part I of this Comment will explore the current laws, introduce the relevant guiding federal statutory law on this topic, and discuss the leading Supreme Court cases addressing the set of issues involving Second Amendment rights, equal protection, and the ability to impose restrictions on the mentally ill. It will then discuss state laws, exploring the three main approaches states take in this debate. Part II will then delve into the range of restrictive approaches adopted by states, including the most restrictive statutes that ban “anyone with a mental illness” from owning a gun, exploring how “mental illness” is defined under these laws, and who is made responsible for identifying, categorizing or diagnosing the mental illness. It will address why such quasi-categorical exclusion approaches are unconstitutional, in part, by looking at the variability and imprecision of mental health diagnosis, explored through important lessons derived from recent advances in cognitive psychology and neuroscience. The section will also explore the implications stemming from the continual arguments surrounding what it means for a person to be legally responsible despite having documented mental health issues, and explore the evidence addressing the degree to which mental illness can be directly correlated to a propensity for serious violence—especially over long periods. Lastly, it will address both Second Amendment and equal protection arguments regarding restrictive state approaches. Finally, Part II.C will suggest alternative models employed currently by few states, such as behavioral or symptoms-based approaches and actuarial prediction models, as better methods to protect not only the individual’s civil liberties, but also the community.

I. DISCUSSION OF CURRENT LAWS

The evolution of gun laws in this country mirrors the fluctuating pool of public opinion towards violence and weapons. While many of the recent changes in gun control legislation have occurred on the state level, the

13 After a mass shooting, public opinion polls show an increased demand for stricter gun control, which tapers off after some time has passed. See, e.g., Louise Witt, In Wake of San Bernardino Mass Shooting, 80% of Americans Want Tougher Gun Laws AND Believe NRA Policies ‘Make All Americans Safer’, N.Y. DAILY NEWS (Dec. 3, 2015), http://www.nydailynews.com/news/national/calif-shooting-80-america-tougher-gun-laws-article-1.2453721 (finding an overwhelming number of the people polled after the San Bernardino shooting demanding stricter gun controls). See also Francie Diep, Do Americans Care More About Gun Control After Mass Shootings?, PAC. STANDARD (Dec. 3, 2015), https://psmag.com/do-americans-care-more-about-gun-control-after-mass-shootings-45f0ee3a69506l.6us0d45kt (noting the killings at Sandy Hook Elementary School in 2012 “...triggered a flurry of legislative activity and pushed public support for stricter gun laws up by 10 percent. Since then, however, support for gun-control laws has once again tapered off.”).

federal government has also played an important part in establishing gun control boundaries for the mentally ill.

The right to bear arms is guaranteed by the Second Amendment of the United States Constitution which provides: “A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.”15 The Framers of the Constitution wanted to ensure that in this newly-formed state, Americans would have the same rights they did as Englishmen.16 “When the colonists began to rise up against British authority, early American revolutionaries were denied these basic rights, including that to carry firearms.”17 The right to bear arms, therefore, was seen as a necessity to preserve the early colonists’ freedom, as well as a symbol of independence. Because this right was established in the context of a militia, some scholars and citizens argued that the Second Amendment only applied to the rights of citizens to take up arms in a militia or during war time. In District of Columbia v. Heller, the Supreme Court rejected that notion, clarifying that the Second Amendment encompasses a right for the individual to possess a firearm—in times of war or peace.18 While many find it difficult to imagine a revolutionary scenario like that of 1776 reoccurring, many Americans still believe the Second Amendment is a necessary element to protect citizens from a modern-day type of tyranny.19 However, even when the Constitution was being signed, the right to own a firearm was not without limits.20 Today, both the Supreme Court, and, arguably, Congress have established checks and controls that suggest this right is not absolute.

A. The Supreme Court

Although the Second Amendment undoubtedly guarantees that the right to own firearms shall not be infringed—a concept that has become ingrained in American culture—the right to bear arms is often not afforded

---

15 U.S. CONST. amend. II.
17 Id.
20 See Al-Khatib, supra note 16 (discussing the checks and balances placed on gun ownership when the Second Amendment was enacted).
strict constitutional scrutiny typical of most fundamental rights. Moreover, while recent opinions by the Supreme Court, at first glance, seem to suggest that this is a right guaranteed to all people, in dicta, the Court has suggested that certain groups of people, including the mentally ill, have limited gun rights. The leading case addressing this issue is the United States Supreme Court’s 2008 decision, *District of Columbia v. Heller.* In *Heller,* the Court stated and implied multiple times that all Americans have a right to bear arms: “What is more, in all six other provisions of the Constitution that mention ‘the people,’ the term unambiguously refers to all members of the political community, not an unspecified subset.” However, the Court continued to say “nothing in our opinion should be taken to cast doubt on longstanding prohibitions on the possession of firearms by felons and the mentally ill” as “presumptively lawful regulatory measures.” Since *Heller,* these restrictions pertaining to mental illness have, historically, been widely upheld.

After *Heller,* a sharp split of authority arose as to which level of scrutiny applies to statutes that affect mentally ill Americans’ right to bear arms. According to some scholars, “[t]he *Heller* majority did not adopt a specific level of scrutiny for evaluating gun restrictions but expressly rejected the rational-basis test.” Justice Breyer’s dissent argued that the majority implicitly rejected strict scrutiny by listing valid restrictions that would likely fail such a standard. “But because the felon exception, paired with mental illness by *Heller,* is almost certainly not narrowly tailored to a compelling state interest, strict scrutiny cannot be the relevant test.” Thus, remaining possible tests include: “(1) reasonableness, (2) in-

---


22 *Heller,* 554 U.S. at 579, 626.

23 Id. at 570.

24 Id. at 580.

25 Id. at 626, 627 n.26.

26 See *McDonald v. City of Chicago,* 561 U.S. 742, 786 (2010) (“We made it clear in *Heller* that our holding did not cast doubt on such longstanding regulatory measures as ‘prohibitions on the possession of firearms by felons and the mentally ill.’”).

27 For a general overview of different approaches to the constitutional standard, see *Vars & Young, supra* note 12, at 3–24 (discussing different interpretations of the standard); *see also Heller,* 554 U.S. at 688 (Breyer, J., dissenting) (omitting mental illness from his list of Second Amendment restrictions as likely to fail a heightened standard of review, and thus suggesting that it could survive even a strict scrutiny analysis); City of Cleburne v. Cleburne Living Ctr., 473 U.S. 432, 433 (1985) (discussing the heightened rational basis standard of review for mentally ill persons).

28 *Vars & Young, supra* note 12, at 7.


30 *Vars & Young, supra* note 12, at 7–8; *see also Stephen Kiehl, Comment, In Search of a Standard: Gun Regulations After *Heller* and *McDonald,* 70 Md. L. Rev. 1131, 1156–57, 1157 n.227 (2011).
A reasonableness standard would mean: “[A]ny law that is a ‘reasonable regulation’ of the arms right is constitutionally permissible.” A few circuits have adopted the second proposed standard: intermediate scrutiny. This “would require that a restriction upon the gun rights of the mentally ill would have to be substantially related to an important government objective.” Lastly, a hybrid approach of the above could be utilized, with limitless hypothetical options.

While some scholars contend that, despite dicta in the dissenting opinion in Heller that might have suggested otherwise, strict scrutiny should not be applied to these issues. However, in a later case, McDonald v. City of Chicago, the Supreme Court characterized the right to keep and bear arms as fundamental, which many state courts then interpreted as saying such laws should be subject to strict scrutiny. The applicable standard clearly has a significant impact on the ability of the measure to pass constitutional muster.

B. Federal Statutes

While the Supreme Court’s position on the issue of firearms and the mentally ill has been debated for decades, Congress has taken a much stronger stance on the topic. In fact, the new administration has promised to make significant changes to existing federal mental health laws. However, to understand those new changes, it is important to briefly look at the history of federal gun control legislation.

In 1968, Congress enacted the Federal Gun Control Act of 1968 (“GCA”) which provides: “It shall be unlawful for any person to sell or otherwise dispose of any firearm or ammunition to any person” who “has

---

31 Vars & Young, supra note 12, at 8.
32 Id.
33 For example, the Seventh Circuit applies intermediate scrutiny. See United States v. Skoien, 614 F.3d 638, 641–42 (7th Cir. 2010) (en banc) (finding need for “some form of strong showing”).
34 Vars & Young, supra note 12, at 9.
35 Id. at 10. These include a hybrid of intermediate and strict scrutiny, as well as more complicated categorical justifications. Id.
36 Id. at 7–8.
37 McDonald v. City of Chicago, 561 U.S. 742, 746 (2010).
38 See, e.g., Missouri Supreme Court Applies Strict Scrutiny to Gun Case, Upholds Ban on Felon-in-Possession, NRA-ILA (Aug. 21, 2015), https://www.nraila.org/articles/20150821/missouri-supreme-court-applies-strict-scrutiny-to-gun-case-upholds-ban-on-felon-in-possession (“[C]ases that arose after McDonald under Missouri’s right to arms would be subject to strict scrutiny... [T]he Missouri Supreme Court viewed Amendment 5 as ‘a declaration of the law as it would have been declared by this Court after McDonald mandated that the fundamental right to bear arms applied to the states.’”).
been adjudicated as a mental defective or who has been committed to any mental institution."  

"Adjudicated as a mental defective" is defined:

(a) A determination by a court, board, commission, or other lawful authority that a person, as a result of marked subnormal intelligence, or mental illness, incompetency, condition, or disease: (1) Is a danger to himself or to others; or (2) Lacks the mental capacity to contract or manage his own affairs.  

(b) The terms shall include—(1) A finding of insanity by a court in a criminal case, and (2) Those persons found incompetent to stand trial or found guilty by reason of lack of mental responsibility.

Commitment decisions must be made through a formal hearing process, unless a person voluntarily enters a mental institution "for observation."

Over the years, Congress has continued to pass laws which pose stricter limits on gun possession for Americans, and in particular, for individuals with signs of a mental illness.  However, as will be discussed later, this trend may change due to the new administration.

The Brady Handgun Violence Prevention Act ("Brady Act"), passed in 1994, amended the GCA and established stricter gun control measures. Some of these measures included mandatory waiting periods between applying for ownership and purchase, mandatory National Instant Criminal Background Check System ("NICS") background checks to purchase a firearm, and the establishment of the NICS Index, which was created with the intention of disqualifying any individual with a mental illness history from accessing dangerous weapons. The NICS Index contains information provided by local, state, tribal, and federal agencies of persons prohibited from receiving firearms under federal or state law. An individual is immediately disqualified from purchasing or owning a firearm if he or she is a match on the NICS Index. However, the Index, and the Brady Act generally, were broadly criticized for being ineffective because originally

---

41 27 C.F.R. § 478.11 (2017); see also BUREAU OF ALCOHOL, TOBACCO, FIREARMS AND EXPLOSIVES, GUN CONTROL ACT, https://www.atf.gov/rules-and-regulations/gun-control-act (last updated Sept. 22, 2016) (discussing how the GCA limits access to firearms by "prohibited persons").
the Index was comprised only of information voluntarily submitted by state and federal agencies. 47

Due to lack of contributions to the Index, Congress passed the NICS Improvement Amendments Act of 2007 (“Improvement Act”). 48 The Improvement Act sought to eliminate inconsistent reporting by providing both positive and negative incentives—encouraging states to accurately report all persons with federal disqualifications to the NICS Index. Some of those incentives included “awarding grants to fund creation and maintenance of state databases and imposing fines for failure to comply.” 49

Recently, news and media outlets have dubbed 2015 the “year of the mass shootings,” with some news outlets reporting more than 350 mass shootings in the year alone. 50 However, other outlets have reported as little as four “mass shootings” in 2015. 51 This drastic disparity stems from the fact that there is no singular definition of “mass shooting,” and as a result the numbers are calculated based on each news outlet’s individual definition of what should be considered a “mass shooting.” Notwithstanding a lack of definitional consensus, tragic events such as the San Bernardino shooting have the public outraged, demanding stricter gun control laws from Congress. 52 Recently, Senators Christopher Murphy, D-Conn., and Bill Cassidy, R-La., have introduced a bi-partisan bill entitled the Mental Health Reform Act of 2015 to address some of these concerns. 53 During his presidency, President Obama issued a statement, claiming it was within

---

47 Rudolph, supra note 45, at 680 (“Inconsistent legal standards and reporting among states has led to inconsistent enforcement of federal restrictions on the sale and possession of firearms by individuals with disqualifying mental illness.”).


49 Rudolph, supra note 45, at 681.

50 See Christopher Ingraham, There Have Been 334 Days and 351 Mass Shootings so Far This Year, WASH. POST (Nov. 30, 2015), https://www.washingtonpost.com/news/wonk/wp/2015/11/30/there-have-been-334-days-and-351-mass-shootings-so-far-this-year/ (claiming there were 351 mass shootings in the United States since the start of the year up until November 2015).

51 See Mark Follman, How Many Mass Shootings Are There, Really?, N.Y. TIMES (Dec. 3, 2015), http://www.nytimes.com/2015/12/04/opinion/how-many-mass-shootings-are-there-really.html?r=0 (“By our measure, there have been four ‘mass shootings’ this year, including the one in San Bernardino, and at least 73 such attacks since 1982.”).


his executive authority to start implementing stricter laws. During his last days in office, President Obama and his administration attempted to make those changes to the Improvement Act again. These changes required federal agencies to:

- Identify, on a prospective basis, individuals who receive Disability Insurance benefits under title II of the Social Security Act (Act) or Supplemental Security Income (SSI) payments under title XVI of the Act and who also meet certain other criteria, including an award of benefits based on a finding that the individual’s mental impairment meets or medically equals the requirements of section 12.00 of the Listing of Impairments (Listings) [to the Attorney General for inclusion in NICS].

The rule was opposed not only by the NRA, but also by President Trump. Most recently, the House has voted to overturn the legislation. While the federal government continues to debate this issue, the states have initiated efforts to amend their laws in response to public outcry for stricter legislation.

C. State Legislation

While federal law supplies certain aspects of gun control, the states also have the power to establish their own gun control laws. Many states in recent years have taken this opportunity to adopt stricter measures in this area, making it more difficult for persons with signs, or a history of mental illness to obtain a firearm. According to the Law Center to Prevent Gun Violence, over ninety-nine new state laws strengthening gun regulation have been passed within the past two years. In general, state laws regarding mentally ill persons and firearm possession can be divided into two categories: (1) restrict access to people who have been involuntarily com-

56 Id.
59 Devaney, supra note 57 (“The House voted 235-180 to roll back a rule that required the Social Security Administration to report people who receive disability benefits and have a mental health condition to the FBI’s background check system.”).
60 Rudolph, supra note 45, at 682.
mitted or adjudicated mentally defective (which is similar to the federal statute); and (2) more restrictive approaches—including both behavioral and categorical restrictions on people with mental illness.61

Despite these recent changes in a number of states, some states still have no statute on point to address this particular issue, and others still adopt laws that follow the federal standards.62 As previously discussed, federal law bans firearm possession by anyone who is “adjudicated as a mental defective or has been committed to any mental institution.”63 Of the remaining states, scholars have noted two distinct approaches that have been adopted: (1) categorically-based restrictions and (2) behaviorally-based restrictions.64

1. Categorical Approaches

The federal government and the state are currently struggling to find the balance between public safety and infringement on personal rights. In response to public demand, many states have adopted a categorical approach to firearm possession and the mentally ill. These laws categorically restrict firearm possession and purchase rights for persons with mental illness.65 While states vary in details of their categorical approaches, generally these provisions place a burden on mental health professionals to identify and predict patients likely to engage in violent behavior, and then report those patients to authorities.66

The categorical approach is often justified in the political realm because concern for public safety outweighs certain individual liberties, and these states would rather risk subjecting one individual to constitutional deprivation than putting the greater public at risk. Proponents of this approach tend to “rely[] on a presumed correlation between violence risk and mem-

62 See, e.g., ARK. CODE ANN. § 5-73-103 (2005); see also Rudolph, supra note 45, at 682–83 (discussing different state laws and state approaches).
64 See Vars, supra note 61, at 1636–37 (acknowledging the two regimes for restrictive approaches towards the mentally ill and firearms restrictions).
65 See Rudolph, supra note 45, at 683 (defining what a “categorical” approach towards this issue entails).
66 Id. at 683–84 (“For example, the New York Secure Ammunition and Firearms Enforcement Act (‘NYSafe’) requires mental health professionals to report to local law enforcement agencies all patients deemed likely to harm themselves or others. The reported individuals and their relevant health information are submitted to state databases that prohibit reported persons’ access to firearms indefinitely. Tennessee law closely resembles the NYSafe Act, requiring mental health practitioners to immediately inform law enforcement of a patient’s identifiable threats. Reported patients are also entered into state and federal databases used to monitor gun purchases or possession.”).
bership in a category of persons with a mental health adjudication.”

Some state legislators suggest that this measure is actually the least harmful or burdensome to gun rights as it creates stricter laws without changing general gun laws as they apply to most people.

However, these categorical exclusions are susceptible to much criticism. They typically rest on mental illness diagnoses, which are all too often not reliable or valid, as will be discussed more infra. Second, key assumptions underlying such laws are not supported by adequate studies or sufficient data. Third, because mental health professionals sustain the burden of reporting these patients to law enforcement, many argue that this will (1) breach patient/client trust and/or confidentiality and thus (2) chill mentally ill patients from effectively seeking help. These consequences will be explored more deeply in Part II.D.

2. Behavioral Models

The second type of model states use when addressing this issue is a behavioral approach, or a symptom-based firearm restriction. These laws are based on the behavior of an individual, searching for violent tendencies or certain symptoms allegedly indicating violent tendencies, rather than focusing on a categorical diagnosis.

See Rudolph, supra note 45, at 685–86 (“For example, in Indiana, law enforcement officers may seize weapons from all persons exhibiting potentially harmful behavior, irrespective of whether that individual is mentally ill or impaired. Connecticut follows a similar model, allowing law enforcement authorities to remove guns from individuals that present an immediate risk of injurious behavior.”)
focus on behavior more closely mirror other mental health laws. The behavioral approach acknowledges the important notion that a diagnosis of mental illness does not necessarily equate to a propensity for violence. While, as noted, the categorical provisions have been criticized as discriminatory and overinclusive, the behavioral approaches seek to avoid those defects by relying on the actual symptoms and actions of individuals, which is a better predictor than mere diagnosis.

Ironically, one main argument against a behavioral approach is that it “[casts] too wide a net” upon individual gun rights. Supporters of individual gun liberties often prefer laws that restrict only a small subset of the population’s rights (i.e. a categorical approach requiring a mentally ill diagnosis) as opposed to a law that could consequently subject even a greater number of people to stricter controls and restricted liberties. Public opinion polling shows wide support for the assumption that the issue with gun control in this country is who is accessing guns and problems with the mental health care system, rather than inadequate gun control laws generally.

Whether past behavior is a reliable indicator of future violence is also an issue hotly debated. Just as mental illness is hard to define and diagnose, propensity for violence is arguably as equally vague a concept. Does a person who frequently plays violent video games qualify or must they act on those interests? Would angry words be sufficient to qualify as dangerous behavior?

Another weakness that arises under a behavioral approach is considering who would be responsible for noticing, determining, and reporting alarm-raising behaviors. Placing the responsibility on the shoulders of mental health professionals could raise similar concerns generated by the categorical approaches, including breach of confidentiality, or could create

71 A person cannot be convicted of a crime simply because they have a mental illness. There needs to be some behavior or action that justifies the law’s intervention. It follows that having laws that restrict rights of individuals based solely on a diagnosis do not comport with the mental health law system. See generally Morse, supra note 11 (discussing the range of mental health laws).

72 See Paul S. Appelbaum, Violence and Mental Disorders: Data and Public Policy, 163 AM. J. PSYCHIATRY 1319, 1319 (2006) (explaining data that suggests mental illness alone is not indicia of violent tendencies); but see Jeffrey W. Swanson et al., A National Study of Violent Behavior in Persons With Schizophrenia, 63 ARCH. GEN. PSYCHIATRY 490, 496 (2006) (suggesting people with schizophrenia are likely to be more violent than the “average” individual); see also supra note 69 (discussing increase in violence risk when mental illness is paired with substance abuse).

73 Rudolph, supra note 45, at 684–85 (describing that mental health professionals claim such requirements cause over-identification, and have a negative effect on those looking for help).

74 Id. at 687.

75 See Craighill & Clement, supra note 3 (revealing studies that suggest people are more concerned with the mental health system rather than gun laws generally); see also David Kyle Johnson, Guns Don’t Kill People, People Do?, PSYCHOL. TODAY (Feb. 12, 2013) (highlighting that the slogan for the NRA is “guns don’t kill people, people kill people”).
a negative stigma which could lead to persons being dissuaded from seeking medical treatment and/or counseling. If family members were responsible for reporting behavior, results may be biased, as certain family members will undoubtedly act to “protect” their loved ones and may not report behavior. These questions create doubts that a behavioral approach would do a substantially better job at protecting the masses than a categorical approach.76

One recent study found that concerns about a perpetrator’s mental stability were reported prior to the crime in 11% of shootings between January 2009 and July 2015.77 Many of these reports were based on exhibitions of violent tendencies in behavior.78 With a clear definition of what behavior is sufficient to qualify as violent, as well as efficient procedures and methods of reporting, many of the weaknesses of a behavioral approach could be alleviated and decrease the percentage of these instances in a way that does not violate constitutional rights.

II. UNCONSTITUTIONALITY OF MOST RESTRICTIVE MEASURES

New state laws that categorically exclude anyone with a mental illness from possessing a firearm likely violate the Second Amendment, and perhaps the Equal Protection Clause as well. Furthermore, the increasing pressure being placed on mental health professionals to, in essence, predict future violence is unfair and unworkable given that cognitive psychology and the related field of neuroprediction are immature sciences, and are not yet able to predict relevant behavior with the accuracy that the American legal system should demand.79

A. Different Restrictive Approaches

States have adopted a number of variations of the restrictive, categorical approach to this issue regarding the mentally ill and firearm possession. Some states prohibit possession or ownership by those who have had any type of commitment, whether voluntary or involuntary (as opposed to fed-

76 This concept and proposal will be discussed further in the Conclusion.
78 Id. at 3; see also Editorial, Don’t Blame Mental Illness for Gun Violence, N.Y. TIMES (Dec. 15, 2015), http://www.nytimes.com/2015/12/16/opinion/dont-blame-mental-illness-for-gun-violence.html?_r=0 (quoting the “Everytown for Gun Safety” article).
eral law, which only includes involuntary commitment); the most restrictive regime turns on diagnosis and prohibits ownership or possession by people with mental illness even without history of commitment or without a regard to symptoms others prohibit ownership or possession by people with mental illness but without history of commitment.\(^\text{80}\) For example, some states prohibit gun possession by anyone who “[i]s or has been diagnosed as having a significant behavioral, emotional, or mental disorder[.] . . . .”\(^\text{81}\) Such a categorical exclusion is both overinclusive and underinclusive. It is overinclusive, or too broad, because if a policy like this was enforced, it would “disqualify roughly 17% to 20% of the overall population based on diagnosis of severity.”\(^\text{82}\) It is underinclusive, or too narrow, because relying on diagnoses will exclude people in the population who do not seek medical help.\(^\text{83}\)

B. Diagnosing Mental Illness—A Clinical Approach

When dealing with constitutional rights, determining mental illness should be a legal decision—not a medical or psychological decision.\(^\text{84}\) However, courts give great deference to the mental health profession to help define those boundaries.\(^\text{85}\) A concern with state laws that ban anyone diagnosed with a mental illness, thus, is that the legal test imports the unreliability and variability of mental diagnoses. Studies suggest that mental health professionals’ diagnoses of mental disorders are, at best, widely varied.\(^\text{86}\) Often in field studies, such variations do not seem too drastic. However, compared to medicine generally, and in actual practice, diagnosis in the mental health arena is not as strong.\(^\text{87}\) Because of this lack of reliability

\(^{80}\) Vars & Young, supra note 12, at 11–12 (discussing the federal law and the differences between the federal law and various different state laws); e.g., DEL. CODE ANN. tit. 11, § 1448(a)(2) (2017); D.C. CODE § 7-2502.03(a)(6) (2016); GA. CODE ANN. § 16-11-129(b)(2)(J) (LexisNexis 2016); 720 ILL. COMP. STAT. 5/24-3.1(a)(4) (2010); MASS. GEN. LAWS ANN. ch. 140, § 131(d)(ii) (West 2015).

\(^{81}\) Id.; see e.g., HAW. REV. STAT. ANN. § 134-7(c)(3) (West 2017).

\(^{82}\) Vars, supra note 61, at 1637 n.21 (citing Ronald C. Kessler et al., Prevalence and Treatment of Mental Disorders, 1990 to 2003, 352 NEW ENG. J. MED. 2515, 2518 (2005)).

\(^{83}\) Id. at 1639 (explaining that under this regime, too many people end up interacting with law enforcement before ever receiving a diagnosis).

\(^{84}\) Morse, supra note 11, at 211.

\(^{85}\) See, e.g., Sell v. United States, 539 U.S. 166, 172 (2003) (discussing and defining mental health professionals’ roles and boundaries in the courtroom and case); but see Foucault v. Louisiana, 504 U.S. 71, 109 (1992) (Thomas, J., dissenting) (“We have recognized repeatedly the ‘uncertainty of diagnosis in this field and the tentativeness of professional judgment.’.”).

\(^{86}\) See, e.g., Charles W. Lidz et al., The Accuracy of Predictions of Violence to Others, 269 JAMA 1007, 1009 (1993) (showing that prediction rates and accuracy are very low while using DSM and other diagnostic criteria in the psychology profession).

\(^{87}\) See generally Ahmed Aboraya et al., The Reliability of Psychiatric Diagnosis Revisited: The Clinician’s Guide to Improve the Reliability of Psychiatric Diagnosis, 3.1 PSYCHIATRY 41, 44
in diagnosis, mental health laws often focus more on behavior, rather than classification to a certain category or particular illness.\(^8\)

Some courts have been very skeptical of mental health experts’ testimony that relies simply on diagnosis; whatever the expert did to reach his/her opinion—use of the Diagnostic and Statistical Manual of Mental Disorders (“DSM”), clinical evaluations, interviews with family, etc.—must be clearly explained to the court.\(^8\) If the court is not satisfied with such explanations, whether due to lack of reliability or validity, testimony can be barred from the courtroom.

Most of these restrictive state statutes require that the mental illness be “significant” and often leave the distinction of severity to mental health professionals.\(^9\) A serious mental disorder, insanity, or “marked subnormal intelligence” are usually prerequisites.\(^9\) In other instances, states will suggest certain illnesses established in the DSM-V—the mental health professionals’ guide in terms of diagnosing patients—are enough to qualify someone for these restrictions.\(^2\) The DSM is the handbook used by health care professionals in the United States and much of the world, and is the authoritative guide to the diagnosis of mental disorders.\(^9\) Now in its fifth edition, the manual has evolved over the years, refining, adding and shedding diagnoses, by which psychiatrists and psychologists can classify their patients in order to establish treatment plans.\(^9\) While generally recognized as the “[B]ible” of its field,\(^9\) there are many problems that arise with use of

\(^8\) Mental health laws usually do not require a categorical diagnosis of a particular disorder, like schizophrenia or bipolar disorder, in order to apply to individuals. For example, if a person is suffering from a mental illness or disorder, that person is not automatically mentally incompetent under the law. Furthermore, a person can be found mentally incompetent without a categorical diagnosis. See generally Raphael Leo, Competency and the Capacity to Make Treatment Decisions: A Primer for Primary Care Physicians, 1 PRIMARY CARE COMPANION J. CLINICAL PSYCHIATRY 131, 131–41 (1999) (discussing competency and mental capacity).


\(^9\) HAW. REV. STAT. ANN. § 134-7(c)(3) (West 2017); Vars, supra note 61, at 1637.


\(^9\) See HAW. REV. STAT. ANN. § 134-7(c)(3) (West 2017) (“Is or has been diagnosed as having a significant behavioral, emotional, or mental disorders as defined by the most current diagnostic manual of the American Psychiatric Association or for treatment for organic brain syndromes”).


\(^9\) Id.

the DSM that can inform issues with diagnosis-based gun laws. To begin, many critics argue there is a lack of reliability with experts using DSM diagnostic criteria because it is too vague or broad.96 Criteria from the DSM also do not provide enough guidance for the level of precision, let alone accuracy, that should be required in the legal system.97 Second, the DSM-V is not a legal device—it was not created, nor is it encouraged, for use in the legal context.98 As explained by Stephen Morse:

All [DSM] diagnostic categories include necessary behavioral criteria, and for most, including schizophrenia and affective disorders, behavioral criteria alone are sufficient to justify the diagnosis. The question is whether a diagnosis produces value added beyond the information conveyed by the behavioral criteria that define the diagnostic category. The legal issue in mental health law cases is never whether the agent suffers from a disease; rather, it is always whether the agent has a crazy reason for legally relevant conduct.99

These laws specifically relating to diagnosis are employed because of the common perception that diagnosis of a mental illness leads to an increased risk of violence. However, while it may be true that certain disorders suggest people are more prone to violence or are often displayed as such,100 many people who suffer from mental disorder are not dangerous. In fact, studies have suggested that people who have mental disorders are more likely to be the victims of violent acts, rather than the perpetrators.101

96 Reliability refers to the extent in which psychiatric assessments of a patient are consistent—or, more simply, the number of therapists who agree on a diagnosis for a patient. Saul McLeod, What is Reliability, SIMPLY PSYCHOLOGY (2013), http://www.simplypsychology.org/reliability.html; see also Jeffrey R. Lacasse, After DSM-5: A Critical Mental Health Research Agenda for the 21st Century, 24.1 RES. ON SOC. WORK PRAC. 5, 7 (2014).

97 See Ralph Slovenko, The DSM in Litigation and Legislation, 39.1 J. AM. ACAD. PSYCHIATRY L. 6, 6 (2011), http://www.jaapl.org/content/39/1/6.full ("The caveat in the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR), advises that it is intended for use in clinical, educational, and research findings, not for forensic purposes. It warns that when the Manual is used for forensic purposes, there are significant risks that the information will be misused or misunderstood. These dangers arise, it states, because of the imperfect fit between the questions of ultimate concern to the law and the information contained in a clinical diagnosis.").


99 Morse, supra note 11, at 219; see also THE DIAGNOSTIC AND STATISTICAL MANUAL OF MENTAL DISORDERS (Am. Psychiatric Ass’n 5th ed.) (2013).

100 See Mental Health Reporting: Facts About Mental Illness and Violence, UNIV. OF WASH. SCH. OF SOC. WORK, http://depts.washington.edu/mhreport/facts_violence.php (last visited Jan. 10, 2017) ("Characters in prime time television portrayed as having a mental illness are depicted as the most dangerous of all demographic groups: 60 percent were shown to be involved in crime or violence.").

101 Id. ("People with psychiatric disabilities are far more likely to be victims than perpetrators of violent crime. People with severe mental illnesses, schizophrenia, bipolar disorder or psychosis, are 2.5 times more likely to be attacked, raped or mugged than the general population.") (internal citations omitted).
Furthermore, data shows there are more accurate indicators of violence than diagnosis, including substance abuse.\textsuperscript{102} Laws that require diagnosis-based restrictions also face a fundamental shortcoming: a large number of people with mental illness are not diagnosed, or are diagnosed incorrectly. Recent studies suggest that potentially half of the people with mental illness go undiagnosed and untreated.\textsuperscript{103} This suggests that a law which focuses on diagnosis will also be seriously underinclusive, as it will fail to identify potentially dangerous individuals who do have a mental illness.

In modern mental health law, the fact that a person suffers from a mental illness will not suffice to prove he or she is guilty of a crime, or liable for some conduct.\textsuperscript{104} The symptoms or propensity allegedly associated with the defect is not alone enough. The law in other contexts requires more than a labeled diagnosis. What traditionally has been important is the legally relevant behavior that accompanies the diagnosis. Statutes that exclude anyone with a mental illness make this leap in the reverse direction, assuming conduct will follow from the diagnosis, rather than focusing on the actual behavior.\textsuperscript{105} Categorical laws are making that same inaccurate, albeit reverse, inference at the expense of individual liberties and freedom.

C. Propensity for Violence—Why Clinical, Actuarial, and Neurological Prediction Methods All Fall Short

Obtaining a mental health diagnosis does not equate to a propensity for violence. First, there are many studies that suggest that no such correlation exists between a mental disorder and future violence.\textsuperscript{106} There is also little

\textsuperscript{102} Studies have shown that substance abuse is a better indicator of violence than mental illness. As of late, addiction is not recognized as a disorder that would qualify as a “mental illness,” but people with substance abuse issues are more likely to commit violent acts. Studies have also shown that level of violence decreases after substance abuse ceases. “This suggests that targeting attributes other than, or in addition to, diagnosis could more efficiently reduce violence.” Var, supra note 61, at 1639; see also Kate Pickert & John Cloud, If You Think Someone is Mentally Ill: Loughner’s Six Warning Signs, TIME (Jan. 11, 2011), http://content.time.com/time/printout/0,8816,2041733,00.html (discussing other warning signs for mental illness).

\textsuperscript{103} See, e.g., Joel L. Young, Untreated Mental Illness, PSYCHOLOGY TODAY (Dec. 30, 2015), https://www.psychologytoday.com/blog/when-your-adult-child-breaks-your-heart/201512/untreated-mental-illness/.

\textsuperscript{104} Morse, supra note 11, at 219 (clarifying that mental health law cases are concerned with the “crazy reason” for legally relevant conduct, rather than whether or not the agent suffers from a disease).

\textsuperscript{105} See id. at 219–22 (discussing why mental health laws should focus on behavior as opposed to relying on medical diagnosis, due to the lack of heterogeneity in a diagnosis).

\textsuperscript{106} See, e.g., Seena Fazel et al., Schizophrenia and Violence: Systematic Review and Meta-Analysis, 6 PLoS MED. 1, at 7–8, 12 (Aug. 2009) (concluding that increased risk of violence was associated with drug and alcohol problems, regardless of whether the person had schizophrenia).
reliable evidence to suggest that mental health professionals can accurately predict an individual’s propensity for gun violence without additional methods beyond their traditional approaches:

[P]sychiatrists, using clinical judgment, cannot accurately foresee which patients will be violent. . . . [But] clinicians may improve their predictions of violent behavior if they routinely use structured risk assessment methods that identify indicators of violence such as a history of violent activity or substance abuse. Such guidance is absent from current state legislation.

Scholars and various mental health experts have stated that those mentally ill persons who may pose a risk are also difficult to identify because of the broad spectrum of disorders, which make identifying the line between future dangerousness and potential harmlessness even more difficult to distinguish.

Lastly, for reasons previously discussed, mental health professionals are not always accurate when diagnosing patients, and are similarly limited in their ability to “see the future” and predict future dangerousness. However, critics argue that there are many areas of the law which rely on the idea of predicting future dangerousness, and there are no sound prediction methods in those instances either.

1. Actuarial Risk Prediction

Because clinical diagnosis is an imperfect science in terms of predicting future violence, alternative prediction methods have developed in an attempt to better predict violence, with the most common method being actuarial violence risk assessment. These actuarial methods could potentially be used in future gun legislation, as the main concern rests in predicting future violence risks from those with mental illnesses. While many different actuarial models have developed over the years, one of the most promising methods is the Classification of Violence Risk (“COVR”), developed as

107 Rudolph, supra note 45, at 694–95.

108 Jeffrey W. Swanson, Preventing the Unpredicted: Managing Violence Risk in Mental Health Care, 59 PSYCHIATRIC SERVS. 191, 192–93 (2008) (discussing the differences between prediction and prevention and the difficulty mental health professionals have when diagnosing patients and predicting future violence).

109 In sentencing cases, many of the decisions often turn on prediction of future violence or likelihood to recidivate. There are no actuarial or neuropsychological methods that can predict recidivism rates with perfect accuracy in those instances either, but they are still permissible and often encouraged in courts. See, e.g., Barefoot v. Estelle, 463 U.S. 880, 899–901 (1983) (admitting expert clinical opinions involving hypothetical questions regarding the defendant’s future dangerousness and the likelihood that he would present a continuing threat to society).

110 See Nadelhoffer et al., supra note 79, at 75–80 (discussing the role of actuarial methods in violence predictions).
part of the MacArthur Study of Mental Disorder and Violence.\textsuperscript{111} The study assessed 134 potential risk factors for future violent behavior based on male and female patients.\textsuperscript{112} The study design consisted of patients recently released from a civil psychiatric hospital. The patients were followed and monitored for twenty weeks,\textsuperscript{113} and researchers examined hospital records, patient self-reports, and the reports of friends and family members in order to assess the risk of violence.\textsuperscript{114} The MacArthur Study utilized a “classification tree” methodology to evaluate risk assessment:

This approach allows many different combinations of risk factors to classify a person as high or low risk. Based on a sequence established by the classification tree, a first question is asked of all persons being assessed. Contingent on the answer to that question, one or another second question is posed, and so on, until each person is classified by the tree into a final “risk class.”\textsuperscript{115}

Risk factors include the person’s race, gender, prior crime and violence, and victimization.\textsuperscript{116}

While the COVR delivered impressive results, it was validated “only on samples of psychiatric inpatients in acute facilities in the United States who would soon be discharged into the community. Whether the validity of the model can be generalized to other people . . . remains to be determined empirically.”\textsuperscript{117} Because of this, many critics argue that the COVR may not yet be suitable for contexts outside of civil commitment hearings.\textsuperscript{118} Despite lack of data validating the approach in a criminal context, applying actuarial prediction methods like the COVR, in the context of gun control legislation, would serve as a better and more accurate approach than solely relying on clinical diagnostic decisions. Utilizing such a “classification tree” or looking at multiple factors would serve as a better indicator for violence, be more accurate, and pose less infringement on constitutional rights than existing categorical restriction methods.

\begin{enumerate}
\item See generally John Monahan et al., Rethinking Risk Assessment: The MacArthur Study of Mental Disorder and Violence (2001).
\item Nadelhoffer et al., supra note 79, at 77.
\item Monahan, supra note 113, at 412.
\item Id. (“This contrasts with the usual approach to actuarial risk assessment, such as the HCR-20 and the VRAG, in which a common set of questions is asked of everyone being assessed and every answer is weighted and summed to produce a score that can be used for purposes of categorization.”).
\item Id. at 413–27.
\item Nadelhoffer et al., supra note 79, at 78.
\item Id.
2. Neuroprediction

Currently, neuroscientists are attempting to find a method to predict whether an individual possesses a significant threat of violence with better accuracy and precision. This new science, in theory, could help create better gun control laws because if neuroscience could identify significant threats of violence, laws that are not underinclusive or overinclusive could be created. Over the past two decades, progress has been made in “identifying and exploring some of the neural correlates of violence and aggression.” Specifically, a great portion of the research has been focused primarily on identifying neural correlates to predict future recidivism rates of past criminals. However, such studies can be applied to the issue of restricting the rights of mentally ill persons to possess firearms because policy makers are concerned with the same factor—risk of violence. Risk assessments—actuarial or personality tests like the psychopathy checklist, and other measures discussed above—and neuropsychological measures have demonstrated the ability to predict future antisocial behavior. “However, these latter measures serve only as proxies for direct measurement of the brain’s inhibitory and cognitive control systems.” Recent developments in neuroscience suggest neural correlates could be used in the future to classify or identify character traits or abnormalities that could directly impact risk of violence. Neuroscientists have been able to identify certain brain regions associated with impulse control—an important issue in gun violence—including the anterior cingulate cortex (“ACC”) (a limbic region associated with error processing, conflict monitoring, response selection, and avoidance learning), basal ganglia, dorsolateral prefrontal cortex, and the amygdala. Different approaches, including exploring ACC activity, studying the monoamine oxidases A gene (“MAOA” or the “warrior gene”), and utilizing structural and functional brain imaging scans, have been utilized by scientists and researchers attempting to find

119 Id. at 80.
120 See, e.g., id. at 80–82 (discussing the neural correlates of psychopathy); Eyal Aharoni et al., Neuroprediction of Future Rearrest, 110 PNAS 6223, 6223 (2013), www.pnas.org/cgi/doi/10.1073/pnas.1219302110.
121 Hare Psychopathy Checklist, ENCYCLOPEDIA OF MENTAL DISORDERS, http://www.minddisorders.com/Flu-Inv/Hare-Psychopathy-Checklist.html (last visited Jan. 10, 2017) (“The Hare Psychopathy Checklist-Revised (PCL-R) is a diagnostic tool used to rate a person’s psychopathic or antisocial tendencies.”).
122 Aharoni et al., supra note 120, at 6223.
123 Id.
124 Id.
125 Id.
126 Id.
127 Id. at 6227 n.14.
the link that could lead to the potential identification of the legally significant risk of allegedly dangerous individuals.

One recent study explored ACC activity and a go/no-go impulse control task to assess and predict future antisocial behavior in a study of released criminal offenders. Lesion studies in both animals and humans have shown damage to the ACC can lead to difficulties in regulating behavior changes such as apathy and aggressiveness. Furthermore, studies suggest that the ACC plays an important role in the process of cognitive control—something perhaps of great importance when talking about gun control issues. The results revealed:

Th[e] pattern of results raises the possibility that brain activity in regions such as the ACC, elicited by a simple experimental task, may lend incremental utility to existing behavioral risk factors in the ability to predict rearrest. In addition, these results support existing theories that paralimbic function subserves the relationship between cognitive control and antisocial behavior and that the ACC in particular may facilitate inhibitory learning by feeding error-related information to inhibitory control centers. Moreover, this pattern supports the view that neurocognitive endophenotypes carry the potential to characterize underlying traits and defects independently of behavioral phenotypes, such as self-report instruments and expert-rater diagnoses based on client interviews and collateral historical information. Finally, this work highlights potential neuronal systems that could be targeted for treatment intervention. One plausible hypothesis is that interventions that modulate ACC activity may help to increase cognitive control systems and thereby reduce future recidivism.

While the study provided a valuable insight into the ACC and impulsivity, and inspired some hope that neurological components could become an accurate measure of future violence, more research—specifically more research from an out-sample population—would need to be done before applying such findings in a legal setting. In fact, Russ Poldrack’s reanalysis of the data showed that the incremental payoff was minimal. Poldrack took issue with the fact that the study did not examine out-of-sample predictive accuracy, therefore suggesting the data was too weak and incapable of being replicated by subsequent studies. As is a problem in many neurological studies claiming to find neural correlates relating to prediction of human behavior, according to Poldrack, the “statistical rela-

128 Id. at 6223.
129 Id. Indeed, ACC-damaged patients have been classed in the “acquired psychopathic personality” genre, which will be discussed more below. Id.
130 Id.
131 Id. at 6224.
133 Id.
tionships within a sample generally provide an overly optimistic estimate of the ability to generalize to new samples. In order to be able to claim that one can ‘predict’ in a real-world sense, one has to validate the predictive accuracy of the technique on out-of-sample data.”

Poldrack then reanalyzed the data using cross-data analysis and determined there was only a “slight benefit to out-of-sample prediction of future rearrests using dACC activation, particularly in the period from 20 to 48 months after release.” Combining both analyses suggest that fMRI data can provide relevant information as to whether an individual will be rearrested, or reveal a tendency for high risk impulsive behavior, but the predictability is rather small. Because of this small predictability rate, it is unclear how such a method would accurately translate into prediction of future violence in terms of gun control legislation. With such an incremental payoff, it is unlikely fMRI data in this context would prove helpful or viable when dealing with Second Amendment issues.

Another neuroscientific approach to determine future violence has examined specific genes or alleles to determine if they have any effect or influence on risks of violence. For example, studies have examined the MAOA gene, commonly known as the “warrior gene,” using a “neural intermediate phenotype strategy” to explore potential violence correlations. Both animal and human studies point to MAOA’s role in impulsive aggressive behavior. While research has shown no direct correlation between the MAOA-L allele and an increased risk for violent behavior, one study suggests that it nevertheless “predisposes males who experience early life adversity or abuse to reactive violence and aggression.”

Using functional and structural imaging techniques, researchers have been able to research MAOA’s effect on cognitive tasks. Current research thus suggests that when the MAOA allele is combined with high risk environmental settings, risk of both antisocial and impulsive

134 Id.
135 Id.
136 Id.
137 Nadelhoffer et al., supra note 79, at 82–83 (examining the prominence, developments, and moral problems presented by neuroprediction in the legal context).
138 Id. at 82. For example, past studies have associated the MAOA gene in mice with heightened aggressive outbursts. Some studies in humans suggest male family members with the gene were subject to predisposed “short tempers, and violent sexual behavior.” Id.; see also H.G. Brunner et al., Abnormal Behavior Associated with a Point Mutation in the Structural Gene for Monoamine Oxidase A, 262 SCI. 578, 578–80 (1993) (connecting “complete and selective deficiency of enzymatic activity of monoamine oxidase A (MAOA)” with antisocial behavior).
139 See Nadelhoffer et al., supra note 79, at 83 (describing a study that found “the association between early familial adversity and mental health [in males] was significantly stronger in the low-activity MAOA vs. the high-activity MAOA groups”).
140 Id. at 83.
violence increases in males. Of course, based on the current information known about MAOA, it is still debatable whether this potentially correlated relationship between MAOA and violence can be incorporated into policy and legal decisions concerning future violence. However, utilizing such a strategy in the context of gun control legislation could also raise additional unique constitutional concerns and does not solve any of the issues raised by current legislation.

Lastly, most of the research in this field has focused on individuals with psychopathy—a disorder that results in antisocial behavior, including lack of reactive human emotions like guilt, remorse, or empathy. Due to these factors, psychopathic people, despite making up only 1% or less of the population, could be responsible for as much as 30–40% of all violent crime. This significant percentage has led some scientists and scholars to the conclusion that neuroscientific research on psychopathy could provide better models for predicting violence, which could potentially be used in a legal setting.

When studying psychopathic individuals, neuroscientists have found the following functional neurocognitive deficits:

(a) reduced amygdala and vmPFC activity during aversive conditioning tasks;
(b) impairment in passive avoidance learning tasks and differential reward-punishment tasks;
(c) reduced amygdala activation during emotional memory;
(d) reduced activation in the anterior and posterior cingulate gyri, left inferior frontal gyrus, amygdala, and ventral striatum when encoding, rehearsing, and recognizing negatively valenced words; and
(e) reduced activation in the ventromedial prefrontal cortex and anterior temporal cortex when distinguishing between moral and non-moral images.

141 Id.; see also Joshua W. Buckholtz & Andreas Meyer-Lindenberg, MAOA and the Neurogenetic Architecture of Human Aggression, 31 TRENDS IN NEUROSCIENCE 120, 123 (2008) (exploring the relationship between MAOA-L and inhibitory control and finding differences in the limbic system in MAOA-L and “highly significant genotype-related differences in brain function”).

142 Specifically, it would require determining if a person possesses the MAOA allele and/or has a history of factors considered to be “risk” factors in terms of promoting anti-social behavior. Obtaining such information may prove to be an invasion of privacy and could lead to other legal troubles yet unprecedented. It is hard to imagine a functioning system that would require every person applying for a gun license to be tested for the allele or gene, in addition to significant background/history tests.


144 Nadelhoffer et al., supra note 79, at 80.

145 Id. “Finally, the construct of psychopathy has had a major impact on violence risk assessment. For instance, it is the only clinical disorder that has been shown to confer increased risk for both reactive and instrumental aggression.” Id.

146 Nadelhoffer et al., supra note 79, at 93–95 (citations omitted).
Each of these findings is significant based on our understanding of brain function today—the amygdala being associated with emotions and aggression, and the prefrontal cortex being involved in decision-making processes. However, there are still other studies that suggest such correlations are not as strong as these studies purport. “Violence risk prediction is an inexact science and as such will continue to provoke debate” in the neuroscientific community and beyond.

Although these new neuroimaging methods offer further potential to be able to predict future violence, since the technology is in its infant stages, it is likely not able to help the legal community or policy makers at this time, in the context of gun control legislation. Prediction methods are often used in the legal system in terms of bail, sentencing, parole, the death penalty, and neuroscience or neuroimaging in combination with other existing methods, which could potentially increase prediction accuracy. However, these studies would need to be proven to be reliable and repeatable in a large population of individuals. In addition, unless these studies can help in diagnosing psychopathic individuals, such tools would do little to solve the constitutional questions that arise from restrictive categorical exclusions. Additionally, there is a communication disjunction between neuroscientists and the law which often makes applying these studies in a legal context difficult:


148 Philippe Domench & Etienne Koechlin, Executive Control and Decision-Making in the Prefrontal Cortex, 1 CURRENT OPINION IN BEHAV. SCI. 101, 101–05 (2015), http://ac.els-cdn.com/S2352154614000278/1-s2.0-S2352154614000278-main.pdf?_tid=a0da7114-dfc2-11e5-8cad-00000ab0f26&acdnat=1456860196_b3e5d506c7713e6edc46b0a1363e5fa8 (discussing the role of prefrontal cortex in decision making).


150 Perhaps the most likely reason that such technology would not be helpful to policy makers is that since the technology is in its infant stages, it would not pass the Daubert standard in court due to “individualization” problems. See Flores v. Johnson, 210 F.3d 456, 464 (5th Cir. 2000) (“use of psychiatric evidence to predict a murderer’s ‘future dangerousness’ fails all five Daubert factors.”); but see Nenno v. State, 970 S.W.2d 549, 561 (Tex. Crim. App. 1998) (suggesting a lower reliability standard should be applied for social sciences as compared to “hard sciences”). The difference between these two cases is that first one dealt with the issue of guilt, while the latter dealt with issues of sentencing. Such a disparity suggests the guilt phase and sentencing phase of trial treat evidence that fails Daubert standards quite differently. However, what is at issue in this Comment is predicting future violence to limit a person’s access to firearms. It is unclear whether the courts would be persuaded to allow this scientific evidence to uphold these restrictions, because gun possession prior to a violent act does not fit squarely under either of these established precedents. For further discussion on this topic, see Nadelhoffer et al., supra note 79, at 93–95.

151 Aharoni et al., supra note 120, at 6224.
To a cognitive neuroscientist, legal standards like “volitional capacity” and “irresistible impulse” are inherently meaningless. They do not map on to specific mental processes or discrete brain circuits. In other words, legal rules that hinge on judgments about the human mind do not actually reference any of the valid species of human mental function that cognitive science has labored to catalog. Conversely, cognitive science constructs such as “action cancellation” or “delayed reward discounting” represent valid and distinct species of cognition that can be measured reliably and precisely, yet are foreign to legal decision-makers. There is no coherent framework for linking legal standards referencing mental function to specific, quantifiable cognitive processes. Neuroscience and law lack a “lingua franca” of cognition that could bridge the conceptual chasm that exists between these disciplines.\footnote{Joshua Buckholtz & David L. Faigman, Promises, Promises for Neuroscience and Law, 24.18 CURRENT BIOLOGY R861, R864 (2014), http://www.sciencedirect.com/science/article/pii/S0960982214009208; See also Walter P. Sinnott-Armstrong, Neurolaw and Consciousness Detection, 47.10 CORTEX 1246, 1246–47 (2011), http://www.sciencedirect.com/science/article/pii/S0010945211001353?np=y (discussing the controversial use of “cognitive enhancers” to aid witnesses and jurors in their evaluations).}

Other significant concerns regarding the use of neuroscience and neuroprediction in a legal context are the ethical issues such studies generate. Perhaps realizing these concerns and the rapidity of neuroscientific advances before leaving office, President Obama charged his Bioethics Commission to “identify proactively a set of core ethical standards” in the field of neuroscience and charged the Commission to consider implications “relating to . . . the appropriate use of neuroscience in the criminal-justice system.”\footnote{Letter from President Barrack Obama to Amy Gutmann, Commission Chair, Presidential Commission for the Study of Bioethical Issues (July 1, 2013), http://bioethics.gov/sites/default/files/news/Charge%20from%20President%20Obama.pdf. See also David L. Faigman et al., Law and Neuroscience: Recommendations Submitted to the President’s Bioethics Commission, 1 J. L. & BIOSCIENCES 224, 226 (2014).} In response, the MacArthur Foundation released recommendations for the government and courts including: “that NSF . . . and DOJ (for instance through NIJ) fund studies that directly investigate the promise and the limitations of using neuro-technologies to add value to existing data-driven approaches to predicting recidivism and future violence.”\footnote{Faigman et al., supra note 153, at 233.}

As evidenced by the report, applications of neuroscience in the legal field raises both common and novel ethical concerns. The biggest ethical concern when attempting to use neuroimaging to predict future violence of recidivism is the concern around interpreting, or rather identifying, false positives and negatives.\footnote{Owen D. Jones et al., Law and Neuroscience, 33 J. NEUROSCIENCE 17624, 17628 (2013), http://neuroethics.upenn.edu/wp-content/uploads/2015/06/Law-and-Neuro.pdf.} “[P]recedents from non-neuroscientific analyses (such as from other types of predictive testing) can help us to anticipate [these types of] ethical problems and to seek solutions.”\footnote{Id.} Novel concerns,
as noted by some scholars, include, for example, using neuroscience to sentence a convicted person to a “brain intervention instead [of] a behavioral interaction, such as anger management therapy.”\footnote{157} If neuroimaging were used in terms of gun control legislation, other novel ethical concerns would arise. Should the law take away a person’s right to possess a firearm just because a brain scan shows a suspicious abnormality when their behavior reveals no violent tendencies? With brain interventions such as medication and fMRIs or various prediction scans, the changes bypass the person’s decision-making ability, arguably infringing on his autonomy at a significant level.\footnote{158}

Additionally, with these increasing advances in neural correlates, a new question arises: whether or not these potentially invasive methods raise constitutional issues of their own. Although the Supreme Court has held that “predictions per se do not run afoul of defendants’ due process rights even in high stakes legal contexts,”\footnote{159} the neuroimaging studies and methods incorporated in neuroprediction raise unique constitutional concerns—particularly with the Fourth and Fifth Amendments.\footnote{160} The Fourth Amendment protects against unreasonable searches and seizures and requires either prior permission or a valid search warrant supported by probable cause, unless an enumerated exception applies.\footnote{161} One’s own body/person is undoubtedly protected by the Fourth Amendment. Therefore, MRIs or fMRIs, in the context of gun control legislation, could constitute a search in which the government would need probable cause or consent.

Neuroscientific methods also raise Fifth Amendment concerns. A person is protected by the Fifth Amendment from being a witness against himself during the guilt or sentencing phase of a criminal trial.\footnote{162} Presumably, if laws utilizing fMRI data to restrict access to guns were enacted, and someone broke that law and purchased a firearm illegally, use of said data could raise Fifth Amendment concerns. “In Estelle v. Smith, for instance, the Court held that the government could not interview a prisoner before sentencing without warning him that he had the right to remain silent.”\footnote{163} While it is unclear whether or not the Estelle holding is limited to the specific facts of the case, one could see how such use of neuroprediction in the context of gun legislation could raise these novel constitutional concerns—

\footnote{157}{Id.}\footnote{158}{Id.}\footnote{159}{Nadelhoffer et al., supra note 79, at 89.}\footnote{160}{Id.}\footnote{161}{U.S. CONST. amend. IV.}\footnote{162}{U.S. CONST. amend. V.}\footnote{163}{Nadelhoffer et al., supra note 79, at 92 (citing Estelle v. Smith, 451 U.S. 454, 461–69 (1981)).}
using incriminating data found in the brain scans against the person trying to obtain a firearm.

Notably, neuroprediction of violence generally does not conflict with current law, since it is employed in areas such as sentencing, civil commitment, and sexually violent predators.\(^\text{164}\) “Violence predictions can do tremendous harm when mistaken, but all that shows is that the legal system should use the best possible methods when it relies on these predictions.”\(^\text{165}\) As previously discussed, actuarial predictions are more reliable than clinical predictions and would be a better source of reliable information. Furthermore, advances in neuroscience have led scientists to believe the accuracy of actuarial predictions will only improve in future years, thus affecting the legal world.\(^\text{166}\)

Mark Follman of *Mother Jones* found at least thirty-eight mass murder shooters over the past two decades “displayed signs of possible mental health problems prior to the killings.”\(^\text{167}\) Although this is a shocking, and perhaps frightening, statistic, it does not necessarily mean all people with a mental illness are dangerous; this evidence is still not enough to limit the rights of all individuals with a mental illness.\(^\text{168}\) For example, even if stricter laws were in place that inhibited these individuals from purchasing a firearm, they still do not address instances where the weapons are stolen or obtained by a friend.\(^\text{169}\) Currently, because of the lack of information provided by neuroscience, and other sciences, past behavior is the best predictor of future violence. Mental health professionals are not the best people to attest to past behavior, but rather, family members and friends are best equipped to provide this imperative knowledge to help determine future dangerousness.\(^\text{170}\) This is true because often patients may not tell their

---

164 Nadelhoffer et al., supra note 79, at 95.
165 Id.
166 Id. at 94.
167 Id. at 94.
168 Id.
169 Mark Follman, *Mass Shootings: Maybe What We Need Is a Better Mental-Health Policy*, *MOTHER JONES* (Nov. 9, 2012, 6:03 AM), http://www.motherjones.com/politics/2012/11/jared-loughner-mass-shootings-mental-illness. It appears Fullman’s data is based off of reports of mental illness from other news outlets and personal investigations, suggesting this figure may not be accurate. However, even if it were proven to be accurate, it would not change the established, accepted notion or fact that not all people with mental illness are dangerous.
170 See supra Part II.D.
mental health professionals the entire truth, may color stories, or may hide certain information about their pasts. However, family members and friends, who are with the mentally ill person on a daily basis, have a better look into whether the behavior is something worthy to generate alarm.171 Friends and family member assessments are factors that could be incorporated into actuarial prediction models.

D. Mental Health Professional’s Role

Restrictive state laws bar firearm possession by anyone who is “adjudicated as a mental defective” or involuntarily committed.172 “And while mental illness for civil commitment purposes is technically a legal, not medical, concept, legislatures and courts largely incorporate the definition applied by mental health professionals.”173 Thus, these liberties, to a large extent, rest on psychiatric diagnoses in the hands of mental health professionals.

Legislation that places the responsibility on mental health professionals to take away guns raises a number of different concerns. First, there is a potential “chilling effect” on the therapeutic relationship.174 Numerous studies have shown that imposing a mandatory duty on psychologists, outside of immediate threats of harm to self or an individual, corresponded to retaliation and “distance” in the therapeutic relationship.175 Psychologists have also hypothesized this perceived lack of confidentiality would also deter people from being completely honest with their therapist, inhibiting his or her ability to get an adequate diagnosis or treatment.176 These types of laws could have an overall chilling effect on the entire profession, and place these professionals in a terrible catch-22—balancing reporting obligations designed to prevent murder with creating and maintaining a relationship with a patient to whom a duty of care is owed. Even the American

171 While other problems could arise by requiring family members to step into the role of mental health professionals, I merely add this suggestion to further clarify the problems with utilizing mental health professionals in this capacity.
172 See Vars & Young, supra note 12, at 11.
173 Vars, supra note 61, at 1636–37.
174 Id. at 1647.
175 Id. (citing Griffin Edwards, Tarasoff: Duty to Warn Laws, and Suicide, 34 INT’L REV. L. & ECON. 1, 5 (2013)) (“One recent study found that imposing a mandatory duty on psychologists to warn others about threats posed by patients corresponded to a nine percent increase in teen suicides.”).
176 See generally Edward Kaufman & Marianne R.M. Yoshioka, Substance Abuse Treatment and Family Therapy: A Treatment Improvement Protocol Tip 39, U.S. DEP’T OF HEALTH AND HUMAN SERVS. (2004), http://www.ncbi.nlm.nih.gov/books/NBK64259/ (discussing how it is very difficult for mental health professionals to develop a treatment plan when the individual lies or does not inform their therapist about past actions or thoughts, and why these new laws would only further perpetuate that difficulty).
Psychiatric Association has expressed its concern about these laws on the profession:

Because privacy in mental health treatment is essential to encourage persons in need of treatment to seek care, laws designed to limit firearm possession that mandate reporting to law enforcement officials by psychiatrists and other mental health professionals of all patients who raise concerns about danger to themselves or others are likely to be counterproductive and should not be adopted. 177

These laws will also leave mental health professionals battling the negative stigma further perpetuated by these laws. 178 These types of stereotypes naturally will lead people to avoid seeking treatment, resulting in anti-therapeutic consequences and potentially more dangerous conditions for the general public.

Despite all of these disadvantages for including mental health professionals in the process, there are, arguably, some advantages. Proponents of these laws argue that mental health professionals are best at identifying behavior and attitudes that could lead to potential danger. They argue that mental health professionals have more experience than the average person dealing with people who have mental illnesses, and therefore are better equipped to talk with the patient and get more accurate responses. 179 As compared to a store owner selling the gun to a customer, a mental health professional is better suited to recognize certain dangerous patterns that appear on the surface that others may not see. While there is some merit to these points, there are little to no empirical data to support that mental health professionals are more accurate when assessing future dangerousness.

E. Second Amendment and Equal Protection

Courts addressing laws that categorically exclude persons with a mental illness from obtaining a firearm typically confront two constitutional issues: challenges under the Second Amendment and under the Equal Protection Clause. As previously mentioned, the Court in Heller was unclear as to what level of scrutiny to apply to Second Amendment challenges. 180 Although the Heller Court preferred to avoid a scrutiny-based approach al-

178 See Lindsey Lewis, Mental Illness, Propensity for Violence, and the Gun Control Act, 11 HOUS. J. HEALTH L. & POL’Y 149, 169 (2011) (“[T]here is an increased stigmatization associated with labeling mentally ill individuals as violent offenders incapable of handling guns in a safe manner.”).
179 Morse, supra note 11, at 217.
180 554 U.S. at 634–35.
together, some circuits have debated about the correct level of scrutiny. The traditional levels of scrutiny are rational basis, intermediate scrutiny, and strict scrutiny. However, the Supreme Court in *Heller* ruled out rational-basis in regards to Second Amendment challenges—leaving only intermediate and strict.

Some courts apply intermediate scrutiny to these and related issues, but there remains disagreement about how to apply intermediate scrutiny. Only a minority of circuits have chosen to apply strict scrutiny.

The Sixth Circuit recently confronted the strict versus intermediate scrutiny issue with regards to firearm possession and the mentally ill. In *Tyler v. Hillsdale County Sheriff’s Department*, the plaintiff challenged a law which prohibits possession of firearms by individuals “adjudicated as a mental defective” or who have “been committed to a mental institution,” as violating his constitutional rights under the Second Amendment and the equal protection doctrine. The analysis of the three-judge panel assumed heightened scrutiny would not apply to the equal protection challenge. Yet, on the Second Amendment issue, the panel expressed “[t]here are strong reasons for preferring strict scrutiny over intermediate scrutiny... [including that] the Supreme Court has by now been clear and emphatic that the ‘right to keep and bear arms’ is a ‘fundamental right necessary to our system of ordered liberty.’” *Tyler* was vacated in April 2015 and was sub-

---


183 Id. at 628–29 n.27; see also Vars & Young, supra note 12.

184 Tyler v. Hillsdale Cnty. Sheriff’s Dep’t, 775 F.3d 308, 324 (6th Cir. 2014); see United States v. Carter, 669 F.3d 411, 413 (4th Cir. 2012) (applying intermediate scrutiny to § 922(g)(3), which prohibits gun possession by drug addicts and unlawful users of controlled substances); United States v. Williams, 616 F.3d 685, 692 (7th Cir. 2010) (applying intermediate scrutiny to § 922(g)(1)’s ban on gun ownership by felons). For examples of disagreement over how to apply intermediate scrutiny, see, e.g., United States v. Booker, 644 F.3d 12, 25 (1st Cir. 2011) (applying a form of intermediate scrutiny to a “categorical ban on gun ownership by a class of individuals,” which required a “strong showing, necessitating a substantial relationship between the restriction and an important governmental objective”) (internal quotation marks omitted); United States v. Masciandaro, 638 F.3d 458, 470–71 (4th Cir. 2011) (applying intermediate scrutiny to laws burdening the right to bear arms “outside of the home” but applying strict scrutiny to laws surrounding the “core right of self-defense in the home”); see generally Vars & Young, supra note 12.

185 Tyler, 775 F.3d at 328 (“In choosing strict scrutiny, we join a significant, increasingly emergent though, as yet, minority view...”).

186 Id. at 344 (“The government’s interest in keeping firearms out of the hands of the mentally ill is not sufficiently related to depriving the mentally healthy, who had a distant episode of commitment, of their constitutional rights.”).

187 Id. at 326.
sequentially argued before the entire Sixth Circuit en banc. At rehearing, the court held Tyler had a viable claim under the Second Amendment and that the government had not justified a lifetime ban on gun possession by anyone who had been “adjudicated as a mental defective” or “committed to a mental institution,” or the “categorical” type of restriction previously discussed.

To come to this conclusion, the court analyzed the situation under a two-part test addressed in United States v. Greeno. The first step places the burden on the government to show “whether the challenged law burdens conduct that falls within the scope of the Second Amendment right, as historically understood,” meaning “laws . . . [that] regulate activity falling outside the terms of the right as publicly understood when the Bill of Rights was ratified” will survive constitutional scrutiny. The court in Tyler agreed with the district court that the “historical evidence cited by Heller and [the government] does not directly support the proposition that persons who were once committed due to mental illness are forever ineligible to regain their Second Amendment rights.”

The court then assessed the second prong of the Greeno test, and proceeded to analyze “the strength of the government’s justification for restricting or regulating the exercise of Second Amendment rights,” to determine the appropriate level of scrutiny. The court concluded intermediate scrutiny was the appropriate standard and reversed and remanded to the district court.

Although the Tyler court made clear the majority of circuit courts now apply an intermediate standard, it also clarified that courts are split on exactly how to apply intermediate scrutiny to these issues. However, as evidenced by this case, it is unlikely that such categorical exclusions—such as banning anyone with a mental illness from possessing a firearm—would survive either strict or intermediate scrutiny.

Such strict categorical exclusion laws also arguably violate the Equal Protection Clause. The Equal Protection Clause, which is part of the Fourteenth Amendment to the United States Constitution, provides that no state shall deny to any person within its jurisdiction “the equal protection of

---

188 Tyler v. Hillsdale Cty. Sheriff’s Dep’t, 837 F.3d 678 (6th Cir. 2016).
189 Id. at 699.
190 679 F.3d 510 (6th Cir. 2012).
191 Id. at 518.
192 Id. (internal citations omitted).
193 Tyler, 837 F.3d at 689.
194 Greeno, 679 F.3d at 518.
195 Tyler, 837 F.3d at 686.
196 Id. at 692.
197 U.S. CONST. amend. XIV.
the laws. Laws impacting individuals who are members of a protected class are assessed under a heightened level of legal scrutiny. What constitutes a protected class has fluctuated throughout the course of history. Although traditionally and in many contexts the mentally ill were not considered part of a protected class, court decisions have provided that protection, and therefore, laws impacting mentally ill persons have been subject to higher scrutiny standards than of that in the past. Laws that treat “former mental health patients . . . differently than others similarly situated . . . without any logical justification for doing so” are often held to be in violation of the Equal Protection Clause.

Here, there is no logical justification for barring certain persons with mental illness from obtaining a firearm because there is limited sound science, and statistical support, to justify the government rationale, as evidenced by previous sections of this Comment. When dealing with these laws that categorically exclude persons with mental illnesses from obtaining a firearm, once heightened scrutiny is applied, the ban runs afoul of the Equal Protection Clause.

To the extent that the mentally ill are treated as a protected class, justifying higher levels of scrutiny of laws infringing on their gun rights, the laws that categorically exclude anyone with a mental illness from possessing a firearm are presumptively unconstitutional on two grounds. The asserted policy rationale may be reflective of the popular, but empirically unsupported assumption that all persons with a mental illness are dangerous.

CONCLUSION

Alternative models to the categorical approach currently employed by some states, such as the symptoms-based approach, which focuses on behavior when addressing the issue of whether an individual’s Second
Amendment rights should be limited, or models that incorporate actuarial prediction, are better methods to protect not only the individual’s civil liberties, but also the community. Such models will be less of a deterrent for people seeking psychological help, and therefore, may be more effective in keeping guns away from those people who really should not have them.

Advocates for a symptoms-based or behavioral-based approach assert that this will more effectively impact future gun violence for three reasons: it is less discriminatory, more predictable, and more accurate and effective.\textsuperscript{203} Actuarial methods promise similar benefits.

Current reliance on a clinical diagnosis is inadequate to predict future violence. An actuarial approach would provide more accurate prediction methods. While there are some practical concerns about incorporating such a requirement into current state legislation, an actuarial requirement would be a more effective safeguard on constitutional rights, since many tools such as the COVR have a better predictive rate than that of clinical psychological professionals and involve looking at an individual’s behavior. While the field of neuroscience may eventually yield greater accuracy and enhanced prediction abilities, such developments are in their infant stages, and are not yet adequate to pass legal standards. Furthermore, use of such disciplines may raise constitutional questions of their own—particularly with regards to the Fourth and Fifth Amendments. Until neuroscience develops the tools to predict such violent behavior with accuracy that also passes constitutional muster, authorities are forced to place excessive responsibility into the hands of mental health professionals who are torn between their duty to their client and their responsibility to public safety. However, perhaps a better indicator and more reliable measure to attempt to predict and protect would be to hone in on behavior, and specifically, on certain symptoms that are known triggers of violence.\textsuperscript{204} There are certain symptoms, regardless of whether there is a diagnosis, that signify a greater propensity for violence.\textsuperscript{205}

Categorical approaches embedded in recent state legislation allow fear, however understandable, to create policy that directly implicates the rights of the mentally ill under both the Second Amendment and the Equal Protection Clause. Adopting a new approach, either adding an actuarial com-

\begin{footnotesize}
\begin{footnotes}
\item Rudolph, supra note 45, at 698.
\item Morse, supra note 11, at 225 (“Diagnoses will not independently answer the predictive questions about craziness or legally relevant conduct, although the behavioral data upon which they are based may be of help. Indeed, behavioral and demographic variables, especially past history, are far more likely to be valid predictors than purely clinical and psychopathological variables or diagnoses.”).
\item Vars, supra note 61, at 1639–40 (“Delusions and hallucinations appear to have been present in a string of recent mass shootings, including those in the Navy Yard, Aurora, and Tucson. The data suggest that the relationship between delusions and violence is not merely anecdotal.”).
\end{footnotes}
\end{footnotesize}
ponent to the statute or simply focusing on behavior and not diagnosis, will ensure the most protection: both for the individual and the general public, until neuroscientists develop perhaps an even better solution.