PREDICTING THE FUTURE BEHAVIOR OF BAR APPLICANTS

by Peter Ash, M.D.

Editor's Note: This article is based on Dr. Peter Ash's presentation, "Predicting the Future Behavior of Bar Applicants," at the 2013 NCBE Annual Bar Admissions Conference held on April 18–21, 2013, in Boston, Massachusetts.

hen considering an applicant who has a history of substance abuse or mental health problems, fitness boards are concerned with whether the applicant will be able to function as an ethical and competent attorney. The applicant needs to demonstrate that he or she is fit to practice. Such concerns involve making a prediction about future behavior. In cases of serious past misconduct or problems, the applicant needs to demonstrate that he or she has been rehabilitated.

Such implicit predictions raise a number of questions: Can we take the data from studies of the longitudinal courses of many disorders and apply them to individuals in a meaningful way to predict applicants' future behavior? Can we make reasonable estimates about risk of future difficulties? How much risk does it take to deny someone certification? How can we maintain awareness of cognitive biases that might affect the intuitive judgments that are often a part of decision making? How do fitness boards deal with these problems?

In order to gain a sense of how fitness boards approach these issues, I asked audience members during my presentation at the 2013 NCBE Annual Bar Admissions Conference to consider several scenarios depicted on my presentation slides. I then asked them to respond anonymously to questions pertaining to each scenario by using response clickers that had been distributed to them. This article includes some of the audience responses to a few of the scenarios posed: specifically, those relating to alcohol problems, depression, and bipolar disorder. The audience members were asked whether they had ever served on a fitness board and whether they consented to have their anonymous responses reported. The data reported here reflect the responses of the 65 audience members who responded affirmatively to those two questions. Percentages given are of those who responded to the question. Audience members who did not make a choice on a question were not included in the analyses. The audience members were also asked to indicate whether or not their jurisdictions allowed conditional admission, as I was interested to see the breakdown of responses related to conditional admission policy; some of that data is presented here as well. Before reading the responses to each scenario, you might pause and consider your own answer to get a sense of where you fall in the distribution of responses.

ALCOHOL PROBLEMS

Alcohol-related problems are among the most common problems that fitness boards face. Members of the audience were asked to respond to the following example:

Example 1: "Social drinker" with DUIs

John is a 24-year-old third-year law student about to graduate. He had two arrests for open container violations as an undergraduate and DUI arrests at ages 17 and 22, as well as a DUI arrest eight months ago. He refused all Breathalyzer tests and pled all charges down to reckless driving. He claims that all DUIs were the result of heavy drinking at parties but that he doesn't drink much during the week. He doesn't see his drinking as much of a problem. He says that he now limits himself to two drinks if he has to drive.

What would you require?

Audience Response:

As can be seen in Figure 1, two-thirds of fitness board members would require John to demonstrate a period of abstinence for at least a year. Not surprisingly, those from states that have conditional admission would require a longer period of monitoring (at least two years). Of those who responded to other questions, 85% responded that they would require both treatment and urine monitoring. Sixtythree percent thought it more likely than not that John's functioning as a lawyer would be significantly interfered with at some point in the next 10 years, and 74% thought it more likely than not that if John did not get treatment, he would be an alcoholic in 5 years.

Studies about Alcohol Use

Alcohol Use during College

How do these views match up with what research says about the course of alcoholism in bar applicants? There has been little research specifically on law students, but college drinking and the longitudinal course of drinking after college have received a good deal of attention. As is well known, college students drink a lot. A major government study found that about 39% of college students in 2011 had been binge drinking in the previous month, numbers that were four to five percentage points higher than

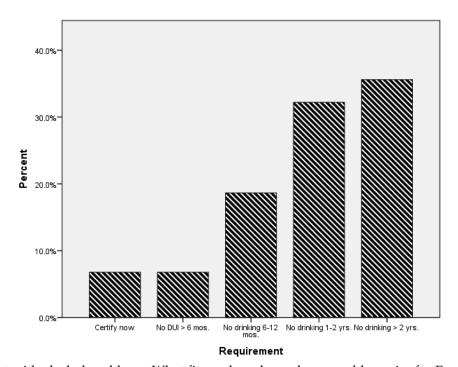


Figure 1: Applicant with alcohol problems: What fitness board members would require for Example 1 case

for young people not enrolled in college. This level of drinking was slightly reduced (by about 5%) from rates in 2002. Sixty-one percent drank some, and 13% were heavy drinkers. In addition, 21% of 16-20-yearolds reported that they had driven in the past year while under the influence of alcohol or illicit drugs.¹

Alcohol Use after College

The good news is that much of this drinking tapers off after college. The rates of alcohol dependence for those age 25-29 are about half of the rates for those age 18–20,² and rates of alcohol dependence continue to fall into middle age.

Who continues to drink? For those followed from age 21 to age 31, the strongest predictor of drinking at age 31 (accounting for 75% of the predictive power) was the amount of alcohol consumption 10 years earlier.³ Also clear from longitudinal studies is that for many drinkers, the amount of drinking varies considerably over time. Over half of alcohol abusers eventually have a period of no serious impairment for at least one year, and for those who have such a period of sustained recovery, the majority have done so with the help of treatment, either through Alcoholics Anonymous or with a mental health treatment provider.4

However, even those with a year of sobriety remain at risk for relapse. George Vaillant, Professor of Psychiatry at Harvard Medical School, has conducted the longest follow-up study (60 years) involving alcohol consumption and found that "return to controlled drinking rarely persisted for much more than a decade without relapse or evolution into abstinence."5 Most studies do not have extended follow-up for more than a year or two, and Vaillant's work suggests that a return to controlled drinking, as reported in short-term studies, is often a mirage.

Exploring Predictors

There has been considerable research into the question of what predicts the course of alcoholism, and the bottom line is that there are no simple answers. The best models utilize numerous variables, such as negative life events, motivation for change, coping resources, craving experiences, mood status, participation in treatment, amount of drinking at the study's outset, level, sex, age, moral beliefs, and fear of loss of control (fear of becoming rude or obnoxious, becoming alcoholic, or getting into trouble).⁶ All of these variables have some predictive value (interestingly, participation in and duration of treatment appear more significant than the type of treatment chosen), but with so many variables and so many different paths to sobriety, the models are complex. While some models achieve statistical significance in determining differences between groups of heavy drinkers who differ on the variables listed above, the models have very limited power in terms of explaining individual outcomes.

The Difficulty with Attempting Individual Predictions

The statistics I've discussed are group statistics. With what confidence can we measure variables in one person and make an accurate prediction? What we would like is a model where we could enter a variety of measurements about an applicant and obtain an accurate prediction of how likely he or she is to be a heavy drinker several years later. The state of the art is such that no accurate predictive model for an individual currently exists. Lack of treatment and lack of ability to reduce drinking certainly indicate significant risk in the short term, and for someone with alcohol dependence, return to controlled drinking is likely not to work in the long term, but even those predictive statements come with considerable uncertainty.

Findings of the Levin et al. Study Testing Bar Discipline Predictability

The hypothesis that variables measured at the time of application to take the bar can predict later bar discipline was tested in a recent study by Levin et al. Using data collected from a large sample of applicants to take the bar examination, they compared those attorneys who subsequently (up to 20 years later) received bar discipline with those who did not.

They found that rates of substance abuse at the time of application were higher among disciplined lawyers than among never-disciplined lawyers (1.38% vs. .92%), but utilizing variables measured at time of application, including substance abuse, did not predict with much accuracy who would be disciplined. When combined with other factors, substance abuse did not even stand out as a significant predictor of later discipline.

This difficulty in finding accurate predictors was not limited to alcohol problems in the Levin et al. study. While they found that a number of factors doubled the risk of later discipline (including male sex, graduation from a lower-ranked law school, criminal conviction, driver's license suspension, and psychological disorder), these variables, even in combination, did not provide a predictive model of much accuracy. The authors attribute much of the difficulty in predicting to the low base rate of discipline. The base rate in this context is the percentage of all attorneys who received bar discipline—2.5% in their sample. Of course, bar discipline is an imperfect measure of problematic conduct; the actual rate of problematic behavior is no doubt considerably higher but not as easy to measure.

Why Low Base Rates of Discipline Complicate **Predictions**

Low base rates of an outcome create particular difficulties in making accurate predictions. If the risk

of an adverse outcome is low, say 2.5%, then if a particular characteristic, say heavy drinking, quadruples the risk, it means that only 10% of the heavy drinkers would go on to have the adverse outcome. For a fitness board to deny certification to everyone with a 10% risk would mean that 90% of the people denied (the false positives) would not be expected to have later problems. Put another way, if a fitness board denied certification to 100 people who had such a risk factor, it would prevent 10 people from practicing law who would be expected to get into trouble (the true positives), but it would also deny the other 90 people who would not otherwise have problems (the false positives). The difficulty is in telling if a person is a true positive or a false positive, and group statistics don't help one to do that. For a base rate outcome of 2.5%, in order to say that a person is more likely than not to have problems later, it is mathematically required that a person with that characteristic be more than 20 times (50% ÷ 2.5%) as likely to have the adverse outcome than someone without that characteristic. The Levin et al. study and a similar study of physician discipline⁸ found variables that at most doubled the risk of later professional discipline.

Relating Audience Responses to the Data

How do the audience responses to the example of John with his three DUIs fit with these findings? The majority's requirement for a period of at least a year of mandated sobriety is likely to weed out those who simply cannot stop drinking, and it may constitute a type of treatment intervention, which lowers risk. The data suggest that a year of sobriety by itself has very limited value in predicting the future course, as alcoholism is a relapsing illness and it is very difficult to predict who will relapse. The pessimism exhibited by the 63% of bar fitness board members who thought that John's functioning as a lawyer would more likely than not be seriously impaired in the next 10 years does not appear to be warranted by the available data, although the data are not conclusive on this point given that while we know the base rate for formal attorney discipline, we do not know the base rate for impaired functioning by alcohol.

DEPRESSION

Depression is probably the most common serious mental health issue in the population. Members of the audience were asked to respond to the following example:

Example 2: Past suicide attempts

Clare is a 26-year-old applicant with a history of three psychiatric admissions following suicide attempts between the ages of 15 and 24. She is not currently in treatment because, she says, she "grew up." She had an independent medical examination, which found that she has never been psychotic,

has little insight into her condition, has moderate depressive symptoms, but has functioned reasonably well in her job as a paralegal for the past year.

What would you require?

Audience Response:

As can be seen in Figure 2, there is a U-shaped curve, with a significant proportion of fitness board members prepared to certify now or after a relatively short period, possibly because the example implies that Clare is functioning well presently and that her last admission was two years ago. Fitness board members from states that have conditional admission were more likely to monitor the example applicant and to do so for a longer period. However, when the audience was shown a follow-up question asking what they would do if Clare made a further suicide attempt three months later, 44% said that

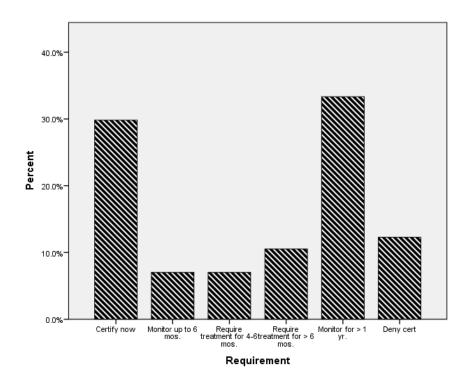


Figure 2: Applicant with depression: What fitness board members would require for Example 2 case

they would monitor her for more than a year, and 38% said that they would deny certification.

Studies about Depression

Depressive episodes are quite common in young adulthood—studies find a 26%-51% cumulative incidence of a Major Depressive Episode (i.e., a serious episode of depression) by age 30. A recent study found that 24% of 18-24-year-olds reported having a first episode of major depression and 43% had a recurrent episode by age 30.9 Impairments, including vocational impairments, vary widely across the patients. A 1990 study found that of 28 professions, attorneys are the most likely to suffer from depression, at a rate 3.6 times the average of the adult population. 10 Treatment is a good prognostic indicator for depression, as there are a variety of treatments that have been shown to have considerable efficacy.

Major Depressive Disorder encompasses a wide range of severity and impairments and is, for many, an intermittent condition, with periods of fairly normal mood followed by periods of lowered mood. While it is difficult to make an accurate prediction of the course of depression for an individual, it is even more difficult to predict which applicants will suffer sufficient impairment from their periods of depression to warrant withholding fitness certification. For those patients who are not psychotic, an assessment of vocational impairment needs to be made for that individual, as it cannot reasonably be extrapolated from the presence or severity of particular symptoms. Even suicidality, while clearly worrisome from a clinical perspective, does not correlate well with vocational impairment.

Relating Audience Responses to the Data

In the example, Clare has no history of psychotic depression, and the most worrisome aspect is her apparent denial of the seriousness of her condition as evidenced by her sense that she needs no treatment despite having moderate depressive symptoms. Despite those symptoms, however, she is functioning well at work. Given that picture, it is fairly likely that she will have a future recurrence of serious depression, but it remains unclear how much even such a worsening would affect her vocational functioning.

BIPOLAR DISORDER

Bipolar disorder, while considerably less common than alcohol abuse or depression (affecting slightly less than 2% of the population), poses a challenge for several reasons, including that the untreated course can have long periods of normal mood and normal functioning separated by briefer periods of very serious impairment. Members of the audience were asked to respond to the following example:

Example 3: Sporadic treatment for bipolar disorder

Anna is a 26-year-old third-year law student. She was first diagnosed with bipolar disorder at age 18 and has had two psychiatric admissions for manic episodes during which she was psychotic. She responded well to medication in the hospitals, but within three months of each discharge, she stopped treatment because she was "feeling so good." In anticipation of applying for the bar exam, however, she went into treatment and is now on medication. Her psychiatrist says that she is currently compliant with treatment and is doing well.

What would you require?

Audience Response:

As can be seen in Figure 3, fitness board members saw the applicant in Example 3 to be more problematic

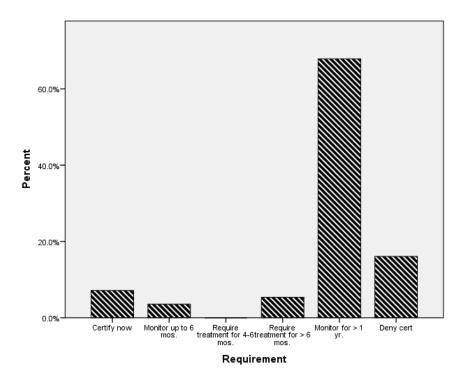


Figure 3: Applicant with bipolar disorder: What fitness board members would require for Example 3 case

than the previous two examples, likely because of the history of psychosis, which is directly relevant to work impairment. Sixteen percent of fitness board members thought that Anna should be denied certification, and none of the members from conditional admission states were comfortable with less than a year's monitoring.

An Overview of Bipolar Disorder

The natural course of Bipolar I Disorder, a mood disorder with manic episodes and depressive episodes, is characterized by recurrent mood swings. In a manic episode, a person's judgment is typically seriously impaired, so that in such a condition, an attorney is likely to be seriously vocationally impaired. Manic episodes, without treatment, tend to recur on average about every five years, so a history of such episodes is of concern to a fitness board.¹¹

Medications are quite effective in Bipolar I Disorder, so a clear history of medication compliance lowers the risk of future manic episodes dramatically. The problem is that many patients enjoy the hypomanic episodes that are often part of the disorder: they enjoy the high energy and heightened mood that accompany these episodes and, as a result, may resist taking medication. In evaluating such applicants, insight into their condition and medication compliance are key factors in assessing prognosis.

Bipolar I versus Bipolar II Diagnosis

Many patients and others do not understand the difference between Bipolar I and Bipolar II Disorders ("Oh, he's bipolar," meaning he's emotionally labile, has entered the lexicon of the young), but it is important to understand the distinction, because over the past decade there has been a large increase in the frequency with which adolescents have been given a diagnosis of Bipolar II Disorder. In the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (known as the *DSM-IV*), a diagnosis of Bipolar I Disorder requires having had at least one

full-blown manic episode. A diagnosis of Bipolar II Disorder implies that there has been no manic episode that meets DSM criteria but that the patient has experienced a hypomanic episode—it's a more minor form of the disorder. 12 This distinction has been carried over into the new, fifth edition of the *DSM* (*DSM*-5), published in 2013.¹³

Controversy about Bipolar II Disorder Diagnosis in Adolescents

The use of Bipolar II Disorder diagnosis in adolescents is controversial, the question being whether irritability and emotional lability without clear mania should be construed as a hypomanic episode. A fairly large number of adolescents have received a diagnosis of Bipolar II Disorder on the grounds of episodes of irritability, and the treating clinician often then prescribes a mood-stabilizing medication. Because of this, a fairly large number of young people who have never had a clear manic episode and have never been hospitalized have been given this diagnosis at some point.

Such patients have a very different prognosis from those who qualify for a Bipolar I Disorder diagnosis. A Bipolar II Disorder diagnosis made in adolescence without recurrence of hypomanic symptoms in young adulthood raises a serious question as to whether the young person is likely to have symptoms of Bipolar II Disorder as an adult.

The *DSM-5* attempts to address this controversy in two ways. The first limits making a diagnosis of Bipolar II Disorder in adolescents by tightening the criteria in cases where the main symptom of the hypomanic episode is irritability rather than manic euphoria. The second is by providing a new, alternative diagnosis, Disruptive Mood Dysregulation Disorder, that can only be initially given in adolescence and may apply to some of these patients.14

It remains to be seen how much these diagnostic changes will reduce the frequency of clinicians making a diagnosis of Bipolar II Disorder in young people.

Relating Audience Responses to What Is Known about Bipolar Disorder

In the example case, there are good grounds to be concerned about Anna's future course. Her condition is one that, if untreated, will very likely recur; and psychotic, manic symptoms, with their attendant poor judgment, are likely to affect the practice of law. The risk of relapse is best predicted by her treatment compliance, and so her past history of stopping treatment is worrisome.

Not clear from the example is the course of her manic symptoms. In some patients, symptoms come on relatively slowly, and others, such as family members, may be able to persuade the patient to enter treatment at that time. If that were the case, then the risk of her doing harm as an attorney would be mitigated. For other patients, however, manic symptoms come on rapidly, and the patients enjoy the onset of manic symptoms and so resist treatment. Therefore, a history of symptom onset would be important to address in an independent medical examination, in addition to obtaining an assessment of the patient's level of insight and her motivation for continuing treatment.

INDIVIDUAL BEHAVIOR IS HARD TO Predict

How surprised should we be that it's difficult to predict how mental health conditions will develop in an individual? The answer is "not very." Longitudinal studies across a wide array of behavioral domains suggest a low ability to predict. Studies of suicide, dangerousness, and criminal behavior all have the same themes in common: one can find risk factors that increase the probability that an individual will suffer a bad outcome, but these risk factors have limited success when applied to an individual. The Levin et al. study¹⁵ provides support for a conclusion that accurately predicting formal bar discipline in an individual case can't be done.

Why is individual behavior so difficult to predict? For many conditions, the predictive causal chain has many steps, and each step has room for error. The chain includes

- applicants with the conditions discussed, alcoholism and mood disorders, are heterogeneous groups with widely varying symptoms and symptom severity, so their courses will be varied;
- multiple variables affect outcomes, and we're not sure which have the most predictive power;
- accurate and reliable measurement of relevant variables is difficult;
- extended length of time (years) until outcome means that many unanticipated events will intervene; and
- an adverse mental health outcome may not imply vocational impairment.

Remember that group statistics that imply connections between risk factors and adverse outcomes are statements about groups. It is much harder to apply such statistics to an individual.

BEWARE OF COGNITIVE BIASES IN MAKING DECISIONS

How people make decisions has become a subject of academic study. While a full discussion of this topic is beyond the scope of this article, a few comments

may be in order. Given that hard data and good predictors are often missing in the judgments fitness boards need to make, the role of intuitive judgment is considerable. It is important, therefore, to be aware of cognitive biases that may affect intuitive judgments. Through many intriguing social science experiments, research has discovered that our intuitive judgments are less reasonable than we usually recognize.16 The most robust findings include the following:

- People tend to be risk averse. Given an applicant who poses some risk of future misbehavior, risk aversion tends to lead people to overweight the possible risk.
- People have a tendency to avoid considering base rates and to see rare events as more common than they actually are. One effect of this tendency is to increase risk aversion, because the risk of an unlikely outcome seems greater than it actually is.
- People tend to judge cases using impression matching. If people do not have wide experience with a situation, they tend to match to a known similar case. For example, if people have a friend, family member, or personal experience with a problem, they will tend to see the new case as being similar to the one in their experience. Their own experience tends to anchor their understanding. They tend not to recognize that their own experience with an issue is not necessarily typical and so undervalue the often important distinctions between their experience and the present case.
- People tend to see conditions as persistent, rather than regressing toward the mean. Alcohol abuse and depression, for example,

tend to be waxing and waning conditions. Applicants come before the fitness board when they have had a recent exacerbation-when they're at their worst-and it's easy to forget that the natural course when things are at their worst is for things to get better, to tend toward the mean. Regression toward the mean is not an intuitive notion.

Consider a group of golfers who all average shooting the same score. On the first day of a tournament, Golfer Good-Day shoots eight shots better than his average, and Golfer Bad-Day shoots eight shots worse. Most people think the most likely scenario is that on the second day of the tournament, they will do about as well as on the first day. In reality, the most likely outcome is that on the second day, Golfer Good-Day will do worse than he did on day one, and Golfer Bad-Day will do better: their scores will regress toward the mean.

Daniel Kahneman, a highly regarded figure in studying such biases, has proposed that one can correct one's intuitive judgments of predicting events by selecting a midpoint between one's intuitive judgment and the base rate.¹⁷ So, for example, if your impression is that there is a 50% chance an applicant will get into trouble with the bar, and the base rate for bar discipline is 2.5%, a point halfway between, 26%, is likely to be a considerably more accurate judgment of actual risk than your intuitive judgment. If there are other factors that are known to affect the outcome, one can adjust by moving somewhat off the midpoint in making an assessment.

People are overly confident in their judgments. They tend to underestimate how much their cognitive biases interfere with their judgments.

These biases have been studied primarily in individuals. Fitness boards operate as groups, and other factors affect group decision making. Group factors vary considerably among groups depending on how the group is structured and the particular relationships between individual members. The anchoring effect is typically strong in groups: the first opinion expressed about a candidate in a group discussion tends to set an anchor point for the group's view. Groups also tend to strive for consensus, which may have the effect of limiting dissent, so it is important for groups to actively encourage disparate views. On the upside, because group members have different perspectives, biases stemming from individual impression matching or limited experience with a particular type of applicant tend to get cancelled out.

CONCLUSION

The vast majority of attorneys practice ethically and competently, and predicting which bar applicants will not do well remains a challenge. The very low rate of actual denials suggests that fitness boards understand that it is very difficult to make a strong enough prediction to justify denying certification.

In cases involving fairly severe alcohol and mental health problems, boards typically give applicants a chance to demonstrate that they can function without significant impairment while being monitored, either through requiring a period of up to a year of unimpaired functioning before taking the bar examination or through conditional admission. Most applicants are able to rise to this challenge. Such interventions may have some therapeutic value in reducing future risk.

Given the complexities inherent in making accurate long-term predictions regarding an individual's behavior, it seems unlikely that in the coming decade we will have a database that will significantly improve our ability to quantify the future risk of impairment. At some future point, advances in understanding psychiatric conditions, especially in understanding brain circuitry and genetic vulnerabilities, may well markedly improve our ability to predict outcomes in individuals. In the meantime, understanding of, and appreciation for, the cognitive biases that tend to affect decision making under uncertainty can be of use in improving decision making.

Notes

- 1. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION, RESULTS FROM THE 2011 NATIONAL SURVEY ON DRUG USE AND HEALTH: SUMMARY OF NATIONAL FINDINGS (2012).
- U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, PUBLIC HEALTH SERVICE, OFFICE OF THE SURGEON GENERAL, THE SURGEON GENERAL'S CALL TO ACTION TO PREVENT AND REDUCE Underage Drinking (2007).
- K.G. Anderson, I. Grunwald, N. Bekman, S.A. Brown & A. Grant, To Drink or Not to Drink: Motives and Expectancies for Use and Nonuse in Adolescence, 36 (10) ADDICT. BEHAV. 972-979 (Oct. 2011).
- A. Douaihy, D.C. Daley, G.A. Marlatt & C.R. Spotts, Relapse Prevention: Clinical Models and Intervention Strategies, in PRINCIPLES OF ADDICTION MEDICINE (R.K. Ries ed., Lippincott Williams & Wilkins, 4th ed. 2009).
- 5. G.E. Vaillant, A 60-Year Follow-Up of Alcoholic Men, 98(8) ADDICTION 1043-1051, at 1047 (Aug. 2003); see also G.E. VAILLANT, TRIUMPHS OF EXPERIENCE: THE MEN OF THE HARVARD GRANT STUDY (Belknap Press of Harvard University Press
- Douaihy, Daley, Marlatt & Spotts, supra note 4; A.J. Epler, K.J. Sher & T.M. Piasecki, Reasons for Abstaining or Limiting Drinking: A Developmental Perspective, 23(3) PSYCHOL. ADDICT. Венач. 428-442 (Sep. 2009).

- 7. L.C. Levin, C. Zozula & P. Siegelman, A Study of the Relationship Between Bar Admissions Data and Subsequent Lawyer Discipline, 2013, available at http://ssrn.com/ abstract=2258164 (last visited Aug. 2, 2013).
- M.A. Papadakis, C.S. Hodgson, A. Teherani & N.D. Kohatsu, Unprofessional Behavior in Medical School Is Associated with Subsequent Disciplinary Action by a State Medical Board, 79(3) ACAD. MED. 244-249 (Mar. 2004).
- P. Rohde, P.M. Lewinsohn, D.N. Klein, J.R. Seeley & J.M. Gau, Key Characteristics of Major Depressive Disorder Occurring in Childhood, Adolescence, Emerging Adulthood, and Adulthood, 1(1) CLINICAL PSYCHOL. SCI. 41-53 (2013).
- 10. W.W. Eaton, J.C. Anthony, W. Mandel & R. Garrison, Occupations and the Prevalence of Major Depressive Disorder, 32(11) J. OCCUP. MED. 1079-1087 (Nov. 1990).
- 11. D.A. Solomon, A.C. Leon, W.H. Coryell, et al., Longitudinal Course of Bipolar I Disorder: Duration of Mood Episodes, 67(4) ARCH. GEN. PSYCHIATRY 339-347 (Apr. 2010).
- 12. American Psychiatric Association, Diagnostic and STATISTICAL MANUAL OF MENTAL DISORDERS (DSM-IV-TR) (American Psychiatric Association, 4th ed. 2000).
- 13. American Psychiatric Association, Diagnostic and STATISTICAL MANUAL OF MENTAL DISORDERS (DSM-5) (American Psychiatric Association, 5th ed. 2013).
- 14. Id.
- 15. Levin, Zozula & Siegelman, supra note 7.
- 16. D. Kahneman, Thinking, Fast and Slow (Farrar, Straus and Giroux 2011).
- 17. Id.



Peter Ash, M.D., is a forensic psychiatrist and Associate Professor of Psychiatry and Behavioral Sciences at Emory University. He is a member of the Georgia Board to Determine Fitness of Bar Applicants.