

Testing Misconceptions and Building Excitement in a Psychology and Law Course

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Did you know that there is no evidence that verifies that each person's fingerprints are truly unique, or that even trained dental examiners cannot accurately match bite marks to the teeth of a suspect? Thinking about our misconceptions can make us excited to learn more about a topic, so that we understand why we were wrong. This article discusses a method that I developed to address misconceptions about psychology and the legal system and to get students excited to learn more about these topics.

In my classes, I work to build a sense of excitement about each course that I teach, from the beginning of the semester through the final day. On the first day of class, I want to do more than just go over the syllabus and let students out early; I want to get them thinking about the course and interested in what they will learn next. I regularly teach a course titled "Psychology and the Law", a lower-level psychology course that is open to all students. In this course, we cover topics such as forensic psychology, eyewitness memory, false confessions, lie detection, jury processes, and the death penalty. The students who take this course are mostly sophomore, junior, and senior psychology majors. However, there are a number of corrections majors and law enforcement majors who also enroll. One issue I emphasize throughout the course is that scientific studies sometimes show results that are the complete opposite of common sense—such that sometimes people will falsely confess to cheating or plagiarizing, or that asking people about the death penalty can make people more likely to find a suspect guilty. Often, the students in this course come in with set ideas about forensic psychology or the legal system that are shaped by television and movies, without a realistic sense of the profession of forensic psychology or what psychological research can add to our understanding of the legal system.

To get students thinking about these issues on the first day, I wanted to impress upon them the types of misconceptions that many people, maybe even themselves, have about our legal system. To achieve this, I created a Psychology and the Law knowledge and beliefs test that I wrote based on each chapter in the course textbook. (I used the first edition of the text, *Forensic and Legal Psychology: Psychological Science Applied to Law*, written by Mark Costanzo and Daniel Krauss and published by Worth publishers.) The test consisted of 34 true/false questions, two for each chapter of the textbook. I wrote the questions to tap into beliefs or misconceptions about the legal system, and knowledge of how the legal system works. The questions addressed a wide range of topics, including lie detection, forensic evidence, mental illness, child witnesses, and the death penalty. For example, one question stated, "States that have the death penalty have fewer murders than states that do not have the death penalty" (false), and another stated "Psychologists are generally not very accurate at predicting the future dangerousness of crimi-

nals" (true). The entire list of questions and their correct answers are provided at the end of this article.

On the first day of class, students completed the test, and I presented the correct answers, which often surprised the students and stimulated discussions about the topics. Students also were asked to write a short response to the test, highlighting which statements surprised them, and which they already knew. One student began her paper by writing, "When we were asked to perform this test on the first day of class I thought, this shouldn't be too bad, I should know most of them from how much Law and Order I watch. When we went through the questions as a class, the first thing to surprise me was how wrong I was on so many of the questions." This response is very typical of most of the students. Overall, the class earned an average score of 59% on the test, suggesting a relatively low level of accurate knowledge about psychology and the law. In several cases, a large majority of the class showed an incorrect belief:

- 80% of the class responded 'false' to "There is no evidence to support the claim that no two fingerprints are alike." This statement is actually true.
- 93% of the class responded 'true' to "Trained dental examiners can accurately match bite marks to the teeth of a suspect." This claim is actually false.
- 76% of the class responded 'true' to "Research has shown that criminal profiling is an effective way to catch criminals, particularly serial killers." This statement is false.
- 90% of the class responded 'true' to "Most judges and juries are likely to rule in favor of victims claiming sexual harassment." This statement is false.

In order to determine whether students who are interested in taking a class focusing on these topics already know more about them than other students, I also offered this test to students taking an Introduction to Psychology course. The Introduction to Psychology students earned an average score of 54%, very similar to the Psychology and the Law students. This also underscores the importance of classes that teach students about the legal system and the role of psychology and psychologists in our system, to combat what seems to be widespread false beliefs and misconceptions about these topics.

The students' response papers were useful to help identify the source of students' prior knowledge and beliefs about psychology and the law. Many students mentioned that they were surprised to learn that bite marks are not an accurate form of evidence, with one student writing, "When you watch television shows they make it out to be true, but I guess that's what you get for believing a show." Most of their responses noted things they had seen in movies or on television as sources of their beliefs. Students also mentioned the idea of false confessions as surprising, and were unable to comprehend why anyone would confess to a crime that they did not commit. Several students were surprised to learn that criminal profiling is not as accurate as they had believed, and a number of students were interested in the idea that there is no evidence to support the claim that no two fingerprints are alike. This was another item where many mentioned that television portrays fingerprint evidence as absolutely reliable, and that they learned as children that their fingerprints were unique. One student wrote, "...it frightens me to think that there's no proof that someone else could have my fingerprint, and to have that someone else be a criminal." I was impressed to see that they were already making connections between their misconceptions, and how such misconceptions might influence what happens in our legal system.

In a few cases, students listed television as a source of accurate beliefs. One student mentioned an episode of Law and Order where polygraph tests were treated as unreliable; the test question about the low reliability of the polygraph was one where many (but not all) students already knew these tests were problematic. Also, students often cited prior coursework

as a source of their accurate beliefs, with several noting that their Human Memory course had talked about mistakes in eyewitness identification, and others mentioning Sociology courses as teaching them about the high rates of imprisonment in the United States and the high levels of recidivism among released prisoners. This was an unforeseen benefit of using this knowledge and beliefs test and asking students to reflect on their responses; they made connections between previous courses and the topics covered in this one. Hopefully, these new connections spurred their enthusiasm to continue learning.

Finally, the students in my Psychology and the Law course completed this test again in the final week of the course, and I compared their scores to the pre-test. The mean score on the post-test was 86% (compared to 59% at the start of class), a significant increase ($F(1, 26) = 132.2, p < .001$). This suggests that the class was effective at combating misperceptions about psychology and the legal system; it would be interesting to follow up with these students as more time passes to determine if their knowledge remains above average, or regresses.

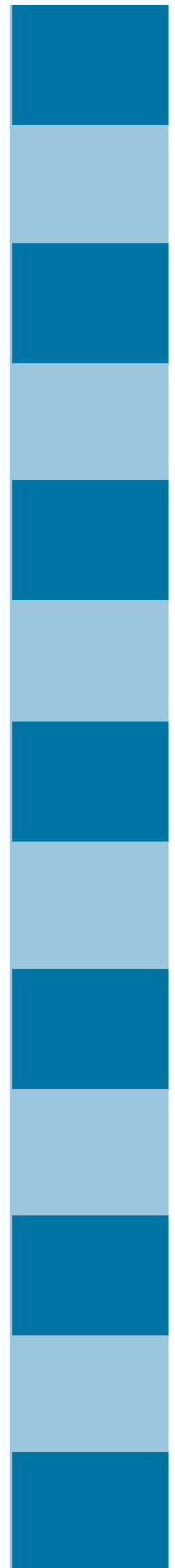
Overall, the main value I found in using this test was that students were genuinely excited to learn more about the topics introduced by the questions, so we began the class on a positive note. In their response papers, students commented on what they were interested to learn more about, with many suggesting that learning about their misconceptions piqued their interest and they now wanted to understand these issues. One student wrote in her paper, "There are a couple topics I found interesting from the test and cannot wait to learn more about," specifically highlighting false confessions and the death penalty as the most intriguing. Others mentioned forensic evidence, and many students majoring in law enforcement wanted to learn more about legal issues that might relate to their future careers.

Using this test seemed to make the course topics more 'real' to the students, compared to just going through a list of topics on a syllabus, and also highlighted for the students some common myths or false beliefs that many people hold about psychology and the legal system. I also referred back to the questions when talking about the importance of using science to test many of these claims, and pointed out that jurors (as well as judges and lawyers) probably hold many of the same false beliefs as the students did on the first day of class. Overall, I recommend this approach as a fun way to introduce a course, encourage students to think about their own beliefs, and spark their interest in the material.

Table 1: Test Questions and Answers, with the percentage of respondents who chose the correct answer for each question at both the pre-test and the post-test

Question	Answer	% Correct at pre-test	% Correct at post-test
1. Judges are the people who decide whether scientific information is reliable enough to be admitted as evidence in court.	True	68%	93%
2. Psychological and legal types of reasoning are very similar in their goals and methods.	False	56%	89%
3. Most people suspected of crimes use their Miranda rights to stay silent when being questioned by police.	False	56%	100%
4. At least 25% of people who have been wrongly convicted falsely confessed to their crime.	True	83%	93%

Question	Answer	% Correct at pre-test	% Correct at post-test
5. Most individuals will do no better than chance when asked to determine if someone is telling a lie or telling the truth.	True	80%	93%
6. Research on polygraph (lie detector) testing has shown that polygraphs are very reliable, and can accurately tell us if a suspect is lying or telling the truth.	False	71%	93%
7. There is no evidence to support the claim that no two fingerprints are alike.	True	20%	96%
8. Trained dental examiners can accurately match bite marks to the teeth of a suspect.	False	7%	96%
9. Research has shown that criminal profiling is an effective way to catch criminals, particularly serial killers.	False	24%	89%
10. Most people diagnosed as being a psychopath are violent.	False	71%	86%
11. To serve on a jury, first you undergo questioning by the prosecution and the defense, and you can be removed from the jury pool based on your responses to their questions.	True	90%	96%
12. Broad personality factors, such as belief in a just world or authoritarianism, have been shown to influence jurors' verdicts.	True	85%	93%
13. Hypnosis has been shown to be a successful way to get eyewitnesses to accurately remember details of crime scenes.	False	83%	93%
14. Mistaken eyewitness identifications are responsible for more wrongful convictions than any other type of evidence.	True	95%	89%
15. Being insane is the same thing as being incompetent to stand trial.	False	78%	89%
16. Courts can force people to take anti-psychotic medication in order to help them become competent to stand trial.	True	39%	93%
17. If a criminal suspect has a severe mental illness like schizophrenia, he or she is declared insane and will not go to trial.	False	73%	79%
18. Insanity defenses are used in less than 1% of all criminal cases.	True	71%	93%
19. Juries will often refuse to convict battered women who kill their abusers.	False	44%	61%
20. 'Rape shield laws' prevent lawyers from asking victims of sexual assault about their past sexual experiences.	True	88%	89%



Question	Answer	% Correct at pre-test	% Correct at post-test
21. Children younger than age 10 are not allowed to testify as witnesses in criminal trials.	False	59%	89%
22. Because children have poor language skills, psychologists and police officers should ask 'yes/no' questions when interviewing children about crimes, rather than open-ended questions.	False	32%	75%
23. In the majority of states, judges make decisions about child custody, rather than juries.	True	98%	100%
24. There are very few scientifically valid measures that psychologists use to help evaluate children and parents in custody decisions.	True	46%	50%
25. In many states, juries do not have to reach a unanimous decision, just a majority vote.	True	56%	96%
26. Juries are allowed to refuse to convict a suspect, even if the evidence is completely clear that they committed the crime.	True	73%	89%
27. Sex offenders are more likely to keep committing crimes when released from prison compared to other types of criminals.	False	17%	50%
28. Psychologists are generally not very accurate at predicting the future dangerousness of criminals.	True	15%	96%
29. Most judges and juries are likely to rule in favor of victims claiming sexual harassment.	False	10%	57%
30. Women and men tend to agree on what qualifies as sexual harassment, particularly more serious harassment.	True	20%	57%
31. Convicts who are sent to prison have higher rates of recidivism (meaning they are more likely to commit crimes when released) compared to people who committed similar crimes, but did not spend time in prison.	True	66%	64%
32. The United States imprisons a larger percentage of its citizens than any other industrialized democracy in the world.	True	98%	100%
33. Jurors who support giving the death penalty are also more likely to favor the prosecution and find the defendant guilty.	True	63%	96%
34. States that have the death penalty have fewer murders than states that do not have the death penalty.	False	73%	96%

