

court's conclusion that the Social Security benefits paid to the children were a gratuity and that Kari should not be given a credit upon remand, and we affirm this decision; and (3) although the Court of Appeals correctly affirmed the district court's decisions that a downward modification in Kari's child support could be retroactive to the month after the filing of the application to modify, that the judgment against Elizabeth for \$25,472.11 should be reversed, that a judgment against Elizabeth for \$2,357.90 should be entered, and we affirm these decisions, it erred when it reasoned that upon remand, Kari could not receive credit for overpayments, if any, made during the pendency of the modification proceedings for the reason that Kari had continued to pay the \$3,000-per-month child support ordered in the decree. To the contrary, the fact that Kari continued to pay what had been ordered does not preclude consideration of a potential credit after receipt of additional evidence upon remand pursuant to the exception in *Griess v. Griess*, 9 Neb. App. 105, 608 N.W.2d 217 (2000). Accordingly, we affirm in part, and in part reverse and remand with directions.

AFFIRMED IN PART, AND IN PART REVERSED
AND REMANDED WITH DIRECTIONS.

STATE OF NEBRASKA, APPELLEE, v. CRAIG ANTHONY JOHNSON,
ALSO KNOWN AS CRAIG A. JOHNSON, APPELLANT.

862 N.W.2d 757

Filed May 15, 2015. No. S-14-101.

1. **Appeal and Error.** For an appellate court to consider an alleged error, a party must specifically assign and argue it.
2. **Juries: Discrimination: Equal Protection: Prosecuting Attorneys.** A prosecutor ordinarily is entitled to exercise permitted peremptory challenges for any reason at all, if that reason is related to his view concerning the outcome of the case. But under *Batson v. Kentucky*, 476 U.S. 79, 106 S. Ct. 1712, 90 L. Ed. 2d 69 (1986), a peremptory challenge to remove a prospective juror for a racially discriminatory reason violates the Equal Protection Clause.
3. **Juries: Discrimination: Prosecuting Attorneys: Proof.** Determining whether a prosecutor impermissibly sought to remove a prospective juror based on race is

a three-step process: First, a defendant must make a *prima facie* showing that the prosecutor exercised a peremptory challenge because of race. Second, assuming the defendant made such a showing, the prosecutor must offer a race-neutral basis for striking the juror. And third, the trial court must then determine whether the defendant has carried his or her burden of proving purposeful discrimination. The third step requires the trial court to evaluate the persuasiveness of the justification proffered by the prosecutor. But the ultimate burden of persuasion regarding racial motivation rests with, and never shifts from, the opponent of the strike.

4. **Juries: Discrimination: Prosecuting Attorneys: Moot Question.** Once a prosecutor has offered a race-neutral explanation for a peremptory challenge and the trial court has decided the ultimate question of intentional discrimination, the preliminary issue of whether the defendant made a *prima facie* showing that the challenge was racially motivated is moot.
5. **Juries: Discrimination: Prosecuting Attorneys: Appeal and Error.** An appellate court reviews *de novo* the facial validity of an attorney's race-neutral explanation for using a peremptory challenge as a question of law. It reviews for clear error a trial court's factual determinations whether an attorney's race-neutral explanation is persuasive and whether his or her use of a peremptory challenge was purposefully discriminatory.
6. **Juries: Discrimination: Prosecuting Attorneys.** Under the second step of an inquiry under *Batson v. Kentucky*, 476 U.S. 79, 106 S. Ct. 1712, 90 L. Ed. 2d 69 (1986), a prosecutor must present a comprehensible reason for using a peremptory strike against a prospective juror in response to a *Batson* challenge. But in determining whether the explanation is race-neutral, a court is not required to reject the explanation because it is not persuasive, or even plausible; it is sufficient if the reason is not inherently discriminatory.
7. ____: ____: _____. Whether a prosecutor's explanation for using a peremptory strike against a prospective juror is pretextual falls within the trial court's ultimate factual determination in the third step of the inquiry under *Batson v. Kentucky*, 476 U.S. 79, 106 S. Ct. 1712, 90 L. Ed. 2d 69 (1986).
8. **DNA Testing: Words and Phrases.** In forensic analysis, a DNA profile is a person's combination of alleles at each tested locus.
9. **Rules of Evidence: Appeal and Error.** When the Nebraska Evidence Rules commit the evidentiary question at issue to the discretion of the trial court, an appellate court reviews the admissibility of evidence for an abuse of discretion.
10. **Trial: Rules of Evidence.** A trial court exercises its discretion in determining whether evidence is relevant and whether its prejudicial effect substantially outweighs its probative value.
11. **Judgments: Words and Phrases.** An abuse of discretion occurs when a trial court's decision is based upon reasons that are untenable or unreasonable or if its action is clearly against justice or conscience, reason, and evidence.
12. **Rules of Evidence.** Under Neb. Evid. R. 402, Neb. Rev. Stat. § 27-402 (Reissue 2008), irrelevant evidence is inadmissible.
13. **Rules of Evidence: Words and Phrases.** Under Neb. Evid. R. 401, Neb. Rev. Stat. § 27-401 (Reissue 2008), relevant evidence means evidence having any

tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.

14. **Rules of Evidence.** Under Neb. Evid. R. 403, Neb. Rev. Stat. § 27-403 (Reissue 2008), even relevant evidence is properly excluded if its probative value is substantially outweighed by its potential for unfair prejudice.
15. **DNA Testing: Evidence.** The relevance of DNA evidence depends on whether it tends to include or exclude an individual as the source of a biological sample.
16. ____: _____. Nebraska case law generally requires that DNA testing results be accompanied by statistical evidence or a probability assessment that explains whether the results tend to include or exclude the individual as a potential source.
17. **Expert Witnesses: Words and Phrases.** An expert does not have to couch his or her opinion in the magic words of “reasonable certainty,” but it must be sufficiently definite and relevant to provide a basis for the fact finder’s determination of a material fact.
18. **Expert Witnesses.** A court should exclude an expert’s opinion when it gives rise to conflicting inferences of equal probability, so the choice between them is a matter of conjecture.
19. **Expert Witnesses: Proof: Words and Phrases.** An expert opinion which is equivocal and is based upon such words as “could,” “may,” or “possibly” lacks the certainty required to sustain the burden of proof of causation for which the opinion has been offered.
20. **Trial: DNA Testing: Evidence.** Unless the State presents the statistical significance of DNA testing results that shows a defendant cannot be excluded as a potential source in a biological sample, the results are irrelevant. They are irrelevant because they do not help the fact finder assess whether the defendant is or is not the source of the sample. And because of the significance that jurors will likely attach to DNA evidence, the value of inconclusive testing results is substantially outweighed by the danger that the evidence will mislead the jurors.
21. **Criminal Law: Trial: Evidence: Appeal and Error.** An error in admitting or excluding evidence in a criminal trial, whether of constitutional magnitude or otherwise, is prejudicial unless the error was harmless beyond a reasonable doubt.
22. **Verdicts: Juries: Appeal and Error.** Harmless error review looks to the basis on which the jury actually rested its verdict; the inquiry is not whether in a trial that occurred without the error, a guilty verdict would surely have been rendered, but whether the actual guilty verdict rendered was surely unattributable to the error.

Appeal from the District Court for Cheyenne County: DEREK C. WEIMER, Judge. Affirmed.

James R. Mowbray and Kelly S. Breen, of Nebraska Commission on Public Advocacy, for appellant.

Jon Bruning, Attorney General, and Erin E. Tangeman for appellee.

HEAVICAN, C.J., WRIGHT, CONNOLLY, STEPHAN, MCCORMACK, MILLER-LEMAN, and CASSEL, JJ.

CONNOLLY, J.

I. SUMMARY

A jury convicted the appellant, Craig Anthony Johnson, of first degree murder, use of a weapon to commit a felony, and possession of a deadly weapon by a prohibited person. The court sentenced him to prison terms of, respectively, life, 40 to 50 years, and 10 to 20 years, with all terms to be served consecutively.

On appeal, Johnson argues that the court erred in (1) admitting evidence of inconclusive DNA testing results; (2) overruling his *Batson*¹ challenge to the State's use of a peremptory strike against the only African-American prospective juror; and (3) admitting cumulative, gruesome autopsy photographs.

We conclude that Johnson has waived any claimed error regarding the photographs and that the court did not err in overruling his *Batson* challenge. We conclude, however, that the court improperly admitted irrelevant DNA testing results. But because we also conclude that the evidentiary error was harmless beyond a reasonable doubt, we affirm Johnson's convictions.

II. BACKGROUND

In the spring of 2011, April Smith separated from her husband, Edward Smith (Ed), and began dating Johnson. At some point, Johnson began working near Sidney, Nebraska, at a pipe distributor for oil rig operations. April managed a convenience store near the distributor and lived in a duplex within eyesight of the store. Johnson moved in with April about the end of the summer. But April continued to maintain a close relationship with Ed, and Ed continued to help her with some financial

¹ See, *Batson v. Kentucky*, 476 U.S. 79, 106 S. Ct. 1712, 90 L. Ed. 2d 69 (1986); *State v. Nave*, 284 Neb. 477, 821 N.W.2d 723 (2012).

obligations and the maintenance of her white van, which they jointly owned.

For Thanksgiving 2011, April invited Ed to have dinner with herself, Johnson, and April's nephew and his family. Just before Thanksgiving, Johnson told a coworker that he was upset that April had invited Ed and that he would kill her if she ever left him to go back to Ed. During the Thanksgiving gathering, Ed refused Johnson's offer to repair April's van.

On Saturday morning, December 10, 2011, Ed went to April's duplex and took her van to repair the brakes. He returned it around noon. Ed was a truckdriver and left shortly after returning the van to go to Texas.

Johnson worked on Saturday morning. His supervisor said that Johnson asked to leave work early because he heard that Ed was going to April's house. She said that Johnson frequently mentioned meetings between April and Ed and was upset and jealous about their relationship. On Saturday morning, he told his supervisor that if he ever caught them together, he would "beat the shit out of both of them." His supervisor advised him to leave if he was unhappy, and he apologized for his remark. On Saturday afternoon, Johnson called a coworker and asked whether he could come over because he and April were fighting, but the coworker had plans to leave town.

Later that evening, April's nephew, his wife, and their children went to visit April at her duplex. Robert Gray, April's nephew, said that Johnson was drinking beer and was unusually quiet most of the evening. Robert and his wife both said that Johnson was upset about other men flirting with April at the convenience store and about Ed's repairing the brakes on April's van. Robert's wife described Johnson's demeanor as angry and said that his and April's interactions were tense; they went into the kitchen to talk privately a couple of times during the evening. Just before Robert and his family left around midnight, April and Johnson had started to argue. April's neighbors reported hearing loud voices and arguing around 1 or 2 a.m. They recognized Johnson's voice from previous fights between April and Johnson when they had tried to intervene. A neighbor in the adjacent duplex said that the

arguing continued for 30 to 45 minutes and that she heard “a couple of thuds.”

On Sunday morning, December 11, 2011, April’s employer saw her white van in front of her duplex while he was at the convenience store. At about 11:50 a.m., a sheriff’s officer was at the convenience store to respond to an alarm that had gone off. While he was checking the outside of the building, Johnson pulled up in April’s van. Johnson said that his girlfriend was the manager and that they had received a call from the alarm company. He told the officer that his girlfriend was having back problems and preparing to resign her position. Johnson opened the door with a key and deactivated the alarm.

Meanwhile, Robert and his wife tried to call April about 11 a.m. and noon on Sunday, but she did not answer or return their calls, which was unusual. They went to April’s duplex a couple of times that afternoon, but the van was gone, she did not respond to knocks, the blinds were closed, and the deadbolt was locked, which was also unusual. Johnson’s pickup was parked in front of the duplex. They returned to April’s duplex that night but could not see inside. About 8:45 p.m., a security camera filmed Johnson while he was purchasing gas for a white van in Chapman, Nebraska, which is about 3 hours 45 minutes from Sidney.

On Monday morning, December 12, 2011, Robert and his wife contacted the sheriff’s department. April’s employer had also contacted the office when she did not show up for work. Johnson had requested time off in advance for a doctor’s appointment.

At about 8 a.m. on Monday, two officers went to the duplex to check on April. When she did not answer their knocks, the officers spoke to people who might know where she was and learned that Johnson had taken the day off. They eventually broke into the duplex and found April’s body lying face down in the living room. A chief deputy sheriff believed she had been dead for quite a while from the appearance of her body. The officers could see that her hands and feet were tied, and there was blood on the couch beside her and on her arms and legs. After determining that April was dead, the sheriff’s

officers secured the duplex until State Patrol investigators could help.

A witness testified that while he was at a gas station in Brooklyn, Iowa, on Tuesday, December 13, 2011, a driver in a white van—whom he identified as Johnson—asked him for money to pay for gas. The van had South Dakota plates on it, even though Johnson had said he was from Sterling, Nebraska. Johnson was emotional and told the witness that he was having relationship problems and trying to get to a job in Illinois.

Two days later, on December 15, 2011, a sheriff's officer in Jackson County, Michigan, pulled over April's white van with South Dakota license plates for a traffic violation. Johnson was driving the van. But when the officer got out of his vehicle, Johnson accelerated back into traffic. A high-speed chase ensued, which ended when other officers set up "stop sticks" to puncture the van's tires. Johnson initially refused to get out, so the officers arrested and handcuffed him. The arresting officer found the van's Nebraska license plates inside and learned that it was stolen from the scene of a homicide, but he did not say this to Johnson. The South Dakota plates did not match the van's vehicle identification number. Later, while the officer was booking Johnson, he blurted out, "'What do you want from me I'm wanted for murder.'"

When Nebraska investigators learned that Michigan officers had arrested Johnson, they went to Michigan to bring Johnson back to Nebraska. They also obtained a search warrant to photograph his body and obtain fingernail scrapings. The photographs did not show any injuries. But when they attempted to scrape his right-hand fingernails, Johnson became confrontational and began to dig at his right-hand nails, discarding the debris on the floor, until the officers could restrain him. The deputy sheriff could not obtain scrapings from his right hand. The scrapings he obtained from Johnson's left hand tested negative for the presence of blood, and DNA testing showed nothing of evidentiary value.

During the return trip to Nebraska, Johnson told a Nebraska investigator that he had planned to see an old friend in

Michigan and then turn himself in. Later, he said that “dope would play a role in the investigation.”

When the Nebraska investigators searched the van, they found Johnson’s T-shirt and athletic shoes with dark stains that they believed to be blood. The stains on both the T-shirt and shoes tested positive for blood, and the DNA profile extracted from these stains matched April’s profile. The investigators traced the South Dakota license plates to a vehicle in a Sioux Falls, South Dakota, salvage yard.

1. JURY SELECTION

During jury selection, the State used one of its peremptory challenges to strike juror No. 8. In a juror questionnaire, she listed her race or ethnicity as African-American and Hispanic Latino. Johnson is African-American, and juror No. 8 was the only minority represented in the jury pool. The defense challenged the strike in a side bar.

During an in camera discussion, the prosecutor explained that the juror had indicated on her questionnaire that she was acquainted with April because April was a customer at a pharmacy where the juror worked. The prosecutor believed that the juror could have knowledge related to April’s use of drugs—evidence that the prosecutor believed was irrelevant but knew that Johnson would use in his defense.

The defense responded that the State’s proffered reason was pretextual and irrational. The defense argued that the prosecutor had not questioned the juror about her knowledge, i.e., whether she had filled any of April’s prescriptions. The State responded that it did not want to highlight the reason for striking her. The court overruled the objection.

2. EVIDENCE PRESENTED OF THE CRIME SCENE AND APRIL’S INJURIES

The investigators found blood in the main bedroom, bathroom, a second bedroom, and the dining room. They found dark-colored vomit in a trash can by the bed, and blood smeared on and around the toilet, suggesting that April had vomited there too. They believed the evidence showed signs of

a struggle throughout the duplex or that April was moving from place to place in an effort to survive.

When they turned over April's body, they saw a ligature abrasion on her neck, a hand wound, a facial wound, and a gaping wound in the left side of her abdomen about 2 inches long. They also found a clump of April's hair by her body and in other parts of the duplex, and several of her acrylic fingernails.

Inside a kitchen trash can, investigators found a white trash bag, a cell phone, a black baseball cap, and two blue knit hats. The cell phone belonged to April. The trash bag had blood splattered on the end by the drawstring, and a V-shaped piece was ripped out of it. Investigators found the ripped-out piece beside April's body. A Nebraska State Patrol investigator stated that the trash bag appeared to have an imprint in it where it had been stretched over something. He believed the imprint was of a human face. He opined that the blood pattern indicated that the blood had been aspirated or exhaled onto the bag. The pathologist who performed the autopsy concluded that the pinpoint hemorrhages found on April's mouth could have been caused by strangulation or suffocation. The ligature abrasion on her neck indicated strangulation. A forensic scientist found a fingerprint on the trash bag that matched one of Johnson's fingerprints. DNA testing of the blood on the bag and the ripped-out piece produced DNA profiles that matched April's profile.

Investigators also found a couple of knives in the sink, one of which had an 8-inch blade and a red substance dried on it. No identifiable fingerprints were found on the knife. The knife tested positive for the presence of blood; DNA testing of the knife handle and blade produced DNA profiles from a single source that matched April's profile and excluded Johnson.

During the deputy sheriff's testimony, the court admitted, without objection, a photograph showing the position of April's body face-down beside the couch. During the other investigators' testimonies, the State submitted, without objection, three photographs of blood found in the duplex. But Johnson objected to the State's offer of eight more photographs of April's body and the crime scene as cumulative and

an attempt to inflame the jurors' passions. The State argued that photographs gave the jurors a perspective of the body's location in the house and the violent scene that investigators encountered. The court overruled Johnson's objections. After this ruling, the court admitted two more photographs from the crime scene, without objection, showing April's bound hands—including the wound in her palm and the ligature abrasions around her wrists—and the stab wound to her abdomen.

The evidence showed that April had been prescribed hydrocodone pills for back problems, and investigators found three prescription bottles with these pills in her bedroom: one on the floor, one on her bed, and one in a plastic bag with other prescription bottles. But the State presented witnesses who testified that April had not abused her prescription drugs and was not involved in drug dealing. The pathologist stated that the toxicology report showed April had a toxic level of hydrocodone in her body, sufficient to cause death, and also some amount of a barbiturate. He stated that this evidence did not show that April had abused the drugs. But the evidence did show that she had taken the drugs close to the time of her death.

In addition to the stab wound and ligature abrasions, April had multiple bruises and abrasions on her face and body. The hand wound could have been a defensive wound. The stab wound in her abdomen was 7½ inches deep and punctured her small intestine in a couple of places. It would not have caused immediate death, but it would have caused vomiting. The pathologist believed that April was alive after sustaining the stab wound to her abdomen because an inflammatory response had started in her body. The State submitted, without objection, several autopsy photographs of the injuries to April's body. The pathologist opined that her death was a homicide caused by the stab wound to her abdomen and suffocation, with a contributing cause of multiple drug toxicity.

The State's DNA expert testified about her testing of biological samples that investigators took from the crime scene. The court overruled Johnson's continuing objections to three of the expert's inconclusive testing results and her testimony

about them. Johnson objected that under Neb. Evid. R. 402 and 403,² the evidence was irrelevant and its potential for unfair prejudice outweighed its probative value.

III. ASSIGNMENTS OF ERROR

Johnson assigns, reordered, that the court erred as follows: (1) admitting cumulative, gruesome autopsy photographs that depicted the same injuries and thus allowing the prosecutor to inflame the jurors' passions; (2) denying his *Batson* challenge based on an irrational and pretextual justification; and (3) admitting testimony and exhibits that Johnson's DNA profile contained certain alleles that matched alleles found in a mixed blood sample, because such evidence lacked sufficient probative value.

IV. ANALYSIS

1. JOHNSON HAS NOT PRESERVED ERROR REGARDING THE COURT'S ADMISSION OF PHOTOGRAPHS

Johnson assigns that the court erred in admitting gruesome autopsy photographs of April's injuries. But he did not object to the admission of the photographs at trial. And in his brief, he argues that the court erred in admitting cumulative photographs taken at the crime scene—not autopsy photographs.

[1] For an appellate court to consider an alleged error, a party must specifically assign and argue it.³ Johnson has not assigned that the court erred in admitting cumulative crime scene photographs, and he has not argued his assignment that the court erred in admitting gruesome autopsy photographs. So we do not address whether the court erred in admitting any photographs.

2. THE COURT WAS NOT CLEARLY WRONG IN DETERMINING THAT THE PROSECUTOR'S PEREMPTORY CHALLENGE WAS NOT BASED ON RACE

Johnson assigns that the court erred in overruling his *Batson* challenge to the prosecutor's use of a peremptory challenge

² See Neb. Rev. Stat. §§ 27-402 and 27-403 (Reissue 2008).

³ See *State v. Filholm*, 287 Neb. 763, 848 N.W.2d 571 (2014).

to remove juror No. 8, the only prospective juror of African-American descent. He contends that the prosecutor's proffered reason for the challenge was pretextual. He argues that the prosecutor did not ask juror No. 8, who worked at the pharmacy where April filled her prescriptions, whether she possessed any special knowledge about April. Johnson also points out that the juror had stated that she could be impartial on her questionnaire. He contends that these facts raised an inference that the prosecutor sought her removal because of her race. We disagree.

[2,3] A prosecutor ordinarily is entitled to exercise permitted peremptory challenges for any reason at all, if that reason is related to his view concerning the outcome of the case.⁴ But under *Batson v. Kentucky*, a peremptory challenge to remove a prospective juror for a racially discriminatory reason violates the Equal Protection Clause.⁵ Determining whether a prosecutor impermissibly sought to remove a prospective juror based on race is a three-step process:

First, a defendant must make a *prima facie* showing that the prosecutor exercised a peremptory challenge because of race. Second, assuming the defendant made such a showing, the prosecutor must offer a race-neutral basis for striking the juror. And third, the trial court must then determine whether the defendant has carried his or her burden of proving purposeful discrimination. The third step requires the trial court to evaluate the persuasiveness of the justification proffered by the prosecutor. But the ultimate burden of persuasion regarding racial motivation rests with, and never shifts from, the opponent of the strike.⁶

[4,5] Once a prosecutor has offered a race-neutral explanation for a peremptory challenge and the trial court has decided the ultimate question of intentional discrimination, the preliminary issue of whether the defendant made a *prima facie*

⁴ See *Nave*, *supra* note 1, citing *Batson*, *supra* note 1.

⁵ See, *id.*; *State v. Myers*, 258 Neb. 300, 603 N.W.2d 378 (1999).

⁶ *Nave*, *supra* note 1, 284 Neb. at 485, 821 N.W.2d at 730-31.

showing that the challenge was racially motivated is moot.⁷ So we determine only whether the prosecutor's reasons were race neutral and whether the trial court's final determination regarding purposeful discrimination was clearly erroneous. We review de novo the facial validity of an attorney's race-neutral explanation for using a peremptory challenge as a question of law.⁸ We review for clear error a trial court's factual determinations whether an attorney's race-neutral explanation is persuasive and whether his or her use of a peremptory challenge was purposefully discriminatory.⁹

[6] Under the second step of a *Batson* inquiry, a prosecutor must present a comprehensible reason for using a peremptory strike against a prospective juror in response to a *Batson* challenge. But in determining whether the explanation is race-neutral, a court is not required to reject the explanation because it is not persuasive, or even plausible; it is sufficient if the reason is not inherently discriminatory.¹⁰ Under our de novo review of the prosecutor's proffered explanation for the peremptory challenge, we conclude that his explanation was not inherently discriminatory.

[7] Whether a prosecutor's explanation for using a peremptory strike against a prospective juror is pretextual falls within the trial court's ultimate factual determination in the third step of the *Batson* inquiry: "[W]hether an attorney's race-neutral explanation for a peremptory challenge should be believed presents a question of fact."¹¹ A trial court's determination that the explanation was race-neutral frequently involves its evaluation of a prosecutor's credibility, which requires deference to the court's findings absent exceptional circumstances.¹²

⁷ See *Nave*, *supra* note 1.

⁸ *Id.*

⁹ *Id.*

¹⁰ See *id.*

¹¹ *State v. Thorpe*, 280 Neb. 11, 17, 783 N.W.2d 749, 757 (2010).

¹² See *Nave*, *supra* note 1.

Here, the prosecutor explained that he did not want to ask juror No. 8 whether she had knowledge of April's drug use because the questioning would have emphasized his reason for seeking her removal. The record supports his belief that such questions could have raised concerns in the jurors' minds about the validity of Johnson's defense. In his opening statement, Johnson suggested that the evidence would show April was probably addicted to hydrocodone and could have been involved with dangerous individuals who killed her. Because the prosecutor explained that he knew Johnson would rely on April's drug use as a defense, his decision to not question juror No. 8 about her knowledge of April's drug use did not show that his proffered reason was pretextual. Moreover, the prosecutor denied that race was a factor in his decision and argued that if not for juror No. 8's potential knowledge about the case, he would have "like[d] her" as a juror. He noted that she had recently served on a jury that had found the defendant guilty. The court was not clearly wrong in finding that this testimony was credible.

3. THE COURT ERRED IN ADMITTING EVIDENCE OF INCONCLUSIVE DNA TESTING RESULTS

(a) Additional Facts

The State's DNA expert, Melissa Kreikemeier, is a forensic scientist from the Nebraska State Patrol Crime Laboratory. She tested biological samples from the crime scene with the PCR-STR testing method.¹³ Using this method, she tried to detect genetic variations that are known to exist at specific segments in the DNA molecule.¹⁴ Kreikemeier explained that the individual variations are the number of times that a small sequence in the DNA molecule is repeated at a particular segment. The

¹³ See *State v. Fernando-Granados*, 268 Neb. 290, 682 N.W.2d 266 (2004).

¹⁴ See *State v. Carter*, 246 Neb. 953, 967-69, 524 N.W.2d 763 (1994), *overruled in part on other grounds*, *State v. Freeman*, 253 Neb. 385, 571 N.W.2d 276 (1997).

segments are called loci, and the individual variations are called alleles.¹⁵

[8] In forensic analysis, a DNA profile is a person's combination of alleles at each tested locus.¹⁶ Kreikemeier stated that the combination of alleles found at 15 designated loci produces a profile that is very rare and that she had never heard of two people having the same profile unless they were identical twins. She tested for alleles at these 15 loci, plus a locus that is tested to determine the sex of the contributor. Kreikemeier recorded the alleles she detected at each of the 15 designated loci as a number that represents the number of times a DNA sequence is repeated there. She used the known DNA profiles for April, Ed, and Johnson to compare against the alleles that she found in samples from unknown sources.

Kreikemeier explained that because individuals inherit an allele from each parent at every locus (which may be the same allele), if she detected more than two alleles at a locus, her testing showed the sample contained a mixture of DNA from more than one person.¹⁷ She said that for mixed-source samples, an analyst can sometimes (1) determine that one person contributed the majority of the DNA in the sample and (2) assign separate profiles to the major and minor contributors. But she explained that DNA testing can be affected by the quantity of the DNA present in a sample and whether it has been degraded.¹⁸

As stated, the court overruled Johnson's continuing objections under evidence rules 402 and 403 to three of Kreikemeier's inconclusive testing results and her testimony about them. She obtained the inconclusive results from testing the underside of

¹⁵ See, e.g., *State v. Kofoed*, 283 Neb. 767, 817 N.W.2d 225 (2012), citing David H. Kaye & George F. Sensabaugh, Jr., *Reference Guide on DNA Identification Evidence*, in *Reference Manual on Scientific Evidence* 129 (Federal Judicial Center 3d ed. 2011).

¹⁶ See Kaye & Sensabaugh, *supra* note 15 at 139.

¹⁷ See *id.* at 183.

¹⁸ See *id.* at 151. See, also, *Kofoed*, *supra* note 15.

two acrylic nails found in the duplex and the rope tied around April's ankles where it was knotted at her feet.

Regarding the first acrylic nail, Kreikemeier determined that the sample contained mixed DNA and she produced profiles for major and minor contributors. The full major contributor profile matched April's profile. But she obtained only a partial DNA profile for a minor contributor. In total, Kreikemeier recorded 12 alleles for a minor profile at the 15 designated loci and none for the locus used to determine the contributor's sex. Ten of these matched alleles in Johnson's known profile, which showed 30 total alleles at the same 15 loci, and two did not. Each recorded allele in the minor profile had an asterisk beside it. Kreikemeier stated that the asterisks meant "the data that we are seeing his [sic] lower, it's kind of a low-level sample for the minor contributor." Despite the weakness of the sample, she excluded April and Ed as the minor contributors. But she said she could not draw a conclusion about Johnson:

That means when I was doing my comparisons I was unable to include him because there was not a lot of DNA present but the DNA that I was saying [sic] did correspond with his so that way I could not exclude him. So I could neither include nor exclude so I could make no conclusions.

Upon Johnson's questioning, Kreikemeier admitted that she could not even determine the sex of the minor contributor.

Regarding the second acrylic nail, Kreikemeier stated that the sample she took of it showed a "possible mixture" with a minor contributor's DNA. The DNA profile she produced from the second nail exactly matched April's profile and excluded Johnson. But beside one of the recorded alleles, Kreikemeier wrote a "+" sign. She stated that this sign indicated "a possible allele" but that she could not determine if this was "a true allele or not."

Regarding her testing of the rope segment, Kreikemeier stated that she determined it also contained mixed DNA from major and minor contributors. The major profile matched April's profile and excluded Johnson. She stated that she could

not draw any conclusions about the minor profile because she did not have enough information. The testing results show that Kreikemeier recorded three alleles in the minor profile, which were also marked by asterisks. Two of these alleles were recorded for the same locus and did not match either of Johnson's known alleles at the same locus.

When discussing the minor profile for the first acrylic nail and the rope, Kreikemeier did not state the number of alleles that matched alleles in Johnson's profile. Nor did she explain the frequency at which the possible matches occurred in the general population or the probability that an unknown random person could have the same combination.

(b) Parties' Contentions

Relying on *State v. Glazebrook*,¹⁹ Johnson assigns that the court erred in admitting DNA evidence that was unaccompanied by any statistical significance. The State contends that *Glazebrook* is distinguishable because it dealt with mitochondrial DNA (mtDNA), which cannot identify the source of an unknown biological sample. Alternatively, the State contends that a prosecutor needs to inform the jurors about the testing results, even if inconclusive, so they do not speculate that a sample contained DNA from a third person.

(c) Standard of Review

[9-11] When the Nebraska Evidence Rules commit the evidentiary question at issue to the discretion of the trial court, we review the admissibility of evidence for an abuse of discretion.²⁰ A trial court exercises its discretion in determining whether evidence is relevant and whether its prejudicial effect substantially outweighs its probative value.²¹ An abuse of discretion occurs when a trial court's decision is based upon reasons that are untenable or unreasonable or if its action is clearly against justice or conscience, reason, and evidence.²²

¹⁹ *State v. Glazebrook*, 282 Neb. 412, 803 N.W.2d 767 (2011).

²⁰ *State v. Henderson*, 289 Neb. 271, 854 N.W.2d 616 (2014).

²¹ See *State v. Bauldwin*, 283 Neb. 678, 811 N.W.2d 267 (2012).

²² *Henderson*, *supra* note 20.

(d) Analysis

[12-14] Under evidence rule 402, irrelevant evidence is inadmissible.²³ Under Neb. Evid. R. 401,²⁴ relevant evidence means evidence having any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.²⁵ Relevancy requires only that the degree of probativeness be something more than nothing.²⁶ Under evidence rule 403, even relevant evidence is properly excluded if its probative value is substantially outweighed by its potential for unfair prejudice.²⁷

[15,16] It is true, as the State argues, that DNA evidence is normally used to identify a defendant as the perpetrator of a crime. But this argument only states a purpose for which the State may present the evidence. DNA evidence can also contradict the State's theory that a defendant was the perpetrator of a crime.²⁸ But the relevance of DNA evidence depends on whether it tends to include or exclude an individual as the source of a biological sample. This does not mean that the test results must show that no other individual could be source. But our case law generally requires that DNA testing results be accompanied by statistical evidence or a probability assessment that explains whether the results tend to include or exclude the individual as a potential source.

For example, in *State v. Bauldwin*,²⁹ we stated that if a DNA profile from a mixed-source sample matches an individual's known DNA profile, the analyst calculates the probability that someone other than the individual in question could have contributed DNA to the sample. In rejecting the defendant's

²³ See *State v. Merchant*, 285 Neb. 456, 827 N.W.2d 473 (2013).

²⁴ See Neb. Rev. Stat. § 27-401 (Reissue 2008).

²⁵ *State v. Ely*, 287 Neb. 147, 841 N.W.2d 216 (2014).

²⁶ *State v. Lavalleur*, 289 Neb. 102, 853 N.W.2d 203 (2014).

²⁷ See *State v. Rocha*, 286 Neb. 256, 836 N.W.2d 774 (2013).

²⁸ See, *State v. Parmar*, 283 Neb. 247, 808 N.W.2d 623 (2012); *State v. White*, 274 Neb. 419, 740 N.W.2d 801 (2007).

²⁹ *Bauldwin*, *supra* note 21.

argument that these probabilities confuse jurors, we stated the following:

This is essentially a claim that a jury is not smart enough to understand and give weight to the statistical analysis that accompanies DNA evidence. Bauldwin offers no authority for this argument, and we reject it out of hand—juries are asked to analyze complex topics and evidence in many cases, and that is what the jury was asked to do here. Furthermore, *DNA evidence without the accompanying probability assessment would be inadmissible because it would not aid the trier of fact. We have specifically held that DNA evidence is inadmissible without the probability assessment for that very reason.* We are not persuaded to reconsider that position today.³⁰

Other courts have reached the same conclusion.³¹

In *Glazebrook*, we considered testing results that could not exclude a defendant as the source of a hair found on the murder victim's nightgown.³² There, we reversed the defendant's conviction because of the trial court's improper admission of his criminal history and remanded the cause for a new trial. In concluding that the error was not harmless, we noted that the mtDNA evidence had shown the defendant could not be excluded as the source of the hair. But we concluded that this evidence was not compelling because mtDNA evidence can only exclude individuals as a source and cannot identify a person as the source. We then considered whether the mtDNA evidence would be admissible on remand.

The defendant argued that the evidence was irrelevant absent evidence that the hair did not belong to any of the 10 persons investigating at the crime scene. We rejected that argument. But we concluded that when courts have upheld the admission of mtDNA evidence, "the evidence has included expert testimony regarding the statistical significance of the

³⁰ *Id.* at 703, 811 N.W.2d at 288, citing *Carter*, *supra* note 14.

³¹ See, e.g., *Peters v. State*, 18 P.3d 1224 (Alaska App. 2001); *Nelson v. State*, 628 A.2d 69 (Del. 1993); *People v. Coy*, 243 Mich. App. 283, 620 N.W.2d 888 (2000).

³² *Glazebrook*, *supra* note 19.

fact that the defendant could not be excluded as the donor.”³³ We cited an example of a case in which an expert testified that most of the general population could be excluded. But in *Glazebrook*, the database recording the number of people with the hair’s genetic variation was small and the State’s expert testified only about the number of times that the variation had been found in different populations. We emphasized that the record did not show the significance of the “raw data in arriving at a statistical probability analysis to establish relevancy.”³⁴ We held that on remand, “the statistical significance of the fact that a particular individual cannot be excluded as the donor of mtDNA is an important factor in determining the relevancy of mtDNA evidence.”³⁵

Contrary to the State’s argument, *Glazebrook* is not distinguishable solely because it dealt with mtDNA evidence. We reasoned that the relevance of genetic testing evidence that shows a defendant cannot be excluded as the potential source of a crime scene sample depends upon the statistical significance of that result. The same reasoning applies here. Obviously, if an allele, or a combination of alleles, is so common that a majority of people in the relevant population could not be excluded, then not excluding the defendant is weak evidence that he or she is the source. But without knowing that statistical probability, jurors cannot be expected to assess information that a defendant cannot be excluded.

Here, the evidence was even weaker and more difficult to assess. Kreikemeier testified that the partial minor profile she produced from the first acrylic nail was from a weak sample, suggesting that she could not even state with certainty that the alleles she recorded were accurate. Yet, her data was apparently strong enough for her to exclude April and Ed as the minor contributors. So based on Kreikemeier’s exclusions of two known profiles and her testimony that she could not exclude Johnson as the minor contributor because of the

³³ *Id.* at 434, 803 N.W.2d at 785.

³⁴ *Id.* at 435, 803 N.W.2d at 786.

³⁵ *Id.*

consistencies she saw with his profile, a juror could rationally conclude that her inability to exclude Johnson was significant. Presenting this evidence without offering any statistical relevance of the matching alleles she found, or the probability that the minor profile would exclude a random person, suggested to the jury that Johnson was linked to the evidence and that the proof would be even stronger if investigators had found more DNA. That is, decoupling inconclusive results from their statistical relevance allows the State to suggest that the defendant's DNA is present in a sample even if, in reality, its expert could exclude no one as a potential contributor.³⁶

Similarly, the State presented irrelevant testimony that (1) Kreikemeier could not draw any conclusions about the minor profile found on the rope because she did not have enough information and (2) her testing of the second acrylic nail showed a "possible mixture" with a minor contributor.

[17-19] An expert does not have to couch his or her opinion in the magic words of "reasonable certainty," but it must be sufficiently definite and relevant to provide a basis for the fact finder's determination of a material fact.³⁷ A court should exclude an expert's opinion when it gives rise to conflicting inferences of equal probability, so the choice between them is a matter of conjecture.³⁸ "An [expert] opinion which is equivocal and is based upon such words as 'could,' 'may,' or 'possibly' lacks the certainty required to sustain the burden of proof of causation for which the opinion has been offered."³⁹

Kreikemeier's testimony that there *may* have been a minor contributor's DNA on the second nail was not probative of the source of the DNA. And her testimony that she could not draw any conclusions about the partial minor profile she found from the rope sample followed her earlier testimony that her inconclusive testing results from the first acrylic nail meant

³⁶ See, *Com. v. Nesbitt*, 452 Mass. 236, 892 N.E.2d 299 (2008); *Deloney v. State*, 938 N.E.2d 724 (Ind. App. 2010); *State v. Tester*, 185 Vt. 241, 968 A.2d 895 (2009).

³⁷ See *State v. Edwards*, 278 Neb. 55, 767 N.W.2d 784 (2009).

³⁸ See *id.*

³⁹ *State v. Kuehn*, 273 Neb. 219, 226, 728 N.W.2d 589, 598 (2007).

she could neither include nor exclude Johnson as the minor contributor. Nor did she explain why the partial minor profile from the rope did not exclude Johnson, despite contradictions with his profile. And if this court cannot say with certainty whether Johnson should have been excluded or included, we assume that the jurors could have concluded from her testimony that Johnson was a possible source. So her testimony was either irrelevant or improperly suggested that the DNA evidence was stronger than it actually was.

“Because the potential precision of DNA testing is so well known, a jury might assume that any DNA profile match is extremely unlikely and therefore extremely probative”—even when this is not true.⁴⁰ By permitting Kreikemeier to testify that a minor contributor’s DNA was found on the rope, without providing any statistical relevance for the alleles she detected, the court allowed the jurors to speculate that Johnson’s DNA was detected even if the State knew that conclusion was false.

It is no answer to argue, as the State does, that the presentation of inconclusive testing results is necessary to prevent jurors from speculating that a sample contains DNA from a third person. Inconclusive results cannot dispel that possibility. More important, the State creates the speculation by introducing the inconclusive testing results. During an in camera conference to discuss Johnson’s objections, the prosecutor specifically argued that presenting the testing results allows the jurors to draw their own conclusions about the significance of an unknown person’s DNA in a sample. But without knowing the statistical significance of DNA testing results, any conclusion that a juror draws from such evidence will likely be pure speculation.

[20] Consistent with our decision in *Glazebrook*, we hold that unless the State presents the statistical significance of DNA testing results that shows a defendant cannot be excluded as a potential source in a biological sample, the results are irrelevant. They are irrelevant because they do not help the fact finder assess whether the defendant is or is not the source

⁴⁰ See *Peters*, *supra* note 31, 18 P.3d at 1227.

of the sample. And because of the significance that jurors will likely attach to DNA evidence, the value of inconclusive testing results is substantially outweighed by the danger that the evidence will mislead the jurors. We conclude that the court erred in admitting evidence of the inconclusive DNA testing results from the two acrylic nails and the rope segment.

4. THE COURT'S ERROR WAS HARMLESS BEYOND A REASONABLE DOUBT

[21,22] An error in admitting or excluding evidence in a criminal trial, whether of constitutional magnitude or otherwise, is prejudicial unless the error was harmless beyond a reasonable doubt.⁴¹ Harmless error review looks to the basis on which the jury actually rested its verdict; the inquiry is not whether in a trial that occurred without the error, a guilty verdict would surely have been rendered, but whether the actual guilty verdict rendered was surely unattributable to the error.⁴²

Although DNA testing results can be potent evidence, that is not true here. Kreikemeier admitted that her DNA sample from the first acrylic nail was weak and that she could not include Johnson as a potential source of the minor contributor's DNA. She admitted that she could not draw any conclusion about the rope segment and that she was not even sure that there was a minor contributor's DNA on the second acrylic nail. It is true that through Kreikemeier's testimony and reports, the State allowed the jurors to speculate about the significance of her testing results. But when considered in the context of the overwhelming evidence of guilt, we conclude that the verdict was surely unattributable to speculation.

April's nephew and his wife testified that April and Johnson were arguing when they left on Saturday night shortly before midnight. April's neighbor in the adjacent duplex testified that she heard "a couple of thuds" and loud arguing for 30

⁴¹ *State v. Matthews*, 289 Neb. 184, 854 N.W.2d 576 (2014); *State v. Faust*, 265 Neb. 845, 660 N.W.2d 844 (2003), *disapproved in part on other grounds*, *State v. McCulloch*, 274 Neb. 636, 742 N.W.2d 727 (2007); *State v. Lenz*, 227 Neb. 692, 419 N.W.2d 670 (1988).

⁴² See, *Matthews*, *supra* note 41; *Faust*, *supra* note 41.

to 45 minutes around 1 to 2 a.m. on Sunday. April did not respond to calls on Sunday morning, and by that evening, Johnson had fled in her van. When officers found April on Monday morning, she had been dead for quite a while. After Michigan officers arrested Johnson, he told one of them that he was wanted for murder, and he resisted efforts to scrap his fingernails for DNA evidence. On the return trip, he told Nebraska investigators that he had planned to turn himself in and that drugs would play a role in the investigation.

This evidence proved his consciousness of guilt. But even more damning was the DNA evidence showing that April's blood was on his shirt and shoes that were found in the van. And investigators found his fingerprint on the trash bag that was used to suffocate or strangle April. We reject Johnson's argument that a single white hair, from an unidentified female, which was found in April's hand, is sufficient to undermine confidence in the verdict. Officers found April face down on carpet, and they believed that she had moved throughout the house before she was killed. Any visitor to the duplex could have left a hair behind. We conclude that the verdict was surely unattributable to the court's error in admitting inconclusive DNA testing results.

V. CONCLUSION

We conclude that under our briefing rules, Johnson has waived any error related to the court's admission of autopsy or crime scene photographs. We conclude that the court was not clearly wrong in determining that the prosecutor's peremptory challenge to juror No. 8 was not racially motivated. We conclude that the court erred in admitting inconclusive DNA evidence without accompanying evidence showing the statistical relevance of the testing results. But we conclude that the error was harmless beyond a reasonable doubt because the jury's guilty verdicts were surely unattributable to the error. We therefore affirm Johnson's convictions.

AFFIRMED.

CASSEL, J., concurring.

I write separately for two reasons. First, it is important to distinguish between inconclusive results and testimony that

a subject can be included, but not excluded, as the source of DNA evidence. Second, while inconclusive DNA results are normally not admissible, there are circumstances where they may become admissible. I have no quarrel with the majority's abuse of discretion standard of review.

Inconclusive results arise when the DNA test provides no information to include or exclude a person, because of an insufficient sample or some other reason.¹ Truly inconclusive results, in failing to either include or exclude the defendant, are wholly neutral.² Thus, such results are not relevant, because they do not have a tendency to prove any particular fact that would be material to an issue in the case.³ In the normal case, inconclusive results should not be admitted.⁴ But if admitted, the admission is harmless error.⁵

However, “[w]hether or not DNA test results fail to exclude a person as a potential contributor to sample material poses a wholly different question from whether the test results are inconclusive[.]”⁶ Evidence that a subject may be included, but not excluded, as the source of DNA evidence is probative evidence.⁷ It may serve “to corroborate other evidence and support the Government’s case as to the identity of the relevant perpetrators.”⁸

And as reflected in the majority opinion, evidence that a person may be included, but not excluded, must be accompanied by testimony explaining the statistical relevance of the nonexclusion results.⁹ Without reliable accompanying evidence as to the likelihood that the test could not exclude

¹ *Com. v. Almonte*, 465 Mass. 224, 988 N.E.2d 415 (2013).

² See *Com. v. Cavitt*, 460 Mass. 617, 953 N.E.2d 216 (2011).

³ See *id.*

⁴ See *id.*

⁵ See, *Clark v. State*, 96 A.3d 901 (Md. Spec. App. 2014); *Cavitt*, *supra* note 2.

⁶ *Almonte*, *supra* note 1, 465 Mass. at 239-40, 988 N.E.2d at 427.

⁷ See *U.S. v. Morrow*, 374 F. Supp. 2d 51 (D.D.C. 2005).

⁸ *Id.* at 65.

⁹ See *Com. v. Mattei*, 455 Mass. 840, 920 N.E.2d 845 (2010).

other individuals in a given population, the jury has no way to evaluate the meaning of the result.¹⁰ Admitting such evidence without proper interpretation creates a greater risk of misleading the jury and unfairly prejudicing the defendant.¹¹ Thus, trial courts confronted by testimony that a subject cannot be excluded must insist that the evidence be accompanied by evidence of its statistical relevance.

In the case before us, the results were truly inconclusive. Kreikemeier testified that she could neither include nor exclude Johnson as a source of the minor profile recovered from the first acrylic nail. And her testimony as to the minor profiles on the second acrylic nail and the rope segment were similarly inconclusive. Thus, as to Johnson, Kreikemeier's testimony was wholly neutral and irrelevant. It did not tend to establish that Johnson was the contributor of the minor profiles recovered from any of the samples. I agree with the majority that its improper admission was harmless error.

But I wish to make clear that while inconclusive DNA results are normally not admissible, there are circumstances where they may become admissible. Inconclusive results may properly be admitted to rebut an attack on the sufficiency of a police investigation.¹² "When faced with such a suggestion, the prosecutor is entitled to introduce testimony to demonstrate that tests were performed and results (even if inconclusive) were obtained."¹³ Thus, I emphasize that in another case and under different circumstances, inconclusive DNA testing results may be admissible.

HEAVICAN, C.J., joins in this concurrence.

¹⁰ See *id.*

¹¹ See *id.*

¹² See, *Clark*, *supra* note 5; *Com. v. Mathews*, 450 Mass. 858, 882 N.E.2d 833 (2008).

¹³ *Mathews*, *supra* note 12, 450 Mass. at 872, 882 N.E.2d at 844.