

STATE OF MINNESOTA IN COURT OF APPEALS

C0-01-1373

State of Minnesota,
Respondent,

vs.

Howard Frederick Thoms,
Appellant.

Filed July 2, 2002
Affirmed

Forsberg, Judge*

Hennepin County District Court
File No. 00021646

Mike Hatch, Attorney General, 525 Park Street, Suite 500, St. Paul, MN 55103; and

Amy Klobuchar, Hennepin County Attorney, Linda M. Freyer, Assistant County
Attorney, C-2000 Government Center, Minneapolis, MN 55487 (for respondent)

Mark D. Nyvold, 1030 Minnesota Building, 46 East Fourth Street, St. Paul, MN 55101
(for appellant)

Considered and decided by Peterson, Presiding Judge, Schumacher, Judge, and
Forsberg, Judge.

U N P U B L I S H E D O P I N I O N

FORSBERG, Judge

On appeal from his conviction of and sentence for third-degree criminal sexual conduct, appellant argues that the district court abused its discretion by allowing the state to present statistical evidence connecting his DNA to the forensic sample taken from the crime scene. Appellant argues that (1) the state did not present testimony of a properly

qualified expert to support the evidence; (2) the statistical evidence was not stated as a random-match probability; and (3) the court failed to give a proper cautionary instruction. Appellant also argues that the court abused its discretion by imposing a triple upward durational departure from the presumptive sentence. We affirm.

FACTS

At 11 p.m., on March 2, 2000, appellant Howard Thoms began his shift as a registered nurse. One of his patients was 17-year-old L.L., a comatose female. Appellant had expressed interest in L.L. since her admittance two months earlier, and he had given her a doll that read, "I love you." After 1 a.m., a nurse walked into L.L.'s room and saw appellant pulling up his pants. The nurse asked appellant what was happening and appellant responded, "Not much." L.L.'s eyes, which were usually closed, were open, and her bed rail was lowered. The nurse called the police, who stopped appellant as he attempted to leave the building. Appellant told an officer, "I know I shouldn't have done that" and stated that he was administering a suppository to L.L. when he missed her rectum, accidentally touched her vagina, became aroused, and started to masturbate but did not ejaculate.

Police arrested appellant and took his clothes for forensic analysis. No evidence existed that appellant had administered a suppository to L.L.; she received suppositories only at 6 a.m. every other day, and no suppository was scheduled for that day. L.L.'s underwear was on inside out and not pulled up correctly. The sexual-assault exam revealed redness and a tear on L.L.'s vagina, indicating recent injury, and examiners found sperm on L.L.'s vagina, perineum, and diaper, as well as in the fly of appellant's pants. Examiners

took a blood sample from L.L. and from appellant, and the BCA tested the blood samples, the vaginal swab, the perineal swab, and the cutting from the diaper.

In February 2001, the parties stipulated to a Frye hearing on the admissibility of DNA test results. In March, the district court ruled that respondent could “present [DNA] evidence on random match probability pursuant to the ‘product rule’ and in conformity with the standards set forth in NRC-II.” The court found both general acceptance of Polymerase Chain Reaction-Short Tandem Repeat methodology (PCR-STR) for DNA analysis and foundational reliability for BCA standards and controls.

At trial, BCA forensic scientist Staci Bennett testified that the BCA uses the PCR-STR method of DNA testing. With respect to substances containing DNA mixtures, this methodology indicates only that the DNA is from two or more people and includes possible contributors when the test does not eliminate them. Bennett testified that the DNA from the vaginal swab, the perineal swab, and the diaper were mixtures—containing DNA from more than one person. She separated the mixture into sperm- and nonsperm-cell fractions and found that the DNA profile in the sperm on the diaper and on the vaginal swab matched appellant’s DNA profile, while the DNA profile of the nonsperm-cell fraction on the vaginal swab matched L.L.’s DNA profile. She testified that the DNA profile in the diaper’s sperm would “not be expected to occur more than once among unrelated individuals in the world population.” She also stated that approximately 99.99997 percent of the general population could be excluded as contributors to the sperm on the vaginal swab. On cross-examination, appellant’s counsel asked her to cite figures that she had used in her calculation, such as “2.6 times 10 to the

minus 17th,” and he asked whether this figure amounted to the number of “people in a trillion worlds.”

The jury found appellant guilty of third-degree sexual conduct under Minn. Stat. § 609.344, subd. 1(d) (2000) (defining a violation when “the actor knows * * * that the complainant is mentally impaired, mentally incapacitated, or physically helpless”) (amended 2002). The court imposed a 144-month sentence, a triple upward durational departure from the presumptive sentence, based on L.L.’s vulnerability, zone-of-privacy violation, position-of-trust violation, and cruelty.

D E C I S I O N

I.

Minnesota courts determine the admissibility of evidence derived from new scientific techniques according to the test derived from *Frye v. United States*, 293 F. 1013, 1014 (D.C. Cir. 1923). *State v. Jobe*, 486 N.W.2d 407, 419 (Minn. 1992). The Frye test asks whether (1) “experts in the field widely share the view that the results [of scientific testing] are scientifically reliable as accurate”; and (2) the laboratory complied with appropriate standards and controls. *Id.* (quoting *State v. Mack*, 292 N.W.2d 764, 768 (Minn. 1980)). Whether the relevant scientific field generally accepts a particular principle or technique is a question of law, but we review a district court’s determination of foundational reliability, and of expert-witness qualifications and helpfulness, for an abuse of discretion. *Goeb v. Tharaldson*, 615 N.W.2d 800, 815 (Minn. 2000). When reviewing a district court ruling on the competence of a proffered expert witness, we must apply a deferential standard and may not conduct an independent review of the

witness's credentials. *Gross v. Victoria Station Farms, Inc.*, 578 N.W.2d 757, 760-61 (Minn. 1998).

An appellate court will not reverse a conviction based on the erroneous admission of objected-to evidence if the admission was harmless beyond a reasonable doubt. *State v. Shannon*, 583 N.W.2d 579, 585 (Minn. 1998). An error is harmless beyond a reasonable doubt “[i]f the verdict actually rendered was surely unattributable to the error.” *State v. Jones*, 556 N.W.2d 903, 910 (Minn. 1996). The court must consider the record as a whole in assessing whether an erroneous admission of evidence was harmless, considering the strength of the state's evidence and the weakness of any defense evidence. *State v. VanWagner*, 504 N.W.2d 746, 749 (Minn. 1993).

And a district court has broad discretion in determining jury instructions. *State Farm Fire & Cas. Co. v. Short*, 459 N.W.2d 111, 113 (Minn. 1990). “A party is entitled to a special instruction on his theory of the case only if” the evidence supports the instruction and is in accord with applicable law. *Id.* We will not grant a new trial, when instructions fairly and correctly state the applicable law. *Alevizos v. Metro. Airports Comm'n*, 452 N.W.2d 492, 501 (Minn. App. 1990), *review denied* (Minn. May 11, 1990).

Appellant admits that he is not contesting whether statistical evidence is admissible “where the product rule is used to generate a random match probability in cases in which the PCR process is used to test STR DNA.” Instead, appellant argues, in *this particular* case the statistical evidence was not admissible because of the types of statistics generated, the way they were presented, the State's failure to meet foundational requirements, and jury instruction issues.

Appellant does, nevertheless, reiterate his argument raised in a pretrial motion that the state's analytic method of calculating random-match probability—the product rule—is not generally accepted in the relevant scientific community. Appellant also argues that the state's presentation of statistical probability testimony was prejudicial under Minn. R. Evid. 403 (requiring the court to balance the probative value of an offered piece of evidence against its prejudicial effect when determining admissibility). He claims that the use of the product rule to multiply out these frequencies [of genetic characteristics at the ends of DNA loci] to numbers of incomprehensible length still carries with it the great potential for persuading a jury to equate that number with a probability of guilt. He suggests that the state's DNA evidence should have been expressed only in terms of a random match, rather than stating, as Bennett did, that 99.99997 percent of the population could be excluded as contributors to the sperm sample.

In *State v. Bloom*, 516 N.W.2d 159, 160 (Minn. 1994), the supreme court ruled that the “interim ceiling method,” approved by the NRC, is a generally accepted method among forensic scientists of analyzing DNA. An expert can testify only that there is a DNA “match” and express an opinion as to the relative strength of that match; the expert may not testify that a DNA sample is unique to the defendant, nor may the expert testify that the defendant is the source of the evidence to the exclusion of all others or express an opinion as to the strength of the evidence. *Id.* at 168.

The district court explained that the publication NRC-II has since replaced NRC-I, which *Bloom* relied on, and NRC-II states that the product rule is now the appropriate means of expressing random-match probability under modern PCR-STR testing methods (NRC-I had used RFLP-VNTR testing methods). The court pointed to the widespread acceptance

of PCR-STR testing in the forensic-science community. The court reasoned that, because PCR-STR test results are admissible, it follows that the product rule—“the corresponding statistical approach which most accurately conveys the significance of said test results to the jury”—is necessarily an appropriate means of presenting the results. We agree that, as long as testing techniques conform to NRC standards and as long as experts testify only that there was a “match” with the DNA from the crime scene, the presentation of new DNA testing methods does not violate the core principles of *Bloom*.^[1] And expressing a percentage in terms of an exclusion statistic is merely the flip side of expressing it as a random match. Because appellant accepts PCR-STR testing methods generally and challenges only the reliability and presentation of the methodology offered in this case, we review the court’s evidentiary rulings merely for an abuse of discretion.

We also observe that appellant’s attorney, and not respondent, elicited the large number from Bennett. During cross-examination, appellant’s attorney highlighted the large numbers Bennett used in her methodology. Defense counsel may not elicit prejudicial testimony from the state’s expert witness and then cry foul; if the witness properly testified on direct examination, her testimony should be considered proper, and defense counsel is deemed to have “opened the door” to any prejudicial testimony he elicited from the witness. *See* Minn. R. Evid. 106 (providing that, when a party introduces a part of a writing, the other party may require the introduction of any other writing that ought in fairness be considered contemporaneously with it); *see also State v. Folkers*, 581 N.W.2d 321, 326 n.4 (Minn. 1998) (explaining that defense counsel’s inquiry into the terms of a witness’s plea agreement permits the state to introduce the entire plea

agreement). Significantly, respondent never referred to the statistics elicited by appellant in its closing argument or at any other time.

Appellant next challenges the foundation for the statistical evidence. He argues that Bennett was not properly qualified to perform product-rule calculations, especially with mixtures, and that she acted outside of BCA protocol by doing such a calculation. He also argues that Bennett is not a population geneticist and that, because the BCA does not normally perform product-rule calculations on mixtures, Bennett lacked the requisite training. Moreover, appellant challenges the foundation for Bennett's population database.

We conclude that respondent properly laid a foundation for Bennett's testimony: (1) she has a B.S. in biology from the University of Minnesota and has received in-house training at the BCA and the FBI; (2) she and 12 other BCA forensic analysts are trained to perform PCR-STR tests; (3) she has been testing DNA since 1991; (4) she could explain the method of identifying DNA profiles and how it has evolved; and (5) she follows NRC-II methods. Appellant cites no authority for the proposition that Bennett must be an expert in population genetics to give testimony regarding such calculations. And at trial, appellant never objected to the foundation for Bennett's testimony on database populations. *See Roby v. State*, 547 N.W.2d 354, 357 (Minn. 1996) (refusing to address matters not argued and considered in the court below). In any case, Bennett properly laid a foundation for the databases. She testified that she used NRC-II methodology and that BCA protocol neither prohibited nor mandated the calculations that she used. Because we defer to the district court's determination of foundation and expertise, and because

appellant has not offered compelling reasons to dispute Bennett's testimony, appellant's foundation arguments are without merit.

Finally, appellant argues that the court failed to instruct the jury properly on interpreting the DNA evidence. He claims that the court should have *sua sponte* offered a limiting instruction to the jury in light of the prejudicial testimony elicited during trial. He suggests that *Bloom* requires that courts explain to juries that random-match probability statistics have limited evidentiary value, and he suggests that the court should have given the jury a cautionary instruction.

We find no authority for requiring a special instruction for DNA evidence. Nor did appellant ask the court to issue any cautionary instruction. *See Roby*, 547 N.W.2d at 357 (refusing to address matters not argued and considered in the court below). The court found that appellant's requested instruction was incomplete; instead, the court gave the jury the standard JIG instruction for expert witnesses. We conclude that the district court properly exercised its discretion in instructing the jury.

We observe that the jury had sufficient alternative evidence indicating appellant's guilt beyond a reasonable doubt. The state presented the jury with, among other things, (1) the nurse's testimony; (2) the lack of evidence supporting appellant's story; (3) evidence of recent sexual assault; (4) sperm found on L.L.'s diaper and vagina; and (5) appellant telling the police officer that he had not ejaculated, yet his pants contained sperm. Even without the DNA evidence, the state introduced adequate evidence indicating appellant's guilt.

II.

Departures from presumptive sentences are reviewed under an abuse-of-discretion standard, but courts must cite “substantial and compelling circumstances” to justify a departure. *Rairdon v. State*, 557 N.W.2d 318, 326 (Minn. 1996) (citations omitted). A court should consider whether the defendant’s conduct was significantly more or less serious than that typically involved in such crimes. *State v. Cox*, 343 N.W.2d 641, 643 (Minn. 1984). “If the record supports findings that substantial and compelling circumstances exist, this court will not modify the departure unless it has a ‘strong feeling’ that the sentence is disproportional to the offense.” *State v. Anderson*, 356 N.W.2d 453, 454 (Minn. App. 1984) (citation omitted). When aggravating circumstances exist, the upper limit on a durational departure is usually double the maximum presumptive sentence. *State v. Glaraton*, 425 N.W.2d 831, 834 (Minn. 1988). Severe aggravating circumstances, however, may justify a sentence greater than double the presumptive sentence. *Id.* We determine the existence of severe aggravating circumstances “based on our collective, collegial experience in reviewing” many criminal appeals from the district courts. *Id.*

The presumptive sentence under Minn. Stat. § 609.344, subd. 1(d) (2000) (amended 2002), is 48 months. Minn. Sent. Guidelines IV. Under Minn. Stat. § 609.109, subd. 6(1), (2) (2000), a court must double the presumptive sentence if the defendant is convicted under section 609.344, subdivision 1(d), and if the court finds an aggravating factor supporting an upward departure. Such aggravating factors include (1) the victim’s vulnerability due to infirmity or reduced physical or mental capacity that is known to the defendant; (2) invading the victim’s zone of privacy; (3) abusing a position of trust; (4) treating the victim with particular cruelty; and (5) the psychological and emotional effect

on the victim. *State v. Carpenter*, 459 N.W.2d 121, 128 (Minn. 1990) (abuse of trust); *State v. Allen*, 482 N.W.2d 228, 233 (Minn. App. 1992) (psychological/emotional effect on victim), *review denied* (Minn. Apr. 13, 1992); *State v. Hines*, 343 N.W.2d 869, 873 (Minn. App. 1984) (invasion of zone of privacy); Minn. Sent. Guidelines II.D.2.b.(1) (vulnerability); Minn. Sent. Guidelines II.D.2.b.(2) (cruelty).

Appellant argues that vulnerability is already an element of the offense of sexual penetration with an incapacitated person. *See State v. Brusven*, 327 N.W.2d 591, 593 (Minn. 1982) (“Ordinarily, it is inappropriate for the sentencing court to use as a basis for departure the same facts which are relied upon in determining the presumptive sentence.”). But an element of the offense may sometimes be an aggravating factor. *See Cox*, 343 N.W.2d at 644 (stating that an element of the offense may be used as an aggravating factor if the offense is committed in a particularly serious way). L.L. was particularly vulnerable because she was a comatose patient under appellant’s care.

Appellant next claims that he did not violate L.L.’s zone of privacy because she was in a nursing home and because appellant was not an intruder. But appellant’s status is irrelevant to a zone-of-privacy invasion. *See State v. Bates*, 507 N.W.2d 847, 854 (Minn. App. 1993) (finding a violation of zone of privacy by defendant who was staying overnight in victim’s home), *review denied* (Minn. Dec. 27, 1993). And the court found that the nursing home was L.L.’s home because she had lived there for two months.

Appellant also argues that L.L. did not know that he was in a position of trust. But the position and conduct of the offender, and not the victim’s consciousness, triggers this factor. *See Carpenter*, 459 N.W.2d at 128 (finding abuse of trust because victim’s family

and church members trusted offender to care for congregation's youth). Appellant used his position of trust to gain access to L.L.

Finally, appellant argues that cruelty means some conduct beyond the definition of the offense, and he argues that the court did not specify what aspect of his conduct was cruel. Particular cruelty alone can justify a double departure. *State v. Edwards*, 380 N.W.2d 503, 510 (Minn. App. 1986). And an element of the offense can be an aggravating factor if the defendant commits the offense in a particularly serious way. The record shows that appellant did not care whether L.L. knew what he was doing to her or whether she would remember if and when she emerged from her coma.

We also note that the psychological effect on L.L. may justify an upward departure. L.L. testified that she felt upset and dirty on learning what had happened when she woke up. L.L.'s family has also suffered from appellant's actions. *See State v. Norton*, 328 N.W.2d 142, 146 (Minn. 1982) (pain suffered by victim's family may help justify upward departure).

We conclude that the only limit on appellant's sentence is the statutory maximum of 15 years and that the number and severity of aggravating factors justified appellant's sentence. Because appellant was convicted under section 609.344, subdivision 1(d), and because at least one aggravating factor exists, section 609.109, subdivision 6, mandates a double departure. And while a triple departure is rare, the district court has broad discretion in sentencing and found four aggravating factors. We do not have a "strong feeling" that a triple departure was excessive.

Affirmed.

* Retired judge of the Minnesota Court of Appeals, serving by appointment pursuant to Minn. Const. art. VI, § 10.

[1] This court has held that the kits used in PCR-STR testing are not reliable because they have not yet been subject to peer review. *State v. Traylor*, 641 N.W.2d 335, 341 (Minn. App. 2002), *review granted* (Minn. May 14, 2002). Appellant does not challenge the test kits or the PCR-STR testing methods in this appeal.