COURT OF APPEALS OF VIRGINIA

Present: Judges Benton, McClanahan and Senior Judge Coleman

Argued at Richmond, Virginia

CAROLYN D. BRANDT

v. Record No. 2342-04-2

MEMORANDUM OPINION* BY JUDGE SAM W. COLEMAN III MAY 2, 2006

COMMONWEALTH OF VIRGINIA

FROM THE CIRCUIT COURT OF HENRICO COUNTY
Gary A. Hicks, Judge

David B. Hargett (Hargett & Watson, PLC, on brief), for appellant.

Michael T. Judge, Assistant Attorney General (Judith Williams Jagdmann, Attorney General, on brief), for appellee.

LEGAL HISTORY

On the evening of May 21, 2003, Ronnie Brandt died of smoke inhalation from a fire in his mobile home on Brook Road in Henrico County. His wife, Carolyn Brandt (Brandt), the appellant, was indicted and convicted of arson and first-degree murder in connection with the fire.

The principal issue on appeal is whether the trial court properly admitted into evidence the results of a fire investigator's experiment that he conducted after the fire. The experiment consisted of the investigator placing a lit cigarette on each of twenty separate piles of clothing to determine the likelihood of a fire starting in that manner. The appellant contends that because the "lit cigarette" experiment was not conducted under conditions substantially similar to those in which the actual fire occurred and because the results of the test were not shown to have been

^{*} Pursuant to Code § 17.1-413, this opinion is not designated for publication.

scientifically reliable, the trial judge erred by admitting the evidence. Assuming without deciding that the trial judge erred by admitting evidence of the results of the experiment, the incriminating evidence against Carolyn Brandt was so overwhelming in proving her guilt that any error in the admission of the experimental evidence was harmless.

FIRE INVESTIGATOR'S EVIDENCE

When firemen arrived at the Brandts' burning mobile home, they located Ronnie Brandt's body just inside the home's back door. The fire investigator arrived as the firemen were extinguishing the fire. After examining the scene, the investigator determined the fire had begun near some burnt clothing on the living room floor. In an effort to determine whether the fire had been accidentally or intentionally set, the investigator examined and excluded certain possible accidental causes, such as electrical malfunctions, home heating sources, and lightning strikes. Also, he found no evidence of accelerants having been used to set or accelerate a fire. He also considered whether Ronnie Brandt, a known smoker, might have accidentally caused the fire by dropping a lit cigarette on clothing. The investigator searched for, but did not find, any evidence of cigarettes, cigarette butts, cigarette lighters, or remnants of smoking material in the area near the fire's source. To further determine the likelihood that a dropped lit cigarette may have caused the fire, the investigator conducted an experiment to determine the probability or improbability that a lit cigarette dropped on piles of clothes would cause them to ignite. The results of his experiment caused one of the twenty piles of clothes to ignite after smoldering for fifty-three minutes.

At trial, Carolyn Brandt's attorney conceded that the fire investigator was qualified as an expert to investigate and determine the causes of fires. However, over defense counsel's objection, the investigator testified about the experiment he conducted and the results of his having placed a lit cigarette on each of twenty separate piles of clothes. He explained that the

clothes consisted of "socks, pants, shirts, jackets, all material types, including nylon, rayon, cotton, polyester." He did not specify whether each pile of clothes contained only a particular type of fabric or whether the lit cigarettes were placed on different types of fabric.

HARMLESS ERROR

We adhere to "the sound judicial practice of refusing to decide or address issues whose resolution is not necessary to dispose of a case, unless there are compelling reasons to do otherwise." United States v. Craig, 861 F.2d 818, 821 (5th Cir. 1988). See also Milton v. Wainwright, 407 U.S. 371, 372 (1972) ("the judgment under review must be affirmed without reaching the merits of petitioner's present claim. Assuming, arguendo, that the challenged testimony should have been excluded, the record clearly reveals that any error in its admission was harmless beyond a reasonable doubt."); Pitt v. Commonwealth, 260 Va. 692, 695, 539 S.E.2d 77, 79 (2000) (assuming without deciding that the trial court erred in admitting codefendant's statements because it violated the defendant's right to cross-examination, held that error was harmless beyond a reasonable doubt); Jenkins v. Commonwealth, 244 Va. 445, 454, 423 S.E.2d 360, 366 (1992) (assuming arguendo that admission of defendant's confession was error, such error was harmless beyond a reasonable doubt). The fire investigator's opinion that the fire was of "incendiary" origin was admitted without objection. However, the test results did not prove that the fire could not have been started accidentally, supporting appellant's theory of the case; in fact, the investigator testified he could not rule out that possibility. Thus, any potential prejudicial effect that the evidence had on the jury's verdict was minimal. Here, the

¹ This case is distinguishable from those in which the Commonwealth's evidence is of a "generalized nature" and the effect of improperly admitted evidence undermines confidence in the jury's verdict. For example, in <u>Williams v. Commonwealth</u>, 32 Va. App. 395, 528 S.E.2d 166 (2000) (*en banc*), we reversed appellant's conviction because the "prejudicial impact of Harris' confession clearly was significant and undermines confidence in the verdict. In view of the generalized nature of the other testimony, we cannot conclude 'beyond a reasonable doubt

test results could not have affected the jury's verdict because they supported appellant's hypothesis of innocence. In addition, the Commonwealth presented very specific testimony from many witnesses to establish appellant's guilt beyond a reasonable doubt. Thus, we can say, "without usurping the jury's fact finding function," the test results were inconsequential in light of the overwhelming evidence of guilt. <u>Lavinder v. Commonwealth</u>, 12 Va. App. 1003, 1006, 407 S.E.2d 910, 911 (1991).

Code § 8.01-678 provides that:

When it plainly appears from the record and the evidence given at the trial that the parties have had a fair trial on the merits and substantial justice has been reached, no judgment shall be arrested or reversed . . . for any . . . defect, imperfection, or omission in the record, or for any error committed on the trial.

When an error has been alleged in a criminal case, to determine whether substantial justice has been reached, "'a reviewing court must decide whether the alleged error substantially influenced the jury. If it did not, the error is harmless." Rose v. Commonwealth, 270 Va. 3, 12, 613 S.E.2d 454, 458 (2005) (quoting Clay v. Commonwealth, 262 Va. 253, 259, 546 S.E.2d 728, 731 (2001)). If an error did not influence the jury, the conviction should stand. "But if one cannot say, with fair assurance, after pondering all that happened without stripping the erroneous action from the whole, that the judgment was not substantially swayed by the error, it is impossible to conclude that substantial rights were not affected." Rose, 270 Va. at 15, 613 S.E.2d at 458-59 (quoting Kotteakos v. United States, 328 U.S. 750, 764-65 (1946)). An error is harmless when the evidence of guilt is "overwhelming" such that the error "failed to have any 'substantial influence' on the verdict." United States v. Lane, 474 U.S. 438, 450 (1986) (quoting

that the [improperly admitted confession] did not contribute to the verdict obtained." <u>Id.</u> at 406, 528 S.E.2d at 172 (quoting <u>Chapman v. California</u>, 386 U.S. 18, 24 (1967)).

<u>Kotteakos</u>, 328 U.S. at 765); <u>see Clay</u>, 262 Va. at 260, 546 S.E.2d at 731-32 (adopting <u>Kotteakos</u> harmless error standard).

Harmless error analysis is not a matter of reviewing the evidence and determining if it is sufficient to sustain a conviction:

[I]n determining if an error is harmless, a reviewing court does not decide the probability of the occurrence of a past event, i.e. if, in fact, the defendant committed the crime charged. It determines, instead, whether, as a matter of law, this decision by the fact finder was affected by the error. If so, the error is not harmless; if not, the error is harmless.

Lavinder, 12 Va. App. at 1006, 407 S.E.2d at 911.

Where a trial court has committed error and a defendant has been found guilty, harmless error applies only if the evidence of guilt is so overwhelming as to render any error inconsequential in the jury's finding of guilt. See Hanson v. Commonwealth 14 Va. App. 173, 191, 416 S.E.2d 14, 32 (1992) ("[W]hile they should have been excluded, [certain statements] were inconsequential in light of the evidence which overwhelmingly points to [the defendant] as [a] murderer."). Moreover, "[e]rror will be presumed prejudicial unless it plainly appears that it could not have affected the result." Joyner v. Commonwealth, 192 Va. 471, 477, 65 S.E.2d 555, 558 (1951). If the trial court has committed an error:

[A] criminal conviction must be reversed unless "it plainly appears from the record and the evidence given at the trial that" the error did not affect the verdict. An error does not affect a verdict if a reviewing court can conclude, without usurping the jury's fact finding function, that, had the error not occurred, the verdict would have been the same.

<u>Lavinder</u>, 12 Va. App. at 1006, 407 S.E.2d at 911 (quoting Code § 8.01-678).

Here, both the direct and circumstantial evidence overwhelmingly prove that Carolyn Brandt intentionally set fire to her mobile home and that she did so intending to kill her husband.

First, and most significantly, are Brandt's express admissions that she set the fire to collect the fire and life insurance and to rid herself of Ronnie Brandt. Brandt's daughter testified that on the night of the fire her mother admitted to starting the fire to collect on the homeowner's insurance because the owner was closing the trailer park. Several witnesses also testified to having heard Carolyn Brandt expressly admit to having set the fire to collect the insurance and to kill her husband. The daughter also testified that her mother told her that, before the fire, she had put some photographs in a drawer where they would be safe and after the fire she asked the daughter to retrieve them. Thus, Brandt's express and tacit admissions that she set the fire were corroborated by several witnesses, as well as other surrounding circumstances.

Additionally, the circumstantial evidence proved that Carolyn Brandt not only had, but communicated to others, her motive and desire for burning her mobile home and for killing her husband. Proof of motive is always a fact and circumstance that may be introduced to prove that an accused committed the charged offense. Here, numerous witnesses testified that Carolyn Brandt told them she wanted her husband dead and had talked about what methods she might use to kill him. For example, she told her son how she could "kill somebody and get away with it." Carolyn Brandt's daughter-in-law stated that Brandt mentioned that she hoped the police did not test her shoes for gasoline, which she said she used "to make the fire burn quicker." Several witnesses, including Brandt's daughter, son-in-law, and a neighbor, testified she told them she needed money and that she had insurance on the mobile home and life insurance on Ronnie that she was going to collect. A witness testified that Carolyn Brandt's daughter called her two weeks after the fire to ask about insurance money, and clearly wanted the money. Additionally, after the fire, the investigators found romantic letters written to Carolyn Brandt from a prison inmate. A witness testified that she heard Brandt say, "when he [the inmate] got out of prison, he's coming to live with her and that if Ronnie didn't like it, he could leave." Thus, the evidence proved that Carolyn Brandt had financial, personal, and romantic motives and reasons for burning her mobile home and killing her husband. Moreover, not only did one witness testify to Brandt's professed motives but several witnesses corroborated Brandt's admissions as to her motives and reasons for setting the fire.

The circumstances surrounding how Ronnie Brandt died and the cause of death strongly support the conclusion that Carolyn Brandt administered to Ronnie an overdose of his prescribed anti-depressant, which caused drowsiness, in order to render him helpless before setting the mobile home afire. While Carolyn Brandt argues the circumstantial evidence equally supports the conclusion that Ronnie Brandt took a self-administered overdose before the fire and accidentally dropped a cigarette on some combustible item, unrefuted facts proved otherwise. The toxicologist testified that the victim had lethal amounts of venlafaxine in his system and that his stomach contained "crushed" fragments of the drug. Brandt's son-in-law testified that two or three days before the fire, Carolyn Brandt gave him a mortar and pestle and told him to "get rid of it" because "it had criminal evidence in it." Another witness who had been in the Brandts' mobile home the day before the fire testified that Carolyn Brandt gave Ronnie some food and urged him to eat it. When Ronnie refused the food and the witness asked for it, Carolyn replied "you don't want none." Two prescription bottles for venlafaxine HCL, one filled on March 18, 2003 and one the next day on March 19, 2003, were found in a bag in Carolyn Brandt's car. One of the bottles was empty. During the investigation Carolyn Brandt called an investigator in the case to ask for her medication back. Two witnesses testified to having observed Carolyn Brandt, a month before the fatal fire, put the contents of several pills in her husband's coffee or tea and serve it to him. Although Ronnie Brandt died of carbon monoxide poisoning, the toxicologist testified that the level of venlafaxine in his system could have been fatal if his body had more time to have absorbed it. This circumstantial evidence that Carolyn Brandt had the opportunity

to and had attempted to administer a disabling, if not fatal, dose of an anti-depressant drug to Ronnie Brandt before setting the mobile home afire, further corroborates the several witnesses to whom Brandt admitted setting the fire.

Additionally, the timing of when the fire broke out in relation to when Carolyn Brandt left her mobile home and arrived next door to her daughter's mobile home, together with Carolyn's reaction to hearing that her mobile home was on fire, are very incriminating circumstances. Brandt's daughter testified that approximately thirty minutes before the fire broke out she spoke with Ronnie by telephone and he sounded as if he had been asleep. When Carolyn Brandt came to her daughter's mobile home moments later, Carolyn announced in an unconcerned voice that her mobile home was on fire. About twenty minutes later a neighbor called to tell Carolyn about the fire, during which conversation Carolyn said, "Ronnie is in the house." After hanging up, Carolyn said, "why couldn't them people mind their own fucking business." When another neighbor called to report the fire to Carolyn, she simply responded, "Oh." Also, a friend of Brandt's daughter testified that later that night Brandt said, "If everybody keeps their fucking mouth shut, I won't get caught." Brandt's son-in-law also testified to having heard her make these remarks. Here, several witnesses testified to and corroborated Brandt's tacit admissions and Brandt's indifference and lack of concern to the fact that her home was burning with her husband inside. These additional well-corroborated facts merely add to the already overwhelming amount of incriminating evidence.

At trial, Carolyn Brandt denied she set the fire. She also denied making some of the incriminating statements to her daughter and neighbors. In an effort to show that the fire might have been accidental, witnesses testified that the living room of the trailer had paper, tissues, mail, newspapers, and other trash all over the floor. On different occasions, witnesses saw Ronnie Brandt fall asleep with a cigarette in his hand or his mouth, which would fall and burn

something or somebody and wake him up. One witness said it happened "[t]oo many times" that a cigarette would drop from his mouth while he slept. Brandt presented evidence concerning Ronnie Brandt's multiple medical problems, his taking numerous medications, that he suffered from depression, and had suicidal thoughts.

Despite Carolyn Brandt's evidence, the evidence proving her guilt is substantial and overwhelming: witnesses testified to statements she made before the fire concerning her desire to kill her husband and her need for insurance money; during the night of the fire she showed indifference to the fact that her trailer was burning down with her husband inside; after the fire, she admitted she started the fire to kill her husband and collect the insurance money from his death and the destruction of her trailer; Carolyn Brandt said she would not get caught if the neighbors would keep their "fucking mouths shut"; the fire investigator concluded that neither electrical appliances nor lightning caused the fire; Carolyn Brandt was corresponding with a convict and expressed a desire to live with him upon his release; in addition, in the months before the fire, Carolyn Brandt emptied the contents of pills into her husband's drinks on multiple occasions; the two most recent prescription bottles of venlafaxine, which were filled only two days apart, were found in her car after the fire; the fire broke out only a short time after she arrived at her daughter's mobile home from her home; and the toxicology expert testified that Ronnie Brandt had lethal amounts of venlafaxine in his bloodstream when he died.

CONCLUSION

We conclude that the evidence of guilt is overwhelming and any error of admitting the lit cigarette experiment results was harmless beyond a reasonable doubt. For these reasons, we affirm.

Affirmed.

Benton, J., dissenting.

I would hold that the admission of the evidence concerning the fire investigator's experiment was error. I also dissent from the majority's conclusion that the error was harmless. I would hold that the error was not harmless and, therefore, would reverse the convictions and remand for a new trial.

I.

"On appeal, we will reverse a trial court's decision to admit expert testimony if the court abused its discretion in doing so." Norfolk S. Ry. Co. v. Rogers, 270 Va. 468, 479, 621 S.E.2d 59, 65 (2005). Furthermore, the trial judge has no discretion to permit the jury to consider evidence that is inadmissible. See CSX Transp., Inc. v. Casale, 250 Va. 359, 367, 463 S.E.2d 445, 450 (1995). This is so "because 'admissibility of evidence depends not upon the discretion of the court but upon sound legal principles." Gray v. Rhoads, 268 Va. 81, 86, 597 S.E.2d 93, 96 (2004) (citation omitted).

It is a basic legal principle that "the admission of expert testimony is subject to certain fundamental requirements, including the requirement that the evidence be based on an adequate foundation." Keesee v. Donigan, 259 Va. 157, 161, 524 S.E.2d 645, 647 (2000). Thus, "expert testimony is inadmissible if it is founded on assumptions that have an insufficient factual basis." Id. at 161, 524 S.E.2d at 648; see also Norfolk S. Ry., 270 Va. at 479, 621 S.E.2d at 65 (holding that "whether [an] expert opinion was supported by an adequate factual foundation concerns the admissibility of evidence").

Applying a similar legal principle, the Supreme Court has held that "[r]esults of experiments are not admissible into evidence unless the tests were conducted under conditions which were the same or substantially similar in essential particulars to those existing at the time of the accident." Thorpe v. Commonwealth, 223 Va. 609, 613, 292 S.E.2d 323, 326 (1982). The

purpose of the "substantially similar" test is to give some degree of assurance that the jury, as fact finder, can reasonably conclude that a meaningful comparison exists between the experiment results and the situation to which the results are compared. The failure of the proponent of the evidence to show that the conditions of the tests replicate, in the same or a substantially similar manner, the conditions existing at the time of the event at issue is a "fail[ure] to lay a proper foundation for [the] expert's testimony." Runyon v. Geldner, 237 Va. 460, 464, 377 S.E.2d 456, 459 (1989).

In addition, when the expert's testimony establishes "[t]here were certain variables which he did not consider in arriving at his opinion," the trial judge must reject the experiment testimony. Grasty v. Tanner, 206 Va. 723, 727, 146 S.E.2d 252, 255 (1966). The jury, as the trier of fact, is entitled to know that the expert "consider[ed] all the variables bearing on the inferences to be drawn from the physical facts." Id.

The fire investigator testified that he examined the mobile home after the fire and excluded certain possible accidental causes, such as electrical malfunctions, home heating sources, and lightning strikes. Over the objection of Brandt's attorney, the trial judge permitted the fire investigator to testify about an experiment he conducted to determine whether a dropped cigarette started the fire.

In his testimony to the jury, the investigator described an experiment he conducted at his home and the results of placing a lit cigarette on each of twenty separate piles of clothes. The investigator testified that the tests were conducted in 38% humidity, whereas the outside humidity on the evening of the fire was near 100%. He also indicated that higher humidity on the night of the fire would have further impeded the fire igniting by accidental means. His experiment did not consider, however, the probable or approximate humidity inside the mobile home at the time of the fire.

The investigator explained that the clothes consisted of "socks, pants, shirts, jackets, all material types, including nylon, rayon, cotton, polyester." He did not specify whether each pile of clothes contained only a particular type of fabric or if multiple types of fabric comprised each pile. The Commonwealth did not demonstrate the relevance of the fact that the piles of clothes in the experiment contained different types of materials, because the evidence does not explain whether each pile contained a different type of material. No evidence showed that the clothing the investigator chose was the same or similar to the clothing in the mobile home. Furthermore, the evidence did not show which types of clothing and materials were at the source of the fire.

Additionally, the evidence showed that newspapers and other paper products were scattered on the floor of the mobile home. Although the investigator acknowledged that he saw newspapers on the floor, he did not test those materials to determine the "probability" that they would ignite after contact with a lit cigarette. The probable flammability of that type of material would have been a meaningful variable in calculating the likelihood that a lit cigarette ignited materials in the Brandt mobile home.

The expert's trial testimony was fundamentally flawed. The testimony that one pile in twenty, or 5%, ignited had the illusion of precision and scientific validity, when, in fact, the experiment was not at all precise or scientifically valid. The inspector testified that in conducting his tests he did not attempt to replicate the humidity level that existed in the home or account for the presence of paper. The evidence failed to prove that the types of materials used in the experiment were substantially similar to the clothing and other material even present in the mobile home, much less at the point of the fire's origin. Because many of the essential particulars were not accounted for, the jury could not logically or reasonably conclude from the test results the probability of a lit cigarette causing the fire.

In sum, the experiment did not replicate the conditions of the fire in a substantially similar manner and did not account for significant variables relating to the fire. See Thorpe, 223 Va. at 613, 292 S.E.2d at 326 (holding as inadmissible expert evidence of an experiment conducted under conditions not substantially similar to the conditions of the original accident); Grasty, 206 Va. at 727, 146 S.E.2d at 255 (holding that expert testimony was inadmissible because the expert did not consider all the variables). The experiment's results and the investigator's opinion were "founded upon assumptions that [had] no basis in fact." Vasquez v. Mabini, 269 Va. 155, 160, 606 S.E.2d 809, 811 (2005) (holding that expert testimony founded upon such assumptions "is not merely subject to refutation by cross-examination or by counter experts; it is inadmissible"). Due to these deficiencies, the testimony was inadmissible. The trial judge erred, therefore, in admitting it into evidence.

In addition, I believe the experiment evidence was inadmissible due to its confusing nature. Evidence must be excluded if its negative factors outweigh its probative value. Byrd v. Commonwealth, 30 Va. App. 371, 376, 517 S.E.2d 243, 245 (1999). A factor that "weigh[s] against the admission of relevant evidence [is] . . . the confusing nature of the evidence and the likelihood that it will mislead the jury." Id.

The lit cigarette experiment was intended as a recreation of a specific prior event that purported to yield the same result as occurred the night of the fire. Despite the considerable deficiencies with his experiment, the investigator concluded that the test results suggested that a dropped cigarette did not cause the fire. Indeed, he informed the jury of his conclusion that the fire was "intentionally set."

The majority asserts that this evidence did not establish that the fire could not have been caused accidentally. It is significant that the prosecutor argued in his closing statement to the jury that the investigator's testimony showed the fire was intentionally set. He asserted:

[The fire investigator] considered the possibility of a cigarette accidentally starting the fire. How did he do that, ladies and gentlemen? First of all, he didn't find any evidence of any sort of abandoned smoking materials in the area of the origin of the fire.

The temperature, he testified, was 57 degrees Fahrenheit. The humidity was 100 percent. It was moderate rain outside. That was important, if you remember, what Investigator Hines said. Igniting clothing with a cigarette in high humidity is difficult due to the high moisture content in the air.

Remember, he did 20 controlled experiments with different sorts of cloth material in less humid conditions. In 19 of those 20 situations, the clothing did not catch fire. The one time the clothing did catch fire, it took almost an hour for the fire to start. An hour far exceeds any sort of time frame we have in this case. If you remember, our time frames appeared at 8:30 to 9:00 o'clock.

By conducting these tests, observing physical evidence, Investigator Hines concluded the fire was not likely started by a cigarette accident. Investigator Hines concluded the fire was most likely incendiary in nature, or intentionally set.

This argument demonstrates that the prosecutor's purpose of offering such evidence was to enable the jury to conclude there was only a 5% probability that a dropped cigarette could have caused the fire and zero probability that one could have done so within the requisite thirty minute window. Thus, by positing that the evidence ruled out accidental causes, the prosecutor was asserting the fire was intentionally set.

Masquerading as scientific evidence, the expert testimony had the tendency to confuse and mislead the jury. Lacking the foundation necessary to render the scientific evidence reliable, the testimony's probative value was dramatically outweighed by its "confusing nature," and thus the evidence was inadmissible. See Byrd, 30 Va. App. at 376, 517 S.E.2d at 245 (holding that certain evidence was inadmissible because it "could be misunderstood by the jury and misapplied).

Convictions in criminal cases cannot be based on "inadmissible speculation." <u>Thorpe</u>, 223 Va. at 614, 292 S.E.2d at 326; <u>see also Dunn v. Commonwealth</u>, 222 Va. 704, 705-06, 284

S.E.2d 792, 793 (1981) (holding that the "verdict could have been based only upon speculation and conjecture and cannot be permitted to stand"). By not accounting for all of the significant variables or the conditions at the time and place of the fire, the evidence was unreliable and unprobative to the extent that any jury reliance on the opinion testimony could only result in speculation. Therefore, for all of the above reasons, I would hold that the results of the experiment and opinion testimony were inadmissible and that the trial judge erred by allowing them into evidence.

II.

The trial judge's erroneous admission of the investigator's testimony about his experiments was so prejudicial to Carolyn Brandt that we cannot reasonably conclude that it did not affect the verdict.

"[I]f one cannot say, with fair assurance, after pondering all that happened without stripping the erroneous action from the whole, that the judgment was not substantially swayed by the error, it is impossible to conclude that substantial rights were not affected. . . . If so, or if one is left in grave doubt, the conviction cannot stand."

Clay v. Commonwealth, 262 Va. 253, 260, 546 S.E.2d 728, 731-32 (2001) (quoting Kotteakos v. United States, 328 U.S. 750, 764-65 (1946)). The United States Supreme Court has held that "the principle of Kotteakos [means] that when an error's natural effect is to prejudice substantial rights and the court is in grave doubt about the harmlessness of that error, the error must be treated as if it had a 'substantial and injurious effect' on the verdict." O'Neal v. McAninch, 513 U.S. 432, 444 (1995). "The inquiry cannot be merely whether there was enough to support the result, apart from the phase affected by the error. It is rather, even so, whether the error itself had substantial influence. If so, or if one is left in grave doubt, the conviction cannot stand." Kotteakos, 328 U.S. at 765.

Brandt's husband died of carbon monoxide poisoning. Carbon monoxide is a toxic gas by-product of the incomplete burning of various objects. The evidence proved that his body was found in his mobile home residence, which was "very heavily involved in fire."

The Commonwealth's evidence in this case concerning the cause of the fire was purely circumstantial. The erroneously admitted testimony from the fire investigator bore directly on this issue of causation. Reversing a conviction in a case where expert testimony improperly eliminated an accidental cause of death, the Supreme Court held that "an opinion of a witness the judge has found to be an expert carries great weight with laymen" Bond v. Commonwealth, 226 Va. 534, 538, 311 S.E.2d 769, 772 (1984). When an "expert's opinion . . . may have been the decisive, if not the exclusive, factor in the jury's finding that death was the result of criminal conduct," the error is not harmless. Id. at 539-40, 311 S.E.2d at 772.

The majority suggests that allowing the fire investigator's testimony about his experiments was harmless error because the jury could have only interpreted the evidence as presenting one theory of events beyond a reasonable doubt: Brandt drugged her husband unconscious and set fire to their home in order to kill him. As support, the majority relies on the evidence of the drug venlafaxine in Brandt's husband's system, Brandt's correspondence with an inmate, and witnesses' testimony regarding Brandt's reactions to events and her statements about her husband and his death. At trial, Brandt challenged this interpretation of the evidence by presenting an alternative theory to the jury: Brandt's husband, suffering from depression and suicidal thoughts, ingested the venlafaxine intentionally, and he accidentally started the fire when he lost consciousness and dropped his lit cigarette. Brandt also denied making the statements attributed to her by the Commonwealth's witnesses, squarely raising issues of witness credibility for the jury to resolve.

This Court previously held that error was not harmless when the "[e]vidence presented at trial was circumstantial and the Commonwealth's case rested to a large extent on the credibility of witnesses." Conway v. Commonwealth, 12 Va. App. 711, 716-17, 407 S.E.2d 310, 313 (1991); see also Abunaaj v. Commonwealth, 28 Va. App. 47, 55-56, 502 S.E.2d 135, 139 (1998). That principle is applicable in this case. When the erroneously admitted expert testimony is excluded, the Commonwealth's evidence concerning the fire's causation consists, in large measure, of testimony by witnesses relating inculpatory statements attributed to Brandt. Brandt testified and denied making each of those statements. Thus, the resolution of this circumstantial case turned on the jury's assessment of these witnesses' credibility. For example, a witness testified that Brandt talked about using gasoline to make a fire burn faster. Brandt denied making such a statement. The Commonwealth's witnesses, the fire investigators, testified that they found no evidence that accelerants were used to cause the fire, tending to support Brandt's testimony in this instance. A fire investigator also testified that the residence was an old trailer that is more susceptible to burning.

The erroneously admitted evidence was offered to permit the jury to conclude that scientific experiments established that a dropped cigarette was unlikely to have caused the fire.

This erroneously admitted testimony by an expert adversely impacted the jury's consideration of Brandt's testimony and other evidence suggesting that Brandt's husband accidentally caused the fire.

The evidence proved without contradiction that Brandt's husband was a "chronic" and "heavy smoker." Several witnesses testified that he often fell asleep on the sofa while smoking. One witness testified that his cigarette "would fall or someone would wake him" to avoid a cigarette burn and that on other occasions his falling cigarette would "burn something up." A witness testified that she had barred Brandt's husband from smoking in her house "because he

caught [her] bed on fire twice." Another testified she had forbidden Brandt's husband to smoke in her house because "he got kind of drowsy" when smoking.

Brandt's husband was taking a variety of prescription drugs, including Effexor, which the Commonwealth's expert testified is "the same thing as venlafaxine" and can cause sleepiness and seizures. Indeed, Brandt's husband had told his doctor he was "too sedated with Effexor" in the daytime, "only sleeping approximately 2 hours per night," and having seizures. Two months before the fire, the doctor reported that Brandt's husband "gets very confused when he wakes up from his loss of consciousness," and he noted Brandt's husband had experienced a loss of control of bodily functions and a marked loss of weight. One month before the fire, the doctor reported that Brandt's husband had "worsening anxiety," was receiving treatment for seizures, was having blood glucose levels in excess of 300, and "likely will have elevation of worsening anxiety after cath[erization]," which had been prescribed for his abnormal cardiac condition. Simply put, Brandt's husband's condition was deteriorating in the weeks prior to the fire and his risk of losing consciousness was increasing due to hyperglycemia and increased stress.

This undisputed medical evidence tends to establish that Brandt's husband, a chronic and heavy smoker, was at great risk of losing consciousness while smoking, having anxiety attacks, and waking from his sleep in a state of confusion. Yet, the jury could have discounted these circumstances as a cause of the fire because of the improperly admitted evidence. Indeed, during closing argument to the jury, the prosecutor recounted the experiments the fire investigator conducted, and the prosecutor said, "By conducting these tests [and] observing physical evidence, [the] Investigator . . . concluded the fire was not likely started by a cigarette accident . . . [and also] concluded the fire was most likely . . . intentionally set." In the absence of this erroneously admitted "scientific" evidence the jury likely would have given greater weight to the evidence that tended to show that Brandt's husband's cigarette was the cause of the fire.

The evidence established that Brandt's husband had a potentially fatal amount of the drug venlafaxine in his system at the time of his death. His stomach contained the equivalent of three to five venlafaxine pills, and his blood contained the estimated equivalent of thirty to thirty-five of the pills. The majority opinion suggests the jury could conclude Brandt was the cause of the fire because she may have been the source of the venlafaxine in her husband's system. However, the circumstantial evidence also suggested the alternative that Brandt's husband intentionally ingested the venlafaxine.

Brandt's husband suffered from a complex medical condition. The doctor testified that Brandt's husband suffered from "Depression, Diabetes, Hypertension, Knee pain, Coronary artery disease . . . major depressive disorder. Alcohol abuse." Brandt's husband took twenty-five to thirty different kinds of medication each night. Brandt's husband's doctor had prescribed 225 milligrams of venlafaxine, three 75 milligram capsules, per day for his depression. One of the Commonwealth's expert witnesses expressed some concern about the discrepancy between the high level of venlafaxine in Brandt's husband's blood and the relatively small amount in his stomach. She testified, however, that he could have inhaled or snorted the venlafaxine in powder form, explaining "people do that." This testimony is consistent with the testimony of Brandt's husband's doctor who said that Brandt's husband had revealed to him that "he would now and then think about suicide." He explained that Brandt's husband had reported seizures, hallucinations, and an occasional loss of consciousness. This doctor's report also disclosed that these events coincided with Brandt's husband having "episodic thoughts of wanting to be dead."

We cannot say with any confidence that the jury believed Brandt was the cause of the venlafaxine in her husband's stomach (approximately the dosage prescribed for one day) or the unusual amount in his blood, which he could have ingested in a suicide attempt. The erroneously

admitted evidence tended to suggest to the jury, however, that the evidence of Brandt's husband's illness was irrelevant because even if he lost consciousness and dropped his cigarette that event could not have caused the fire. As the majority notes, the test for harmless error in this case is not whether the evidence was sufficient to prove the defendant's guilt. The question this Court must ask is whether we can "say, with fair assurance, . . . that the judgment was not substantially swayed by the error." Clay, 262 Va. at 260, 546 S.E.2d at 731-32. The trial judge erroneously allowed expert testimony on the likely cause of the fire, which, in turn, impacted the critical issue of witness credibility. I do not believe that we can say with confidence that the improper evidence did not substantially affect the jury's decision.

For these reasons, I would reverse the arson and murder convictions and remand for a new trial.