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STATE OF CONNECTICUT v. TODD RIZZO (SC 17527)

Rogers, C. J., and Norcott, Palmer, Zarella, McLachlan, Vertefeuille and DiPentima, Js.*

Argued October 22, 2010-officially released November 29, 2011

Judith L. Borman and Ann M. Parrent, assistant public defenders, with whom, on the brief, was Jennifer L. Bourn, deputy assistant public defender, for the appellant (defendant).

Harry Weller, senior assistant state's attorney, with whom was *John A. Connelly*, former state's attorney, for the appellee (state).

Opinion

ROGERS, C. J. The defendant, Todd Rizzo, appeals from the judgment rendered by a three judge panel, following a penalty phase hearing held pursuant to General Statutes (Rev. to 1997) § 53a-46a,¹ sentencing him to death for the murder of a thirteen year old victim, Stanley G. Edwards. The defendant claims on appeal that: (1) his waiver of a jury for the penalty phase hearing was constitutionally invalid; (2) the presiding judge at the penalty phase hearing should have disqualified himself due to bias; (3) the absence of a specific intent requirement in the aggravating factor found by the panel renders his death sentence unconstitutional; (4) the panel's finding of an aggravating factor lacks evidentiary support; (5) the method of establishing mitigating factors pursuant to § 53a-46a (d) violates the eighth amendment to the United States constitution; (6) the panel's finding of a single cumulative mitigating factor but no individual mitigating factors was improper; (7) the panel improperly weighed aggravating and mitigating factors and determined that death was the appropriate punishment; (8) the death sentence was the product of passion, prejudice and other arbitrary factors; and (9) the death penalty is a per se violation of the state constitution. We disagree with each of these claims and, accordingly, affirm the judgment sentencing the defendant to death.

The basic facts and procedural history of the case are as follows. In the early evening hours of September 30, 1997, the defendant lured the young victim into the defendant's backyard under false pretenses and, thereafter, bludgeoned the victim to death with a small sledgehammer. The defendant initially attempted to conceal his crime, but the following day, when confronted with powerful evidence of his guilt, he confessed to murdering the victim. The defendant pleaded guilty to murder in violation of General Statutes § 53a-54a (a) and capital felony in violation of General Statutes (Rev. to 1997) § 53a-54b (9) and, following a § 53a-46a penalty phase that was tried to a jury, he was sentenced to death. State v. Rizzo, 266 Conn. 171, 175-76, 833 A.2d 363 (2003). On appeal, this court reversed the judgment as to the death sentence after concluding that the jury had not been instructed properly as to a legal standard to be employed in its imposition;² id., 243; and that the prosecutor had engaged in serious impropriety during his closing argument. Id., 243-44. The case was remanded for a new penalty phase hearing, during which the defendant waived his right to have a jury determine his sentence, instead opting for sentencing by a three judge panel. After the penalty phase hearing, the panel again sentenced the defendant to death. This appeal followed. Additional facts and procedural history will be provided where pertinent to the claims raised.

The defendant claims first that his waiver of a jury for the penalty phase proceedings was constitutionally invalid.³ He argues specifically that his decision to forgo a jury determination of whether death was the appropriate penalty, and to opt instead for sentencing by a three judge panel; see General Statutes (Rev. to 1997) § 53a-46a (b) (3); General Statutes §§ 53a-45 and 54-82;⁴ was not knowing, intelligent and voluntary. According to the defendant, an examination of the totality of the circumstances surrounding his waiver leads to the conclusion that it was ineffective. We disagree.

The following additional procedural history is relevant to this claim. Jury selection for the defendant's penalty phase proceedings began on March 15, 2005. During jury selection and throughout the penalty phase proceedings, the defendant was represented by Ronald Gold and David Channing, both of whom were experienced public defenders. As of April 15, 2005, the twentieth day of voir dire proceedings and a Friday, eight jurors had been chosen. Late that day, after the trial court, O'Keefe, J., had dismissed the current panel of prospective jurors and while the court was preparing to adjourn the proceedings until the following Monday, the defendant requested permission to waive his right to a sentencing jury. Initially, Gold indicated to the trial court that some issue had arisen, and requested a recess to confer with the defendant. The trial court granted Gold's request, encouraging him to "[t]ake [his] time." When the defendant and Gold returned, the following discussion ensued:

"[Gold]: Your Honor, [the defendant] wanted to address the court about something.

"The Court: I don't have any problem with that. What do you want to tell me \ldots ?

"The Defendant: Your Honor, over the past few weeks since we've begun selecting a jury, my mind has changed from back in [1999] when I elected a three judge panel, it might have been during the probable cause hearing or the arraignment or my guilty plea, when I originally elected—

"The Court: A jury.

"The Defendant: A jury.

"The Court: You elected a jury.

"The Defendant: A jury. I reviewed the law and my lawyers presented me with a lot of information that showed that while I'm, you know, if you're arrested for a crime, you're guaranteed a jury trial by jury. But there are conditions, if a defendant wants to elect a three judge panel, and I understand that it is the consent of the state and the approval of the court, and in this situation I haven't prepared any motion and I just wanted to put on the record that I wanted to-

"The Court: You are thinking about changing your election to a three judge panel?

"The Defendant: I have—right. I have no right to do so, but what I—

"The Court: You are thinking about it.

"The Defendant: Yes. I wanted to find out if-

"The Court: If it could be done.

"The Defendant: If it can be done only in the sense, if the state opposes, it's a dead issue. I fully accept a jury. I had a jury before. A jury can be fair, but I feel it's in my best interest this time around to have three judges review the evidence for what it is.

"The Court: Okay. That's a surprise to me, what you said. I'll consider it. There's nothing before me. There's nothing formal before me. So you think about it over the weekend, talk to your lawyers. Tell me how you feel on Monday. And, [state's attorney].

"[State's Attorney]: This is the first. I'm also surprised, Your Honor, but I will think about it over the weekend.

"The Court: Yeah, how's that?

"[State's Attorney]: Just to let [the defendant] know, that the state is not foreclosed to the possibility of a three judge panel.

"The Court: Given my involvement so far in the case, I would not be part of the—I wouldn't be one of the three judges. That probably wouldn't be a good idea, would it?

"[Gold]: I haven't thought about that, Your Honor.

"The Court: We don't need to cross that bridge right at this point. But—okay. You heard what [the state's attorney] said.

"The Defendant: I appreciate you taking the time to hear my request.

"The Court: No problem.

"The Defendant: Thank you, sir.

"The Court: Okay. We're adjourned."

Before court reconvened the following Monday, the defendant and his two attorneys met and discussed the defendant's options for the penalty phase proceedings.⁵ Upon returning to the courtroom, defense counsel indicated that they disagreed with the defendant's decision to waive a jury, but had been unable to dissuade him from doing so. After the state consented to the defendant's election of a three judge panel, the trial court asked the defendant if he had any questions, to which the defendant replied: "I just wanted to put on the record, Your Honor, that the law has been explained

to me by both of my lawyers, very thoroughly." The trial court then referred the defendant to a different judge to be canvassed as to his jury waiver.

At the outset of the canvass proceedings, defense counsel notified the trial court that they both had "explained the various ramifications of the decision [to the defendant] and [had] recommended against it." The trial court, *Iannotti*, *J.*, proceeded to canvass the defendant:

"The Court: Now . . . it's my understanding that since some time on Friday afternoon or Friday morning, up until now, that you had indicated to your attorneys that you were contemplating changing your election from a [twelve] person jury and electing a three judge court—a three judge court, three judge panel. Is that correct?

"[The Defendant]: Yes, sir.

"The Court: Now, have you had enough time to talk to your lawyers about that change, sir?

"[The Defendant]: Yes, sir. Judge O'Keefe granted us much time this morning to—

"The Court: Okay.

"[The Defendant]: —discuss it.

"The Court: And you're obviously, sir, aware that your lawyers are recommending to you not to do this?

"[The Defendant]: Yes, sir. They've thoroughly explained the differences between a jury trial and a court trial and—

"The Court: Tell me what they explained to you . . .

"[The Defendant]: Well, they explained to me how selecting a jury, considering the evidence, and it's different, it's different. It's different for the defense to put on a case for [twelve] people compared to [twelve] experienced judges.

"The Court: Three experienced judges.

"[The Defendant]: Did I say [twelve]?

"The Court: Yes, sir.

"[The Defendant]: I meant three, sir.

"The Court: Yes, sir.

"[The Defendant]: And they would prefer and I don't really—I'm not sure how much I'm allowed to say.

"The Court: Well, you don't have to say anything about the conversations you have with your lawyers. I just wanted to know the understanding, that you understand what you're doing.

"[The Defendant]: Right. They understand—they—if they are putting on this trial and to put on my best defense, they feel that a-

"The Court: They feel they can do it better with a [twelve] person jury than they can with a three judge panel.

"[The Defendant]: Yes, sir.

"The Court: Is that what they told you?

"[The Defendant]: Yes, sir.

"The Court: Now, here's the important part. Okay? Once you change this election here today, okay, from a jury to a three judge panel, you can't change your mind back again. Okay?

"That election ends here and today, and the only thing that will occur after today is phone calls will be made and the chief [court administrator] of this state will appoint a three judge panel to your case, and your matter will be heard in front of that three judge panel. Do you understand that?

"[The Defendant]: Yes, sir.

"The Court: So once that begins, once that process begins or actually not even once that process begins. As soon as I accept your election here today, you can't go into the back room and talk to [defense counsel] and say, you know, geez, maybe I, maybe I should have the jury. Okay? You cannot change your mind back again. Do you understand that?

"[The Defendant]: Yes, sir.

"The Court: If you had originally elected a—the other way, you could have changed—once you elect a court trial, it's over. Do you understand that?

"[The Defendant]: Yes, sir.

"The Court: You can go from a jury to a court, you can't go from a court to a jury.

"[The Defendant]: Yes, sir. That's exactly what they explained to me this morning, very thoroughly.

"The Court: All right. And I'm sure what they also explained to you is that when you have a [twelve] person jury in a death penalty phase case like this, is that it would have to be unanimous with those [twelve] people. Right?

"[The Defendant]: Yes, sir.

"The Court: And my guess is that their thought process was, you know, they probably said to you . . . we think we have a better chance with a [twelve] person jury here than we do with a three judge panel because with a three judge panel of experienced judges, it's the three of them versus the [twelve] person jury that they would have to convince. Do you understand that?

"[The Defendant]: Yes, sir. I was told that it's not unanimous with three judges, it's—it could be"The Court: Two out of three would be enough. But not—obviously, with the jury it has to be unanimous. Do you understand that?

"[The Defendant]: Yes, sir.

"The Court: All right. So they've explained all of that to you thoroughly.

"[The Defendant]: Yes, sir.

"The Court: Right, Mr. Gold?

"[Gold]: Yes.

"The Court: Right, Mr. Channing?

"[Channing]: May I have one moment with him, Your Honor?

"The Court: Sure.

"[Channing]: Thank you, Your Honor. Yes, we explained what he said we explained.

"The Court: Is that right?

"[The Defendant]: Yes, sir. In writing and verbally they told me.

"The Court: All right. And knowing all that, it is still your decision here today that you want to change from a jury to a three judge panel?

"[The Defendant]: Yes, sir. I do understand their position, but I'm certain that I prefer a court trial.

"The Court: Do you have any other questions of your lawyer[s]?

"[The Defendant]: I feel very satisfied that I've been given every bit of information to make this decision, and I have no further questions to my lawyers at this time that's going to change my mind tomorrow."

The trial court thereafter asked the defendant whether he had had enough time to make his decision, and the defendant replied, "Yes, sir. Plenty of time." When the court asked him again whether he needed more time, the defendant responded, "No, sir. I feel very satisfied." The colloquy continued:

"The Court: So you're confident that this is the way you want to go, and you're confident you've discussed everything you need [to] discuss with your attorneys?

"[The Defendant]: Yes, sir.

"The Court: And you're confident that you don't need any additional time to make this decision. Is that correct?

"[The Defendant]: That is correct."

After some discussion with the state's attorney regarding the fact that the defendant, in an earlier penalty phase proceeding, had elected to be tried by a jury, the trial court queried the defendant further: "The Court: . . . [S]o you have been through this process before, and you have had a jury on this before, so you have a complete understanding how that works. Is that a fair statement . . . ?

"[The Defendant]: Yes, it is, Your Honor.

"The Court: And another good point actually brought up by [the state's attorney] is that you've had a lot of time to think about this, you've had a lot of time to talk to your lawyers, but is this your own decision based on your own free will? Are you doing this knowingly? Are you doing this voluntarily? Did anybody pressure you, and I don't mean your lawyers because clearly they have not, but anybody pressure you from without to change your election here? Is there any influence upon you other than your own decision-making process that has led you to make this decision today?

"[The Defendant]: No, Your Honor. This has been knowingly and it's definitely been voluntary because there's—

"The Court: Were you coerced by anybody?

"[The Defendant]: No, not even in the prison. I've had no discussions with this, with even any of the escort officers.

"The Court: Did anybody suggest it to you?

"[The Defendant]: No, sir. I thought this was my decision over the past few weeks and I voiced my opinion last week to my lawyers.

"The Court: All right. So there [were] no outside influences to change your mind from a jury to a court election whatsoever. It was thought up by yourself, it was brought to your lawyers' attention by yourself, was thoroughly discussed with your lawyers by yourself, and again, your lawyers told you not to do this, but regardless of that after having fully talked it out with your lawyers, you have remained adamant that this is a decision that you knowingly, voluntarily, and in complete knowledge wish to make?

"[The Defendant]: Yes, sir. I initiated this."

The trial court continued to inquire:

"The Court: . . . [A]t this time or throughout this decision-making process, as of right now, today, are you under the influence of any alcohol, medication, or drugs of any kind?

"[The Defendant]: I take no medication, Your Honor, and no alcohol, nothing.

"The Court: All right. So your decision making is clear of any outside influences whatsoever with regard to that?

"[The Defendant]: Yes, sir."

The trial court then found that the defendant's decision to revoke his jury election and to proceed before a three judge panel was knowingly and voluntarily made with the assistance of his attorneys. The court further found that the defendant was not under the influence of any alcohol, drugs or medication of any kind and that he had had at least seventy-two hours to contemplate his decision. Accordingly, the trial court accepted and approved the defendant's waiver of his right to a jury and his election to be sentenced by a three judge panel. Following the penalty phase hearing, the three judge panel sentenced the defendant to death.

The defendant now claims that his waiver of a jury for the sentencing proceedings was constitutionally inadequate because the trial court failed to ensure that it was knowing, voluntary and intelligent. According to the defendant, the totality of the circumstances demonstrates that his waiver of the constitutional right to have a jury decide his fate was invalid. Specifically, he points to the timing and nature of his incarceration and the atmosphere during the voir dire proceedings preceding his waiver. The defendant also claims that his waiver was defective in the absence of specific advice from the trial court as to the differences between court and jury proceedings, and that the court should have inquired further about his reasons for waiving a jury. We are not persuaded.⁶

Because the defendant did not raise this claim during the penalty phase proceedings, it is not preserved for purposes of appellate review.⁷ Nevertheless, a claim that a trial court has failed to ensure a proper waiver of the right to a jury is of constitutional magnitude and alleges a violation of fundamental rights. See *State* v. *Woods*, 297 Conn. 569, 578, 4 A.3d 236 (2010); *State* v. *Ouellette*, 271 Conn. 740, 748 n.14, 859 A.2d 907 (2004). Because there is an adequate record of the defendant's waiver, we review his claim within the framework of *State* v. *Golding*, 213 Conn. 233, 567 A.2d 823 (1989).⁸ We conclude, however, that the defendant has failed to establish that a constitutional violation exists and deprived him of a fair trial.⁹

We begin with general principles. A defendant charged with a felony possesses a constitutional right to be tried by a jury, and that right extends to the determination of aggravating factors in the sentencing phase of a death penalty prosecution. See *Ring* v. *Arizona*, 536 U.S. 584, 609, 122 S. Ct. 2428, 153 L. Ed. 2d 556 (2002). Nevertheless, the right to a jury trial, like many important constitutional rights held by an accused, properly may be waived.¹⁰ See *Adams* v. *United States ex rel. McCann*, 317 U.S. 269, 275, 63 S. Ct. 236, 87 L. Ed. 268 (1942) (approving waiver of jury trial by unrepresented felony defendant, "in the exercise of a free and intelligent choice, and with the considered approval of the court"); *Patton* v. *United States*,

281 U.S. 276, 312, 50 S. Ct. 253, 74 L. Ed. 854 (1930) (permitting waiver of jury for trial of felony charges upon, inter alia, defendant's "express and intelligent consent"). Likewise, a defendant who has pleaded guilty to, or has been found guilty of, a capital offense in Connecticut may choose to relinquish his right to have a jury determine his punishment, with the consent of the prosecution and approval of the trial court. See General Statutes (Rev. to 1997) § 53a-46a (b) (3); see also General Statutes §§ 53a-45 and 54-82.¹¹

The question to be answered, as in other instances of waiver, is whether the defendant's choice to forsake sentencing by a jury, and to opt for a penalty phase proceeding before a three judge panel, was knowing, voluntary and intelligent. State v. Gore, 288 Conn. 770, 776, 955 A.2d 1 (2008). "Relying on the standard articulated in Johnson v. Zerbst, 304 U.S. 458, 464, 58 S. Ct. 1019, 82 L. Ed. 1461 (1938) [for waiver of the right to the assistance of counsel], we have adopted the definition of a valid waiver of a constitutional right as the intentional relinquishment or abandonment of a known right. . . . This strict standard precludes a court from presuming a waiver of the right to a trial by jury from a silent record. . . . In determining whether this strict standard has been met, a court must inquire into the totality of the circumstances of each case." (Internal quotation marks omitted.) State v. Gore, supra, 776. We must review the entire record and determine whether it "furnishes sufficient assurance of a constitutionally valid waiver of the right to a jury trial." Id., 776–77. Our inquiry is flexible, with the result turning on "the particular facts and circumstances surrounding [each] case, including the background, experience, and conduct of the accused." (Internal quotation marks omitted.) Id., 777. Finally, we indulge all reasonable presumptions against the waiver of fundamental constitutional rights and, if the record is silent, will not presume acquiescence in their loss.¹² Id. "[W]hether a defendant has effectively waived his federal constitutional [jury] rights in a proceeding is ultimately [a] legal question" subject to de novo review, although we defer to the trial court's subsidiary factual findings unless they are clearly erroneous. (Internal quotation marks omitted.) United States v. Carmenate, 544 F.3d 105, 107 (2d Cir.), cert. denied, 555 U.S. 1019, 129 S. Ct. 586, 172 L. Ed. 2d 442 (2008).

Our review of the record and careful consideration of the totality of the circumstances convince us that the defendant's waiver of a sentencing jury must be upheld. To begin, "there is no evidence to suggest that the defendant was not of ordinary intelligence or educational background"; (internal quotation marks omitted) *State* v. *Ouellette*, supra, 271 Conn. 758; or that he lacked meaningful life experience. To the contrary, the defendant's personal characteristics suggest a valid waiver. At the time of the sentencing proceedings, the defendant was twenty-six years old, a high school graduate, and had several years of steady employment history.¹³ Compare, e.g., State v. Cobb, 251 Conn. 285, 372, 743 A.2d 1 (1999) (upholding validity of jury waiver where, inter alia, defendant was twenty-nine years old, high school graduate, had some military training and was employed at time of arrest), cert. denied, 531 U.S. 841, 121 S. Ct. 106, 148 L. Ed. 2d 64 (2000), State v. Shockley, 188 Conn. 697, 707-708, 453 A.2d 441 (1982) (upholding validity of jury waiver where, inter alia, defendant was twenty-three years old at time of trial and had completed two years of high school), and State v. Smith, 100 Conn. App. 313, 324, 917 A.2d 1017 (upholding validity of jury waiver where, inter alia, defendant had received general equivalency diploma while incarcerated), cert. denied, 282 Conn. 920, 925 A.2d 1102 (2007).

Additionally, because the defendant previously had been sentenced to death by a jury, he had particularly relevant personal experience with the criminal justice system, which the trial court properly considered in assessing his waiver. See Parke v. Raley, 506 U.S. 20, 37, 113 S. Ct. 517, 121 L. Ed. 2d 391 (1992) ("evidence of a defendant's prior experience with the criminal justice system [is] relevant to the question whether he knowingly waived constitutional rights"); see also State v. Cobb, supra, 251 Conn. 372 (upholding validity of jury waiver where, inter alia, defendant had been advised of right to jury trial in connection with other charges); People v. Smith, 176 Ill. 2d 217, 227, 680 N.E.2d 291 (finding it "significant," for purposes of finding valid jury waiver in second capital sentencing hearing, that "defendant had originally been convicted of murder and sentenced to death by a jury, and thus was familiar with the jury's function in a capital sentencing hearing"), cert. denied, 522 U.S. 920, 118 S. Ct. 311, 139 L. Ed. 2d 241 (1997); People v. Albanese, 104 Ill. 2d 504, 536, 473 N.E.2d 1246 (1984) (noting, in upholding jury waiver for capital sentencing hearing, that defendant recently "had been convicted of murder and sentenced to death by another jury . . . on a related indictment and so became familiar with the jury's function at the sentencing hearing"), cert. denied, 471 U.S. 1044, 105 S. Ct. 2061, 85 L. Ed. 2d 335 (1985). Here, the defendant responded affirmatively to the trial court's query: "[S]o you have been through this process before, and you have had a [penalty phase] jury . . . before, so you have a complete understanding [of] how that works. Is that a fair statement . . . ?" The trial court properly relied on the defendant's assurance.

Next, the record clearly reveals that the defendant, in waiving his right to a sentencing jury, acted of his own volition after considerable reflection and after he had ample time to confer with defense counsel and to evaluate his decision. As a result, he possessed an informed awareness of the nature of the right he was waiving, and he expressed his desire to proceed with a three judge panel repeatedly and emphatically. Specifically, the defendant himself initiated waiver proceedings after pondering the option for a "few weeks¹¹ At that time, he stated that he had reviewed the relevant law, and he demonstrated an accurate understanding of the statutory requirements for a waiver, namely, the consent of the state and the approval of the court. See General Statutes (Rev. to 1997) § 53a-46a (b) (3). The trial court gave the defendant an additional weekend to mull over the decision and most of Monday morning to confer with defense counsel. Before and during his canvass, the defendant repeatedly stated that the differences between a court trial and a jury trial had been explained to him thoroughly by his counsel, citing some examples, and he confirmed numerous times that he had had adequate time in which to consult with his attorneys and make his decision.¹⁵ Additionally, the trial court explicitly advised the defendant that a twelve person jury would need to agree unanimously to impose the death penalty, whereas only two votes from a three judge panel would suffice. Both of the defendant's counsel also stated on the record that they had explained the relevant law to the defendant. The defendant stated variously that he was "certain that [he] prefer[red] a court trial," that he was "confident" that was the way he wished to proceed and that he was "adamant" about his decision.

Under analogous circumstances, we regularly have rejected claims of invalid jury waivers. See, e.g., State v. Woods, supra, 297 Conn. 586 (defendant's statements "were appropriate and demonstrated that he understood his rights and the court's questions," he "confirmed that he wished to be tried by a three judge court, that he had spoken with defense counsel to discuss this decision, and had an adequate opportunity to do so, that defense counsel had spoken with him about all the issues and possibilities associated with his decision, and that he was sure of his decision to be tried by a three judge court" and defense counsel agreed with defendant's statements); State v. Ouellette, supra, 271 Conn. 758 (defendant represented by counsel, advised twice of right to jury in open court and both times affirmatively stated that he understood he was giving up right to trial by jury); State v. Williams, 205 Conn. 456, 462, 534 A.2d 230 (1987) (after consulting with counsel, defendant "vigorously and knowingly persisted in articulating a preference for a court trial"); State v. Marino, 190 Conn. 639, 645, 462 A.2d 1021 (1983) (concluding it is reasonable to infer jury waiver "from the free expression by a defendant of his election of a nonjury trial especially where he is represented by counsel"); see also State v. Tocco, 120 Conn. App. 768, 780-81, 993 A.2d 989 (defendant responded to court in "intelligent and courteous manner," indicated that "he carefully had considered the issue and that he was certain of his decision" and gave "immediate and unequivocal replies to the court's inquiries"), cert. denied, 297 Conn. 917, 996 A.2d 279 (2010). In sum, in the present case, it cannot "fairly be said that the record presents a picture of a defendant bewildered by court processes strange and unfamiliar to him"; (internal quotation marks omitted) *State* v. *Shockley*, supra, 188 Conn. 708; or one "intimidated [or] confused by the process." *State* v. *Cobb*, supra, 251 Conn. 373.

Finally, in response to the trial court's questioning, the defendant confirmed unequivocally that he was acting of his own free will, that he was not under the influence of any intoxicating substances and that his waiver of his right to a jury was not a product of coercion or pressure from any outside influences. Despite these assurances, the defendant on appeal urges us to conclude that a variety of circumstances existing prior to his jury waiver effectively had rendered him despondent, desperate to reach the conclusion of the penalty phase proceedings and indifferent to his fate, thereby making his waiver the involuntary product of irrational thinking. Our careful review of the record compels us, however, to reject this argument as unsupported and entirely speculative.¹⁶ In short, because this claim is not preserved, there simply is no evidence in the record that the defendant felt as he now claims he did or that his jury waiver was motivated by those purported feelings. In fact, as we have explained, the record is decidedly to the contrary. See Spann v. State, 985 So. 2d 1059, 1072 (Fla. 2008) (rejecting capital defendant's claim that his depression rendered his penalty phase jury waiver invalid where record contained no contemporaneous evidence of depression); State v. Eley, 77 Ohio St. 3d 174, 182, 672 N.E.2d 640 (1996) (rejecting capital defendant's "bald assertion that he is so mentally challenged as to be incapable of giving a valid [jury] waiver" because it was "not supported in the record"), cert. denied, 521 U.S. 1124, 117 S. Ct. 2522, 138 L. Ed. 2d 1023 (1997); see also People v. McLaurin, 184 Ill. 2d 58, 95, 703 N.E.2d 11 (1998) (rejecting as "speculation" capital defendant's claim that he was forced to waive jury to obtain continuance where record did not support claim and neither counsel nor defendant had complained of coercion), cert. denied, 526 U.S. 1091, 119 S. Ct. 1506, 143 L. Ed. 2d 659 (1999).

The defendant also argues that the trial court's canvass, although extensive, was insufficient to ensure a knowing, voluntary and intelligent jury waiver. Specifically, he complains that the court was required to advise him that juries are better equipped than judges to make moral judgments; about the various possibilities that could ensue in the event of a hung jury,¹⁷ and that a panel of judges, unlike a jury, would be aware of his previous death sentence, this court's opinion in *State* v. *Rizzo*, supra, 266 Conn. 171, and the results of a brain imaging test that the court earlier had permitted the defendant to pursue.¹⁸

The United States Supreme Court has never held that a defendant, when waiving the right to a jury, constitutionally is entitled to be canvassed by the trial court, let alone to require a specifically formulated canvass.¹⁹ See United States v. Carmenate, supra, 544 F.3d 108. Nevertheless, lower courts, both state and federal, and commentators wisely have deemed a canvass to be the better practice for ensuring the validity of a waiver.²⁰ See State v. Gore, supra, 288 Conn. 784-87 and nn.14, 16 and 17. Recently, this court agreed. In State v. Gore, supra, 777–78, in which we held, for the first time, that a criminal defendant personally and affirmatively must waive his right to a jury trial on the record, we also took the opportunity to exercise our supervisory authority prospectively to require that trial courts, in cases in which there is no written waiver of that right, canvass the defendant to ensure that his choice is made knowingly, intelligently and voluntarily.²¹ After surveying extensively the requirements for valid jury waivers in other jurisdictions, we concluded that, "in the absence of a signed written waiver by the defendant, the trial court should engage in a brief canvass of the defendant" (Emphasis added.) Id., 787–88. "This canvass need not be overly detailed or extensive, but it should be sufficient to allow the trial court to obtain assurance that the defendant: (1) understands that he or she personally has the right to a jury trial; (2) understands that he or she possesses the authority to give up or waive the right to a jury trial; and (3) voluntarily has chosen to waive the right to a jury trial and to elect a court trial." (Emphasis added.) Id., 788–89. Moreover, we emphasized, "[i]t is not necessary that the canvass required for a jury trial waiver be as extensive as the canvass constitutionally required for a valid guilty plea," because the latter necessarily involves the forfeiture of a greater number of constitutional rights.²² Id., 789 n.18. Although this holding is to be applied prospectively only,²³ we consider it useful in determining whether the canvass provided to the defendant was adequately detailed.24

Because the United States Supreme Court never has held that a canvass is required for a valid waiver of the right to a jury, it necessarily has not prescribed the contents of a canvass. In other contexts, however, that court has explained: "the law ordinarily considers a waiver knowing, intelligent, and sufficiently aware if the defendant fully understands the nature of the right and how it would likely apply in general in the circumstances-even though the defendant may not know the specific detailed consequences of invoking it." (Emphasis in original.) United States v. Ruiz, 536 U.S. 622, 629, 122 S. Ct. 2450, 153 L. Ed. 2d 586 (2002); id. (waiver of rights attendant to guilty plea). Thus, the United States Supreme Court repeatedly has rejected challenges to the validity of guilty pleas, with the concomitant waiver of multiple constitutional rights, based on claims that defendants harbored "various forms of misapprehension²⁵ Id., 630. In short, constitutional requirements may be satisfied even though a defendant "lacked a full and complete appreciation of all of the consequences flowing from his waiver" (Internal quotation marks omitted.) *Iowa* v. *Tovar*, 541 U.S. 77, 92, 124 S. Ct. 1379, 158 L. Ed. 2d 209 (2004) (right to counsel); see also *Patterson* v. *Illinois*, 487 U.S. 285, 294, 108 S. Ct. 2389, 101 L. Ed. 2d 261 (1988) (same).

Consistent with the foregoing, this court and others have rejected claims that an otherwise valid waiver of the right to a jury is undermined by the trial court's failure to include a specific item of information in its canvass. For example, in *State* v. *Cobb*, supra, 251 Conn. 374–75, we rejected the defendant's claim that the trial court's failure to inquire about his understanding of the process of juror selection and voir dire, or its failure to advise him that a three judge panel, unlike a jury, likely would become aware of inadmissible and prejudicial information about the defendant, rendered his waiver unknowing and involuntary. We reasoned that such information, which relates to "the strategic advantages and disadvantages . . . of a jury trial, as opposed to a trial to a panel of judges"; id., 374; was more properly the province of counsel to explain to the defendant and was not a required part of the trial court's canvass.²⁶ Similarly, in *State* v. *Ells*, 39 Conn. App. 702, 707–708, 667 A.2d 556 (1995), cert. denied, 235 Conn. 940, 669 A.2d 577 (1996), the Appellate Court rejected a defendant's claim that his jury waiver was rendered constitutionally deficient because he was not advised that the trial judge likely would be aware of his previously withdrawn Alford²⁷ plea. See also People v. Robertson, 48 Cal. 3d 18, 38, 767 P.2d 1109, 255 Cal. Rptr. 631 (court's failure to advise capital defendant that it statutorily was required to review automatically any verdict of death returned by jury did not vitiate otherwise valid waiver), cert. denied, 498 U.S. 1004, 111 S. Ct. 568, 112 L. Ed. 2d 575 (1990); People v. St. Pierre, 146 Ill. 2d 494, 512, 588 N.E.2d 1159 (court's failure to admonish capital defendant that sentencing jury would be unaware of his prior death sentence for same murders did not undermine otherwise valid waiver), cert. denied, 506 U.S. 942, 113 S. Ct. 381, 121 L. Ed. 2d 291 (1992); State v. Foust, 105 Ohio St. 3d 137, 145–46, 823 N.E.2d 836 (2004) (rejecting claim, in capital case, that defendant's waiver of right to jury was invalid because he was not informed of, inter alia, jury unanimity requirement for death sentence).28 In sum, courts have declined to require any formulaic canvass and instead, consistent with the mandate of Johnson v. Zerbst, supra, 304 U.S. 464, have looked to the totality of the circumstances of a particular case to determine the validity of a jury waiver. This approach recognizes that "[t]he defendant's rights are not protected only by adhering to a predetermined ritualistic form of making the record.

Matters of reality, and not mere ritual, should be controlling." (Internal quotation marks omitted.) *State* v. *Shockley*, supra, 188 Conn. 712.

Applying these principles, we conclude that the trial court's canvass was sufficiently detailed, and that the omissions cited by the defendant do not render his otherwise valid waiver of his right to a jury constitutionally deficient. Clearly, consistent with the requirements that we prescribed in Gore, the trial court verified that the defendant understood that he had the right to a jury, but that he could waive that right and elect to be sentenced by a court, subject to the requirements of § 53a-46a (b) (3) for capital cases, and that the defendant's choice to waive his right to a jury and to opt instead for a three judge panel was a voluntary choice free of outside pressures or the effect of intoxicating substances. Beyond that, the court advised the defendant that his choice could not be readily undone, differentiated between the unanimity and majority requirements for twelve person juries and three judge panels, respectively, to render sentences of death, and inquired repeatedly whether the defendant had had sufficient time to confer with defense counsel and whether he was satisfied with their advice. In declining to provide more specific information as to the consequences of a waiver, the trial court properly relied on the defendant's prior experience with a capital sentencing jury and his multiple assurances that he had received adequate advice from his counsel.²⁹

The defendant argues finally that the court should have questioned him more thoroughly about his reasons for waiving his right to a jury, in light of his counsel's representation that the defendant would not state to counsel, in response to counsel's entreaty, that he wanted a sentence of life without the possibility of release, but did say that he wanted "justice."³⁰ In response to defense counsel's expressed concern, the trial court asked the defendant whether he was under the influence of any intoxicating substances, and the defendant confirmed that he was not. The court also asked the defendant whether there was anything else he wished to say in response to his counsel's remarks, and the defendant declined that offer. The defendant now argues that defense counsel's stated concern suggested that the defendant was suicidal and was seeking, through his waiver of his right to a jury, to ensure that he received a sentence of death. According to the defendant, therefore, the trial court was obligated to conduct a more searching inquiry into his reasons for waiving his right to a jury. We are not persuaded.

First, we disagree with the basic premise of the defendant's argument, namely, that by choosing to forgo a sentencing jury, he necessarily wanted the least favorable possible result and, therefore, that he had a "death wish \ldots " "[A]t the time when an accused defendant

must choose between a trial before the jury and a trial to the court, it simply cannot be said which is more likely to result in the imposition of death." *Lockett* v. Ohio, 438 U.S. 586, 634, 98 S. Ct. 2954, 57 L. Ed. 2d 973 (1978) (Rehnquist, J., concurring and dissenting). Moreover, it is not unusual for a criminal defendant to expect greater leniency from a court than from a jury, and there are several logical justifications for opting to waive the right to a jury. See 5 W. LaFave et al., Criminal Procedure (2d Ed. 1999) § 22.1 (h), pp. 264-65. Although the defendant now asserts that, at the time of his waiver, he believed his counsel's advice that he would fare better with a jury but nevertheless chose to be sentenced by the court, the record indicates otherwise. Specifically, in explaining his concerns to the trial court, Channing stated that the defendant "trusts the judiciary" Additionally, prior to being canvassed by Judge Iannotti, the defendant stated to Judge O'Keefe that he had "had a jury before," and understood that "[a] jury can be fair, but [he felt it was] in [his] best interest this time around to have three judges review the evidence for what it is."31 Viewed in conjunction with the fact that the defendant previously was sentenced to death by a jury, the preceding comments suggest that the defendant's decision was a strategic one, specifically, that he believed he would fare better with a three judge panel and, accordingly, disregarded his counsels' advice.

Furthermore, although the essence of the defendant's argument is that his waiver was involuntary due to his impaired mental state, he has never raised a formal challenge to his competence in either the trial court or this court; see, e.g., State v. Ross, 273 Conn. 684, 873 A.2d 131 (2005); there is no evidence in the record that he suffers from any mental illness and he does not claim that the trial court, sua sponte, should have ordered a competency evaluation. Accordingly, the defendant presumptively was competent to stand trial; see General Statutes § 54-56d (b); and, consequently, competent to waive his right to a sentencing jury. See Godinez v. Moran, 509 U.S. 389, 398-99, 113 S. Ct. 2680, 125 L. Ed. 2d 321 (1993); State v. Ouellette, supra, 271 Conn. 752-53. This court repeatedly has determined that, even when a defendant has a history of mental illness and/ or incompetency, if he presently is competent, the trial judge need not engage in a more searching canvass than typically is required before accepting the defendant's waiver of his right to a jury. State v. Woods, supra, 297 Conn. 584; State v. Ouellette, supra, 752. Here, there was nothing to suggest that the defendant was incompetent, and the trial court clearly was not required to inquire in that regard.

Finally, as a general matter, the law imposes no obligation on a trial court to explore a defendant's tactical reasons for waiving a jury. *People* v. *Diaz*, 3 Cal. 4th 495, 571, 834 P.2d 1171, 11 Cal. Rptr. 2d 353 (1992),

cert. denied, 508 U.S. 916, 113 S. Ct. 2356, 124 L. Ed. 2d 264 (1993); State v. Ross, 472 N.W.2d 651, 654 (Minn. 1991). We reject the defendant's contention, which is not supported by any legal authority, that his simply expressed desire for "justice," in the absence of any other evidence of incompetence, misconception, coercion or improper influence and in the face of every indication to the contrary, raises a question as to the voluntariness of his decision that would trigger an exception necessitating further inquiry by the trial court. Cf. State v. Ross, 272 Conn. 577, 611, 863 A.2d 654 (2005) (rejecting, as having no basis in logic, experience or law, proposition that "defendant's decision to take control of his fate by forgoing further legal challenges to his death sentences and his ambivalent feelings over the consequences of that decision are, in and of themselves, evidence of his incompetence" [emphasis added]).

A person seeking to set aside a judgment rendered following a jury waiver must make a "plain showing that such waiver was not freely and intelligently made"; Adams v. United States ex rel. McCann, supra, 317 U.S. 281; and has the "burden of showing essential unfairness . . . not as a matter of speculation but as a demonstrable reality. Simply because a result that was insistently invited, namely, a verdict by a court without a jury, disappointed the hopes of the accused, ought not to be sufficient for rejecting it." Id.; see also Sowell v. Bradshaw, 372 F.3d 821, 835 (6th Cir. 2004) (when defendant waived jury for capital sentencing proceeding, knowing death sentence was possible, he "took a litigation risk and lost; these facts alone do not create a constitutional violation"), cert. denied, 544 U.S. 925, 125 S. Ct. 1645, 161 L. Ed. 2d 485 (2005). On the basis of the foregoing analysis, the defendant's first claim fails.

Π

The defendant claims next that Judge O'Keefe should have disqualified himself, sua sponte, from serving on the three judge panel that the defendant requested for the penalty phase proceedings. According to the defendant, Judge O'Keefe's involvement in the case prior to the defendant's waiver of his right to a jury-specifically, his ruling on a pretrial motion, reading of this court's decision in Rizzo and presiding over voir diregave rise to an improper appearance of impartiality or risk of bias against the defendant such that he was required to disqualify himself. Additionally, the defendant argues that comments made by Judge O'Keefe during an unrelated proceeding that took place approximately one year after the defendant was sentenced prove that, during the defendant's penalty phase proceeding, Judge O'Keefe actually harbored a bias that impaired his impartiality. We are not persuaded.

The following additional procedural history is relevant. On March 3, 2005, prior to the start of voir dire, the defendant filed a motion requesting that he be transported to a medical facility for certain brain imaging tests necessary to prepare his defense for the penalty phase hearing. Judge O'Keefe granted the defendant's motion. Apparently, the brain imaging tests were conducted but failed to result in any mitigating evidence useful to the defense, because no such evidence was offered during the penalty phase hearing.

During a March 9, 2005 hearing, just prior to the commencement of voir dire, Judge O'Keefe asked a clerk for the citation to this court's decision in *Rizzo*. Various comments made by Judge O'Keefe during voir dire suggest that he had obtained and read the opinion.

Over the course of voir dire, prospective panel members were questioned about their views on the death penalty generally and whether they had opinions about the appropriate punishment for someone who had committed the crime the defendant had admitted committing. Some panel members expressed beliefs that the death penalty was appropriate both generally and in a case such as the present one.

On April 18, 2005, the trial court accepted the defendant's waiver of his right to a jury. On the following day, the defendant, his counsel and the state's attorney appeared briefly in court to discuss scheduling matters. At that time, Judge Iannotti informed the parties that he had proposed a three judge panel consisting of Judge O'Keefe as the presiding judge, along with Judge William Cremins and Judge Salvatore Agati. The defendant did not object to the composition of the panel or otherwise express any concerns. The proposed panel subsequently was approved by the office of the chief court administrator. At no time during the penalty phase proceedings that followed did the defendant move to disqualify Judge O'Keefe pursuant to Practice Book §§ 1-22 and 1-23.³² Additionally, the defendant did not file any posttrial motions raising the issue of the possible impartiality of Judge O'Keefe.

On appeal, the defendant now argues for the first time that Judge O'Keefe should have disqualified himself from participating on the three judge panel because his pretrial involvement in the case created an appearance or risk of partiality. Specifically, the defendant claims that Judge O'Keefe's awareness that the defendant had undergone brain imaging testing suggests that the judge possessed improper knowledge of facts outside of evidence, namely, that the testing had failed to establish that the defendant had a developmental problem.³³ Additionally, the defendant argues that Judge O'Keefe's exposure, during voir dire, to inflammatory community views of the defendant, the crime he committed and the death penalty in general put the judge's impartiality at risk.³⁴ Finally, according to the defendant, Judge O'Keefe's reading of this court's opinion in *Rizzo* prior to the commencement of voir dire might have caused him to form prejudicial opinions about the evidence, rendering him predisposed toward finding the aggravating factor proven and imposing the same death sentence that the defendant had received after his first penalty phase hearing. Because the defendant did not preserve this claim, he seeks review pursuant to *State* v. *Golding*, supra, 213 Conn. 239–40, arguing that his right to due process³⁵ was violated by the appearance or risk of Judge O'Keefe's impartiality. He argues, alternatively, that Judge O'Keefe's failure to recuse himself constitutes plain error warranting reversal of the judgment.

Normally, Connecticut's appellate courts do not review judicial disqualification claims raised for the first time on appeal because the parties, by failing to object, are deemed to have consented to the participation of the allegedly disqualified judge.³⁶ Nevertheless, because the record is adequate for review and the defendant's claim implicates his constitutional right to a fair penalty phase proceeding; see *State* v. *McDougal*, 241 Conn. 502, 523–24, 699 A.2d 872 (1997); we will address the claim. We conclude, however, that the defendant has not shown that a constitutional violation clearly exists and clearly deprived him of a fair proceeding.

Judicial disqualification claims rarely raise due process questions; more typically, they invoke statutes, rules or common law imposing much stricter standards than are required constitutionally. Bracy v. Gramley, 520 U.S. 899, 904, 117 S. Ct. 1793, 138 L. Ed. 2d 97 (1997) ("[m]ost questions concerning a judge's qualifications to hear a case are not constitutional ones, because the [d]ue [p]rocess [c]lause of the [f]ourteenth [a]mendment establishes a constitutional floor, not a uniform standard"); Aetna Life Ins. Co. v. Lavoie, 475 U.S. 813, 828, 106 S. Ct. 1580, 89 L. Ed. 2d 823 (1986) ("[t]he [d]ue [p]rocess [c]lause demarks only the outer boundaries of judicial disqualifications"); Tumey v. Ohio, 273 U.S. 510, 523, 47 S. Ct. 437, 71 L. Ed. 749 (1927) ("All guestions of judicial disgualification may not involve constitutional validity. Thus matters of . . . personal bias . . . would seem generally to be matters merely of legislative discretion.").

The United States Supreme Court has found judicial bias claims to be due process violations only in egregious cases involving actual bias or unusual circumstances creating an intolerably high risk thereof, typically, when the judge had a pecuniary interest or some other personal stake in the outcome of the case.³⁷ See, e.g., *Caperton* v. A.T. Massey Coal Co., 556 U.S.

, 129 S. Ct. 2252, 2264–65, 173 L. Ed. 2d 1208 (2009) (due process clause violated by newly elected appellate judge's participation in appeal that was pending during his campaign after receiving most of his campaign financing from prevailing party); *Bracy* v. *Gramley*, supra, 520 U.S. 905 (if proven, corrupt judge's prosecution orientation in some criminal cases, affected to deflect attention from other cases in which he had been bribed by defendants, would violate due process clause); Aetna Life Ins. Co. v. Lavoie, supra, 475 U.S. 824–25 (by authoring appellate decision creating law which applied to pending actions in which he was party, judge essentially acted as judge in his own cases in violation of due process clause); Mayberry v. Pennsylvania, 400 U.S. 455, 465-66, 91 S. Ct. 499, 27 L. Ed. 2d 532 (1971) (where judge became involved in "running, bitter controversy" with pro se defendants due to their repeated insults and defiance of court orders, due process required that different judge adjudicate resulting criminal contempt charges); In re Murchison, 349 U.S. 133, 135, 139, 75 S. Ct. 623, 99 L. Ed. 942 (1955) (when judge tried perjury and contempt charges that he had lodged against witnesses in grand jury proceeding he had conducted, judge violated due process clause by acting in same case as complainant, indictor, prosecutor and judge); Tumey v. Ohio, supra, 273 U.S. 523 (due process violated by system that compensated judge for hearing cases by providing him portion of fines levied on those whom he convicted and providing him no compensation in event of acquittal). The defendant has not directed us to any authority holding that an appearance or risk of bias arising from a judge's mere exposure to information or opinions about a party during his earlier participation in the proceedings is a due process violation, and our research has not uncovered any. To the contrary, a judge's pretrial involvement in a criminal case has not "been thought to raise any constitutional barrier against [his] presiding over the criminal trial and, if the trial is without a jury, against making the necessary determination of guilt or innocence." (Internal quotation marks omitted.) State v. Canales, 281 Conn. 572, 596 n.15, 916 A.2d 767 (2007), quoting Withrow v. Larkin, 421 U.S. 35, 56, 95 S. Ct. 1456, 43 L. Ed. 2d 712 (1975). Accordingly, we reject the defendant's constitutional claim.

Because the defendant has not established a constitutional violation, we may disturb the judgment only if Judge O'Keefe's failure to disqualify himself, sua sponte, on the basis of his pretrial involvement in the case amounts to plain error. State v. D'Antonio, 274 Conn. 658, 669, 877 A.2d 696 (2005). "[T]he plain error doctrine . . . has been codified at Practice Book § 60-5, which provides in relevant part that [t]he court may reverse or modify the decision of the trial court if it determines . . . that the decision is . . . erroneous in law. . . . The plain error doctrine is not . . . a rule of reviewability. It is a rule of reversibility. That is, it is a doctrine that this court invokes in order to rectify a trial court ruling that, although either not properly preserved or never raised at all in the trial court, nonetheless requires reversal of the trial court's judgment, for reasons of policy. . . . The plain error doctrine is reserved for truly extraordinary situations where the existence of the error is so obvious that it affects the fairness and integrity of and public confidence in the judicial proceedings. . . . A party cannot prevail under plain error unless it has demonstrated that the failure to grant relief will result in manifest injustice." (Internal quotation marks omitted.) Id.

Pursuant to our rules of practice; see Practice Book § 1-22; a judge should disqualify himself from acting in a matter if it is required by rule 2.11 of the Code of Judicial Conduct, which provides in relevant part that "[a] judge shall disqualify himself . . . in any proceeding in which the judge's impartiality might reasonably be questioned including, but not limited to, the following circumstances . . . [t]he judge has a personal bias or prejudice concerning a party or a party's lawyer, or personal knowledge of facts that are in dispute in the proceeding." Code of Judicial Conduct 2.11 (a) (1). In applying this rule, "[t]he reasonableness standard is an objective one. Thus, the question is not only whether the particular judge is, in fact, impartial but whether a reasonable person would question the judge's impartiality on the basis of all the circumstances. . . . Moreover, it is well established that [e]ven in the absence of actual bias, a judge must disqualify himself in any proceeding in which his impartiality might reasonably be questioned, because the appearance and the existence of impartiality are both essential elements of a fair exercise of judicial authority." (Citation omitted; internal quotation marks omitted.) Ajadi v. Commissioner of Correction, 280 Conn. 514, 527-28, 911 A.2d 712 (2006). Nevertheless, because the law presumes that duly elected or appointed judges, consistent with their oaths of office, will perform their duties impartially; Aetna Life Ins. Co. v. Lavoie, supra, 475 U.S. 820; and that they are able to put aside personal impressions regarding a party; Fair v. Warden, 211 Conn. 398, 414, 559 A.2d 1094, cert. denied, 493 U.S. 981, 110 S. Ct. 512, 107 L. Ed. 2d 514 (1989); the burden rests with the party urging disqualification to show that it is warranted. See 46 Am. Jur. 2d, Judges § 129 (2006).

With certain well-defined exceptions not at issue here,³⁸ a judge's participation in the preliminary stages of a case, and the knowledge he or she thereby gains, will not ordinarily preclude his or her continued participation in the same case thereafter.³⁹ See, e.g., *State* v. *Hayes*, 127 Conn. 543, 581–82, 18 A.2d 895 (1941) (judge's ordering of grand jury, presiding over grand jury proceedings and ruling on numerous preliminary motions did not disqualify him from presiding over trial), superseded by statute on other grounds as stated in *State* v. *Burns*, 194 Conn. 469, 472–73, 481 A.2d 1077 (1984); see also *State* v. *Ortiz*, 83 Conn. App. 142, 152–53, 848 A.2d 1246 (judge's knowledge of defendant's repeated inculpatory admissions during pretrial proceedings did not require recusal), cert. denied, 270

Conn. 915, 853 A.2d 530 (2004); R. Flamm, Judicial Disqualification: Recusal and Disqualification of Judges (2d Ed. 2007) § 13.1, pp. 343–44 ("fact that a judge may know something to the discredit of a criminal defendant does not, in and of itself, establish that she is biased against him").

Although a judge, by participating in pretrial or other proceedings, may be exposed to inadmissible evidence about a party, the standard assumption is that he or she is able to disregard it; see *Liteky* v. *United States*, 510 U.S. 540, 562, 114 S. Ct. 1147, 127 L. Ed. 2d 474 (1994) (Kennedy, J., concurring) ("[t]he acquired skill and capacity to disregard extraneous matters is one of the requisites of judicial office"); State v. Santangelo, 205 Conn. 578, 602, 534 A.2d 1175 (1987) (judge not required to disgualify self from sentencing upon receipt of letter containing unsubstantiated and inflammatory comments concerning defendant); even if he or she subsequently is to act as fact finder. See *State* v. *Bebb*, 99 Haw. 213, 215-16, 53 P.3d 1198 (App. 2001) (judge not required to recuse self from bench trial for defendant's charge of driving under influence after granting defendant's motion to suppress results of breath test), overruled on other grounds by State v. Maldonado, 108 Haw. 436, 445 n.13, 121 P.3d 901 (2005); R. Flamm, supra, § 12.9, pp. 330, 334; cf. State v. Cobb, supra, 251 Conn. 375 (rejecting claim that three judge panel trying capital murder charge improperly read nonpanel member's earlier ruling on motion to suppress; no merit to claim that defendant, during canvass regarding waiver of right to jury trial, should have been advised of likelihood that panel " 'would become aware of inadmissible and prejudicial information about [the] defendant'").

Likewise, opinions that judges may form as a result of what they learn in earlier proceedings in the same case "rarely" constitute the type of bias, or appearance of bias, that requires recusal. See *Liteky* v. *United States*, supra, 510 U.S. 554.⁴⁰ To do so, an opinion must be "so extreme as to display clear inability to render fair judgment." Id., 551. In the absence of unusual circumstances, therefore, equating knowledge or opinions acquired during the course of an adjudication with an appearance of impropriety or bias requiring recusal "finds no support in law, ethics or sound policy." *People* v. *Moreno*, 70 N.Y.2d 403, 407, 516 N.E.2d 200, 521 N.Y.S.2d 663 (1987).⁴¹

The plain error doctrine exists "to prevent the occurrence of manifest injustice[s] as the result of particularly extraordinary trial errors." (Internal quotation marks omitted.) *State* v. *D'Antonio*, supra, 274 Conn. 671. Given the foregoing law governing judicial disqualification, the defendant's claim that Judge O'Keefe's earlier participation in the case created an improper appearance or risk of bias, requiring him to recuse himself, falls well short of this threshold and, consequently, must fail. Because, consistent with that law, a reasonable person would not conclude that Judge O'Keefe's knowledge of the brain imaging tests, his awareness of community views regarding the defendant and/or the death penalty or his reading of *Rizzo* would cause him to be impartial, or lead him to form an opinion so extreme that he clearly was unable to render fair judgment; *Liteky* v. *United States*, supra, 510 U.S. 551; selfrecusal was not warranted.

The defendant also argues that comments made by Judge O'Keefe at an unrelated, noncapital proceeding that took place approximately one year after the defendant was sentenced demonstrate that the judge, when participating in the penalty phase hearing, possessed an actual bias that prevented him from properly considering the mitigation evidence presented by the defendant.⁴² Because the defendant could not have been aware of this claimed basis for disqualification at the time of the penalty phase proceedings, he cannot be faulted for his failure to raise it in an objection. See *Ajadi* v. *Commissioner of Correction*, supra, 280 Conn. 530–31 (party did not consent to participation of disqualified judge when unaware of basis for disqualification at time of trial); see also 46 Am. Jur. 2d, supra, § 205.

The following additional facts are relevant. At an August 14, 2006 hearing, Judge O'Keefe sentenced Keith M. Foster to a total effective sentence of 110 years following his conviction of multiple crimes, including felony murder, assault, kidnapping and sexual assault, in connection with the torture, gang rape and killing of a thirteen year old girl. The facts of the case were particularly disturbing; see *State* v. *Foster*, 293 Conn. 327, 330–31, 977 A.2d 199 (2009); and, despite overwhelming evidence to the contrary, Foster refused to admit his involvement in the crimes. When sentencing Foster, Judge O'Keefe referenced previous cases in which he had taken part to put Foster's crimes into perspective.

The defendant directs our attention to the following comments. First, Judge O'Keefe listed a number of other individuals whom he previously had sentenced, including the defendant, stated that it was "like a murderers' hall of fame," and concluded that he was "going to have to add . . . Foster's name to that list." Next, Judge O'Keefe referred to murderers generally as "not human "⁴³ Finally, directing his comments toward Foster, Judge O'Keefe stated the following, again referencing the defendant and others whom the judge previously had sentenced: "Sometimes in life, just like Diego Vas,44 Mark Chicano,⁴⁵ Eric Steiger,⁴⁶ Todd Rizzo, Adrian Peeler,⁴⁷ you're defined by one incident, one episode. That's it. Everything else is irrelevant. That applies to you. I don't care about your background. I don't care about your upbringing. I don't care about your future. I don't care about your daughter. I care about where

you're going to spend the rest of your life. And it should be in prison. I can't explain why you did this. Nobody can. I don't care. It's not important now. By this act you've defined yourself for the rest of your life." (Emphasis added.)

The defendant argues that Judge O'Keefe's remarks at Foster's sentencing hearing prove that, at the time of the defendant's penalty phase hearing, he was biased in such a way that he was not capable of considering the defendant's mitigating evidence, as is constitutionally and statutorily required, because he believed that evidence to be irrelevant. According to the defendant, the comments indicate that, in murder cases such as the defendant's, Judge O'Keefe categorically rejects evidence as to background and upbringing, thereby making it impossible for him to find that such factors are mitigating in nature or to weigh them against aggravating factors in an impartial manner. The defendant claims that the judge's comments prove that he did not care about, and did not consider, the defendant's upbringing or background before sentencing him to death. We are not persuaded.

The concept of impermissible judicial "bias or prejudice" contemplates the "formation of a fixed *anticipatory judgment* on the part of the judge, as contradistinguished from an open state of mind which will be governed by the law and the facts." (Emphasis added; internal quotation marks omitted.) *Cleveland Bar Assn.* v. *Cleary*, 93 Ohio St. 3d 191, 201, 754 N.E.2d 235, reconsideration denied, 93 Ohio St. 3d 1477, 757 N.E.2d 774 (2001); see also 46 Am. Jur. 2d, supra, § 128, p. 248 ("[p]rejudice," in disqualification context, means judge's "*pre*judgment or forming of an opinion without sufficient knowledge or examination" or "[a] decision in [a] matter . . . based on grounds *other than the evidence placed before him or her*" [emphasis added]).

In contrast, there is nothing impermissible about an opinion formed by a judge after a trial has concluded, on the basis of the evidence and arguments that have been presented and the judge's evaluation of them. Rather, "a trial judge will normally and properly form opinions on the law, the evidence and the witnesses, from the presentation of the case. These opinions and expressions thereof may be critical or disparaging to one party's position, but they are reached after a hearing in the performance of the judicial duty to decide the case, and do not constitute a ground for disqualification." (Internal quotation marks omitted.) Haldane v. Haldane, 232 Cal. App. 2d 393, 395, 42 Cal. Rptr. 828 (1965). Thus, "[t]he judge who presides at a trial may, upon completion of the evidence, be exceedingly ill disposed towards the defendant, who has been shown to be a thoroughly reprehensible person. But the judge is not thereby recusable for bias or prejudice, since his knowledge and the opinion it produced were properly and necessarily acquired in the course of the proceedings, and are indeed sometimes (as in a bench trial) necessary to completion of the judge's task." (Emphasis added.) Liteky v. United States, supra, 510 U.S. 550–51; see also Phillips v. State, 275 Ga. 595, 600, 571 S.E.2d 361 (2002) (purportedly disqualifying remarks made by judge about defendant postsentencing did not demonstrate improper bias because they "were based entirely upon what she learned of [him] and his crimes during the course of trial"); 46 Am. Jur. 2d, supra, § 127, p. 247 ("[t]he fact that the trial judge has become biased against a party after the trial is over does not have any bearing on the [fairness of the] previously conducted trial").

We believe that Judge O'Keefe's comments here, insofar as they reference the defendant, properly reflect the judge's *post* judgment assessment that, given the cruel, heinous and depraved manner in which the defendant killed the victim; see part IV of this opinion; the cumulative mitigating factor of his character, background and history did not weigh heavily enough to offset the aggravating factor in order to result in a life sentence. See part VII of this opinion. The panel was bound, statutorily and constitutionally, to consider factors weighing in favor of leniency, but once judgment imposing death was rendered, those factors, much like the presumption of innocence following a criminal conviction, effectively were removed from the case. Although the defendant urges us to conclude that Judge O'Keefe's comments, made more than one year after the defendant was sentenced, are evidence of Judge O'Keefe's mindset prior to the defendant's penalty phase proceeding and demonstrate prejudgment, that argument is entirely speculative.⁴⁸ First, the defendant has not directed us to any real evidence of actual bias predating the proceeding, but only to unsupported allegations regarding Judge O'Keefe's purported inclination in favor of the death penalty.⁴⁹ See footnotes 16 and 34 of this opinion; compare Nicodemus v. Chrysler Corp., 596 F.2d 152, 155 (6th Cir. 1979) (court's reference to corporate party as "bunch of villains . . . interested only in feathering their own nests at the expense of everyone they can," when made at hearing on preliminary injunction, indicated prejudgment of case [internal quotation marks omitted]). Instead, Judge O'Keefe's comments at Foster's sentencing indicate that he was expressing his *current* opinion about the defendant and the outcome of his case, rather than an opinion that he had formed before hearing the evidence and the arguments of counsel. Compare United States v. Antar, 53 F.3d 568, 573, 576 (3d Cir. 1995) (judge's comment at sentencing, that "[m]y object in this case from day one has always been to get back to the public that which was taken from it as a result of the fraudulent activities of this defendant," when considered along with other circumstances, indicative of improper prejudgment requiring disqualification [emphasis added; internal quotation marks omitted]), overruled on other grounds by *Smith* v. *Berg*, 247 F.3d 532, 534 (3d Cir. 2001).

Second, the record reflects clearly that Judge O'Keefe properly considered and weighed the defendant's mitigating evidence. Specifically, in a unanimous memorandum of decision, the three judge panel, after stating explicitly that it was required to consider constitutionally relevant mitigating evidence and citing extensive law to that effect, found "by a preponderance of the evidence that the cumulative effect of all the evidence presented concerning the defendant's character, background and history is mitigating in nature, considering all the facts and circumstances of the case and, therefore, should in fairness and mercy be considered by the court in the weighing process under § 53a-46a (f)." (Internal quotation marks omitted.) The panel acknowledged its duty to weigh that evidence against the proven aggravating factor and outlined the applicable burdens of proof, then concluded, beyond a reasonable doubt, that the aggravating factor outweighed the mitigating factor. In the absence of any other evidence to the contrary, we must reject the defendant's claim that Judge O'Keefe did not properly consider and weigh the evidence of the defendant's character, background and history.

In evaluating the propriety of Judge O'Keefe's references to a "murderers' hall of fame" and to its members as being "not human," we are mindful of the context in which they were made, namely, during the sentencing of an unrepentant defendant for indisputably horrific crimes. That defendant, Foster, as well as all of the other defendants to whom the judge referred, already had been convicted for the murders of multiple victims and/or child victims. See footnotes 44 through 47 of this opinion. Because a sentencing judge ordinarily must explain the reasons for imposing the sentence he or she has chosen,⁵⁰ his or her explanatory comments, even if "harsh and unkind . . . will rarely give rise to a cognizable basis for disqualification" R. Flamm, supra, § 16.4, pp. 462–63. Indeed, "[i]t is the court's prerogative, if not its duty, to assess the defendant's character and crimes at sentencing, after . . . guilt has been decided." United States v. Pearson, 203 F.3d 1243, 1278 (10th Cir.), cert. denied, 530 U.S. 1268, 120 S. Ct. 2734, 147 L. Ed. 2d 995 (2000). Furthermore, "[t]o a considerable extent a sentencing judge is the embodiment of public condemnation and . . . [a]s the community's spokesperson . . . can lecture a defendant as a lesson to that defendant and as a deterrent to others." (Citation omitted.) United States v. Bakker, 925 F.2d 728, 740 (4th Cir. 1991). Accordingly, a court's derogatory statements to a defendant during his sentencing ordinarily do not constitute a basis for recusal; indeed, "[i]t is a rare occurrence when [a court] . . . flatters a defendant for his criminal actions." United States v. Gaertner, 519 F. Sup. 585, 588 (E.D. Wis. 1981), aff'd, 705 F.2d 210 (7th Cir. 1983); see, e.g., State v. Dumas, 54 Conn. App. 780, 791, 739 A.2d 1251 (court's postsentencing characterization of defendant as "'marauder'" not indicative of improper bias), cert. denied, 252 Conn. 903, 743 A.2d 616 (1999); State v. Ortiz, 91 Haw. 181, 195, 981 P.2d 1127 (1999) (no grounds for recusal where sentencing court referred to defendant as "menace to society" and "menace to the community" [internal quotation marks omitted]).

Although the comments at issue were not made directly to the defendant at his own sentencing, we consider that to be a distinction without a difference for purposes of applying the law. Specifically, if the comments would not have indicated improper bias had they been delivered at the defendant's sentencing, it is difficult to see how they could become improper simply because they were subsequently expressed to a third party at that party's sentencing. Because a sentencing judge enjoys wide latitude when addressing a convicted criminal, Judge O'Keefe's comments, insofar as they referenced the defendant, fall well short of remarks that would warrant recusal. In sum, we reject the defendant's claims relating to judicial disqualification.

III

Connecticut's statutory aggravating factors are enumerated in § 53a-46a (i). The sole aggravating factor that the three judge panel found proven was that the defendant had committed his offense "in an especially heinous, cruel or depraved manner" General Statutes (Rev. to 1997) § 53a-46a (i) (4). The defendant claims that this court's limiting construction of that aggravating factor; see State v. Breton, 212 Conn. 258, 270-71, 562 A.2d 1060 (1989); is unconstitutionally vague in violation of the eighth amendment to the United States constitution⁵¹ and article first, §§ 8 and 9 of the constitution of Connecticut.⁵² The defendant argues specifically that our formulation of the mental state associated with that aggravating factor provides inadequate guidance to the sentencer and fails to distinguish adequately between offenders and offenses that are death eligible and those that are not. According to the defendant, therefore, the panel's imposition of the death penalty in this case, which was premised on the existence of the aggravating factor, must be reversed. We disagree.

The defendant did not raise this claim in the trial court and now seeks review pursuant to *State* v. *Golding*, supra, 213 Conn. 239–40. Because the record is adequate for review and the defendant's claim is of constitutional magnitude, we will address the claim. We conclude, however, that the third prong of *Golding* is not satisfied because the defendant has failed to establish a constitutional violation.

"Because the death penalty is exacted with great infrequency even for the most atrocious crimes [there must be a] meaningful basis for distinguishing the few cases in which it is imposed from the many cases in which it is not. Furman v. Georgia, 408 U.S. 238, 313, 92 S. Ct. 2726, 33 L. Ed. 2d 346, reh. denied sub nom. Jackson v. Georgia, 409 U.S. 902, 93 S. Ct. 89, 34 L. Ed. 2d 164 (1972) (White, J., concurring)." (Internal quotation marks omitted.) State v. Breton, supra, 212 Conn. 262-63. Accordingly, "if a [s]tate wishes to authorize capital punishment it has a constitutional responsibility to tailor and apply its law in a manner that avoids the arbitrary and capricious infliction of the death penalty. Part of a [s]tate's responsibility in this regard is to define the crimes for which death may be the sentence in a way that obviates standardless [sentencing] discretion. Godfrey v. Georgia, 446 U.S. 420, 428, 100 S. Ct. 1759, 64 L. Ed. 2d 398 (1980). Thus, where discretion is afforded a sentencing body on a matter so grave as the determination of whether a human life should be taken or spared, that discretion must be suitably directed and limited so as to minimize the risk of wholly arbitrary and capricious action. Gregg v. Georgia, 428 U.S. 153, 189, 96 S. Ct. 2909, 49 L. Ed. 2d 859 (1976) (opinion of Stewart, Powell and Stevens, Js.)." (Internal quotation marks omitted.) State v. Reynolds, 264 Conn. 1, 62, 836 A.2d 224 (2003), cert. denied, 541 U.S. 908, 124 S. Ct. 1614, 158 L. Ed. 2d 254 (2004).

Relevant to the present matter, "a state must avoid defining aggravating factors in an open-ended, subjective manner that would allow the trier unfettered discretion in levying a death sentence and thus create a substantial risk that the trier will inflict punishment arbitrarily or capriciously. California v. Brown, 479 U.S. 538, 541, 107 S. Ct. 837, 93 L. Ed. 2d 934 (1987). A capital sentencing system could have standards so vague that they would fail adequately to channel the sentencing decision patterns of [triers] with the result that a pattern of arbitrary and capricious sentencing . . . could occur. Gregg v. Georgia, supra, [428 U.S.] 195 n.46." (Internal quotation marks omitted.) State v. Breton, supra, 212 Conn. 264. To prevent that result, "an aggravating [factor] must genuinely narrow the class of persons eligible for the death penalty and must reasonably justify the imposition of a more severe sentence on the defendant compared to others found guilty of murder. Zant v. Stephens, 462 U.S. 862, 877, 103 S. Ct. 2733, 77 L. Ed. 2d 235 (1983)." (Internal quotation marks omitted.) State v. Reynolds, supra, 264 Conn. 62. Nevertheless, because the requisite degree of definition of an aggravated factor "is not susceptible of mathematical precision," we are guided by the "basic principle that a factor is not unconstitutional if it has some commonsense core of meaning . . . that criminal [sentencers] should be capable of understanding" (Citation omitted; internal quotation marks omitted.) Tuilaepa

v. *California*, 512 U.S. 967, 973, 114 S. Ct. 2630, 129 L. Ed. 2d 750 (1994).

Pursuant to General Statutes (Rev. to 1997) § 53a-46a (i) (4), a defendant who has committed one of the capital felonies enumerated in General Statutes (Rev. to 1997) § 53a-54b is eligible for the death penalty if he or she "committed the offense in an especially heinous, cruel or depraved manner" Because the United States Supreme Court held that similar phraseology was unconstitutionally vague in the absence of a narrowing construction by the state court; see Maynard v. Cartwright, 486 U.S. 356, 364–65, 108 S. Ct. 1853, 100 L. Ed. 2d 372 (1988) ("'heinous, atrocious, or cruel'"); see also Godfrey v. Georgia, supra, 446 U.S. 428-32 (" 'outrageously or wantonly vile, horrible and inhuman'"); this court adopted a limiting construction of § 53a-46a (i) (4) to cure that vagueness and to create a standard that complies with the eighth amendment to the United States constitution. State v. Ross, 230 Conn. 183, 242, 646 A.2d 1318 (1994), cert. denied, 513 U.S. 1165, 115 S. Ct. 1133, 130 L. Ed. 2d 1095 (1995); State v. Breton, supra, 212 Conn. 270–71.

We initially provided a core construction of § 53a-46a (i) (4), concluding that it included a defendant's "intentional infliction of extreme pain or torture above and beyond that necessarily accompanying the underlying killing." State v. Breton, supra, 212 Conn. 270. We thereafter elaborated that the pain or torture contemplated by that definition could be either physical or psychological. State v. Ross, supra, 230 Conn. 260. We explained further that, "with respect to the requisite state of mind and consequences thereof, either of the following will suffice [to satisfy \S 53a-46a (i) (4)]: (1) the defendant intended to, and in fact did, inflict extreme physical or psychological pain, suffering or torture on the victim; or (2) the defendant was callous or indifferent to the extreme physical or psychological pain, suffering or torture that his intentional conduct in fact inflicted on the victim." State v. Cobb, supra, 251 Conn. 445; see also State v. Ross, supra, 230 Conn. 262.53

In finding § 53a-46a (i) (4) proven in the present case, the three judge panel relied on the second option, concluding that the defendant had been callous or indifferent to the extreme physical and psychological pain and suffering that he had inflicted on the victim through his intentional conduct. The defendant now argues that this finding was improper because the panel, even with the benefit of this court's limiting construction of § 53a-46a (i) (4), was guided by a standard that failed to limit its discretion and to narrow the class of death eligible offenders sufficient to comport with the eighth amendment. He claims, in essence, that to pass constitutional muster, the aggravating factor, as construed, must require a specific intent to inflict extreme physical or psychological torture beyond that necessarily accompanying the underlying killing and that permitting proof of the aggravating factor by callousness or indifference renders application of that factor unacceptably arbitrary. We disagree because decisions of the United States Supreme Court are decidedly to the contrary.

We begin by emphasizing that the aggravating factor is not proven by demonstrating merely that a defendant was callous or indifferent to the death of his or her victim, as the defendant repeatedly implies, but rather, the state must show that the defendant caused addi*tional* pain, suffering or torture to be inflicted on his victim and that he either specifically intended that additional pain, suffering or torture or was callous or indifferent to it. The United States Supreme Court has upheld against an eighth amendment vagueness challenge the Supreme Court of Florida's functionally identical limiting construction of that state's "especially heinous, atrocious, or cruel" aggravating factor, namely, that the factor was directed at "the conscienceless or pitiless crime which is unnecessarily torturous to the victim." (Emphasis added; internal quotation marks omitted.) Proffitt v. Florida, 428 U.S. 242, 255-56, 96 S. Ct. 2960, 49 L. Ed. 2d 913, reh. denied, 429 U.S. 875, 97 S. Ct. 197, 50 L. Ed. 2d 158 (1976); see also Bell v. Cone, 543 U.S. 447, 457–58, 125 S. Ct. 847, 160 L. Ed. 2d 881 (reaffirming holding of *Proffitt* in concluding that Tennessee Supreme Court's identical limiting construction was not unconstitutionally vague), reh. denied, 544 U.S. 944, 125 S. Ct. 1655, 161 L. Ed. 2d 512 (2005); Walton v. Arizona, 497 U.S. 639, 654–55, 110 S. Ct. 3047, 111 L. Ed. 2d 511 (approving Arizona Supreme Court's construction of "especially cruel" as "inflict[ion] [of] mental anguish or physical abuse before the victim's death," when "the suffering of the victim was intended by or foreseeable to the killer" [emphasis added; internal quotation marks omitted]), reh. denied, 497 U.S. 1050, 111 S. Ct. 14, 111 L. Ed. 2d 828 (1990). These limiting constructions essentially are indistinguishable from this court's construction of § 53a-46a (i) (4), in that they require the imposition of pain and suffering beyond that necessary to kill a victim, but do not necessarily require the specific intent to cause that pain and suffering. Consequently, the defendant's federal constitutional claim must fail.

The defendant argues alternatively that this court's limiting construction of § 53a-46a (i) (4) is impermissibly vague in contravention of the constitution of Connecticut. We are not persuaded. "[I]t is settled constitutional doctrine that, independently of federal constitutional requirements, our due process clauses, because they prohibit cruel and unusual punishment, impose constitutional limits on the imposition of the death penalty. . . . Specifically, our due process clauses require, as a constitutional minimum, that a death penalty statute . . . must channel the discretion of the sentencing judge or jury so as to assure that the

death penalty is being imposed consistently and reliably" (Citation omitted; internal quotation marks omitted.) *State* v. *Rizzo*, supra, 266 Conn. 206.

It further "is well established that federal constitutional and statutory law establishes a minimum national standard for the exercise of individual rights and does not inhibit state governments from affording higher levels of protection for such rights." (Internal quotation marks omitted.) Id. In some instances, we have found greater protections for citizens of Connecticut in our own constitution than those provided by the federal constitution, and we have acknowledged that "[o]ur state constitutional inquiry may proceed independently from the decisions of the United States Supreme Court upholding the constitutionality of the death penalty." (Internal quotation marks omitted.) Id., 207.

"The analytical framework by which we determine whether, in any given instance, our state constitution affords broader protection to our citizens than the federal constitutional minimum is well settled. In State v. Geisler [222 Conn. 672, 684–86, 610 A.2d 1225 (1992)], we enumerated the following six factors to be considered in determining that issue: (1) persuasive relevant federal precedents; (2) the text of the operative constitutional provisions; (3) historical insights into the intent of our constitutional forebears; (4) related Connecticut precedents; (5) persuasive precedents of other state courts; and (6) contemporary understandings of applicable economic and sociological norms, or as otherwise described, relevant public policies." (Internal quotation marks omitted.) State v. Rizzo, supra, 266 Conn. 207-208.

We begin with the second *Geisler* factor, the operative constitutional text. The defendant directs our attention to article first, § 9, which precludes "punish[ment], except in cases clearly warranted by law," and he argues that use of the word "clearly" indicates that Connecticut should interpret its aggravating factor to encompass only conduct which can be proven consistently and reliably.⁵⁴ The defendant's argument, however, presupposes its conclusion, namely, that only intentionally inflicted pain and suffering can be so proven. We disagree, however, that a callous or indifferent mind-set is less susceptible of proof than a specific intent to cause pain and suffering; either finding typically requires the sentencer to draw inferences from circumstantial evidence. Moreover, regardless of whether the state opts to prove that a capital defendant inflicted gratuitous pain or suffering on his murder victim intentionally, or with callous indifference, it must provide proof that convinces the trier beyond a reasonable doubt. Plainly read, the phrase "clearly warranted by law" contemplates a requirement that the legal prerequisites for imposing a particular punishment be definitively established before punishment is imposed; it does not speak to the question of what those prerequisites shall be. In short, the second *Geisler* factor does not aid the defendant in his claim.

We next turn to the first and fifth *Geisler* factors, relevant federal and sister state decisions. Controlling precedent from the United States Supreme Court is contrary to the defendant's claim, and lower federal courts have applied those holdings to reject eighth amendment challenges similar to the present one. See, e.g., Moore v. Gibson, 195 F.3d 1152, 1175-76 (10th Cir. 1999) (applying *Walton* to reject vagueness challenge to Oklahoma court's jury instruction "that the phrase especially heinous, atrocious or cruel is direct[ed] to those crimes where the death of the victim was preceded by torture of the victim or serious physical abuse," with no specified mental state [internal quotation marks omitted]), cert. denied, 530 U.S. 1208, 120 S. Ct. 2206, 147 L. Ed. 2d 239 (2000); Bertolotti v. Dugger, 883 F.2d 1503, 1526 (11th Cir. 1989) (applying Proffitt to reaffirm constitutionality of Florida court's construction of "especially heinous, atrocious or cruel" factor).55

With regard to sister state jurisprudence, our research has disclosed a dearth of cases raising state constitutional challenges to factors akin to our heinous, cruel or depraved aggravator.⁵⁶ A survey of the limiting constructions used in other states is pertinent, however, because those constructions were supplied by those states' highest courts. Several states, like Connecticut, employ constructions that require the infliction of gratuitous pain, suffering or torture on the victim, coupled with a mental state akin to callousness or indifference. See, e.g., McCray v. State, Court of Appeals, Docket No. CR-06-0360 (Ala. Crim. App. December 17, 2010) ("especially heinous, atrocious or cruel" contemplates "those conscienceless or pitiless homicides that are unnecessarily torturous to the victim"); State v. Gallardo, 225 Ariz. 560, 566, 242 P.3d 159 (2010) ("especially cruel" requires jury to find that victim "consciously suffered physical or mental pain, distress or anguish prior to death" and defendant "kn[e]w or should have known that the victim would suffer" [emphasis added; internal quotation marks omitted]), cert. denied,

U.S. , 131 S. Ct. 1796, 179 L. Ed. 2d 665 (2011); *Hall* v. *State*, 614 So. 2d 473, 478 (Fla. 1993) ("heinous, atrocious, or cruel" means "accompanied by additional acts that show that the crime was conscienceless or pitiless and was unnecessarily torturous to the victim" [internal quotation marks omitted]), cert. denied, 510 U.S. 834, 114 S. Ct. 109, 126 L. Ed. 2d 74 (1993); *State* v. *Osborn*, 102 Idaho 405, 418, 631 P.2d 187 (1981) ("heinous, atrocious or cruel" means "accompanied by such additional acts as to set the crime apart from the norm of capital felonies—the conscienceless or pitiless crime which is unnecessarily torturous to the victim" [internal quotation marks omitted]); *State* v. *Anderson*, 996 So. 2d 973, 1006 (La. 2008) ("heinous, atrocious, and cruel" requires "torture or pitiless infliction of unnecessary pain"), cert. denied, U.S. , 129 S. Ct. 1906, 173 L. Ed. 2d 1057 (2009); Bennett v. State, 933 So. 2d 930, 955 (Miss. 2006) ("heinous, atrocious or cruel" means "the conscienceless or pitiless crime which is unnecessarily torturous to the victim," e.g., "the defendant inflicted physical or mental pain before death" [internal quotation marks omitted]), cert. denied, 549 U.S. 1133, 127 S. Ct. 976, 166 L. Ed. 2d 740 (2007); State v. Syriani, 333 N.C. 350, 390, 428 S.E.2d 118 ("heinous, atrocious, or cruel" is "directed at the conscienceless or pitiless crime which is unnecessarily torturous to the victim"; "where the level of brutality involved exceeds that normally present in first-degree murder" [internal quotation marks omitted]), cert. denied, 510 U.S. 948, 114 S. Ct. 392, 126 L. Ed. 2d 341 (1993).

Several other states use more broadly formulated limiting constructions, which, like the preceding jurisdictions, require the infliction of gratuitous pain, suffering or torture on the victim, but unlike those jurisdictions, do not specify a particular accompanying mind-set. See, e.g., People v. Burgess, 176 Ill. 2d 289, 314-15, 680 N.E.2d 357 ("exceptionally brutal or heinous behavior indicative of wanton cruelty" means "involv[ing] prolonged pain, torture or premeditation" [internal quotation marks omitted]), cert. denied, 522 U.S. 999, 118 S. Ct. 568, 139 L. Ed. 2d 408 (1997); State v. Kleypas, 282 Kan. 560, 570, 147 P.3d 1058 (2006) ("heinous, atrocious or cruel" means that victim suffered "serious physical abuse or mental anguish before death" [internal quotation marks omitted]); State v. Moore, 210 Neb. 457, 470, 316 N.W.2d 33 ("especially heinous, atrocious, or cruel" is "directed to the pitiless crime which is unnecessarily torturous to the victim and to cases where torture, sadism, or the imposition of extreme suffering exists" [emphasis added; internal quotation marks omitted]), cert. denied, 456 U.S. 984, 102 S. Ct. 2260, 72 L. Ed. 2d 864 (1982); Le v. State, 947 P.2d 535, 552 (Okla. Crim. App. 1997) ("especially heinous, atrocious, or cruel" is "directed to those crimes where the death of the victim was preceded by torture of the victim or serious physical abuse" [internal quotation marks omitted]), cert. denied, 524 U.S. 930, 118 S. Ct. 2329, 141 L. Ed. 2d 702 (1998); State v. Odom, 928 S.W.2d 18, 26 (Tenn. 1996) ("heinous, atrocious, or cruel" is act involving "torture or serious physical abuse beyond that necessary to produce death" [internal quotation marks omitted]); State v. Kell, 61 P.3d 1019, 1036 (Utah 2002) ("especially heinous, atrocious, cruel, or exceptionally depraved" involves serious physical abuse or bodily injury before death that is "qualitatively and quantitatively different and more culpable than that necessary to accomplish the murder" [internal quotation marks omitted]); Beck v. Commonwealth, 253 Va. 373, 387, 484 S.E.2d 898 ("'vileness'" means conduct involving "'torture'" or "'aggravated battery'" to victim), cert. denied, 522 U.S. 1018, 118 S. Ct. 608, 139 L. Ed. 2d 495 (1997).

Although our research discloses some states that join a specific intent requirement with the infliction of gratuitous pain, suffering or torture, those jurisdictions are decidedly in the minority. See Echols v. State, 326 Ark. 917, 987, 936 S.W.2d 509 (1996) ("cruel" requires intent to inflict mental anguish, serious physical abuse or torture upon victim prior to death), cert. denied, 520 U.S. 1244, 117 S. Ct. 1853, 137 L. Ed. 2d 1055 (1997); State v. Perry, 124 N.J. 128, 172, 590 A.2d 624 (1991) (" 'torture' or 'aggravated battery'" requires intent to cause extreme physical or mental suffering in addition to intent to cause death); Commonwealth v. Stevens, 559 Pa. 171, 201-202, 739 A.2d 507 (1999) (same, as to "torture"); State v. Moeller, 616 N.W.2d 424, 454 (S.D. 2000) (approving limiting construction of aggravating factor of torture to require: "[1] the unnecessary and wanton infliction of severe pain, agony, or anguish; and [2] the intent to inflict such pain, agony, or anguish"); Olsen v. State, 67 P.3d 536, 581 (Wyo. 2003) (construing "especially atrocious and cruel, being unnecessarily torturous to the victim" to require that physical or mental torture be intentionally inflicted); cf. People v. Superior Court, 31 Cal. 3d 797, 801-803, 647 P.2d 76, 183 Cal. Rptr. 800 (1982) (concluding, under state constitutional due process analysis, that limiting construction approved by United States Supreme Court in Proffitt is impermissibly vague). In sum, because the number of other jurisdictions that utilize the construction advanced by the defendant is significantly outnumbered by the number of jurisdictions that do not, we conclude that the first and fifth *Geisler* factors do not support the defendant's claim.

As to the fourth *Geisler* factor, related Connecticut precedents, we have recognized that our due process clauses, like the eighth amendment, prohibit cruel and unusual punishment, and that they may impose limits on the imposition of the death penalty independent of any federal requirements. State v. Rizzo, supra, 266 Conn. 206. Although we have been willing, therefore, to consider claims that the Connecticut constitution provides greater protection to capital defendants than does the federal constitution, those claims rarely have been successful. See State v. Colon, 272 Conn. 106, 319, 864 A.2d 666 (2004) (rejecting claim that state constitution provides for right of allocution at capital sentencing hearing), cert. denied, 546 U.S. 848, 126 S. Ct. 102, 163 L. Ed. 2d 116 (2005); State v. Rizzo, supra, 223–24 (rejecting claim that state constitution requires jury instruction that, to impose penalty of death, aggravating factors must outweigh mitigating factors beyond reasonable doubt); State v. Ross, supra, 230 Conn. 247-51 (rejecting claim that state constitution forbids imposition of death penalty under any circumstances); State v. Ross, supra, 230 Conn. 252–56 (rejecting several facial

challenges to death penalty statutes as violative of state constitution); but see *State* v. *Rizzo*, supra, 233–34 (concluding, with reference to state constitution, that jury, to impose death penalty, must be instructed that it must be persuaded beyond reasonable doubt that aggravating factors outweigh mitigating factors, by any degree). Because our prior jurisprudence in this area almost uniformly has held that, with respect to the specific claims at issue, federal and state constitutional rights are coextensive, the fourth *Geisler* factor does not assist the defendant.

As for policy considerations, the sixth *Geisler* factor, the defendant is correct that our legislature intended for the death penalty to apply only to the most culpable offenders, and the statutorily enumerated aggravating factors are a means for effectuating that intent. We disagree with his argument, however, that the legislature's intent is frustrated by a limiting construction of § 53a-46a (i) (4) that includes those who are callous and indifferent to the gratuitous pain and suffering they cause their victims. Review of our capital jurisprudence discloses that, in the seventeen years since we first articulated that construction, only a handful of offenders have been convicted, and have had their death sentences upheld, on the basis of the callousness/ indifference option, and, more importantly, we are hard pressed to conclude that those individuals do not fall within the class of the most culpable offenders.⁵⁷ See, e.g., State v. Colon, supra, 272 Conn. 337-38 (defendant killed two year old victim, upon whom he previously had inflicted severe physical abuse, by dragging her into bathroom and repeatedly thrusting her head against shower wall, lifting her by hair with force sufficient to cause clumps of hair to detach from her scalp); State v. Cobb, supra, 251 Conn. 448-50 (defendant abducted victim from parking lot, forced her to drive to secluded place where he sexually assaulted, bound and gagged her, threw her off twenty-three foot dam into freezing water, then held her head under water to drown her after she attempted to escape); State v. Webb, 238 Conn. 389, 486-87, 680 A.2d 147 (1996) (defendant abducted victim from parking garage, drove her to remote location and attempted to sexually assault her, then shot her repeatedly in back, chest and face as she cried for help and attempted to escape).

Moreover, in the two cases in which this court has concluded that the jury improperly applied § 53a-46a (i) (4), this court did not hesitate to reverse their findings. Notably, however, those reversals did not concern improper findings as to the defendant's callousness or indifference, but rather, they concerned improper findings as to the extent of the victim's pain and suffering; *State* v. *Johnson*, 253 Conn. 1, 75, 76–77, 751 A.2d 298 (2000) (evidence insufficient to establish that victim, who was ambushed and fatally shot through heart while driving, experienced extreme physical or psychological pain or suffering beyond that necessarily accompanying killing); and whether the defendant intentionally had inflicted psychological torture; *State* v. *Reynolds*, supra, 264 Conn. 95–97 (evidence insufficient to establish that defendant, by continuing to fire shots at victim after shooting him in head from close range, intended to psychologically torture victim rather than to kill him); namely, the portions of our limiting construction that, according to the defendant, provide clearer limits than the portion he contests. In sum, the policy factor also does not support the defendant's claim.

We address last the third *Geisler* factor, historical considerations. As the state points out, the jurisprudential underpinnings of the defendant's vagueness claim are of relatively recent vintage. See *Godfrey* v. *Georgia*, supra, 446 U.S. 427–28; *Gregg* v. *Georgia*, supra, 428 U.S. 189–95; *Furman* v. *Georgia*, supra, 408 U.S. 239. Historically, the death penalty was available for a much broader range of offenses than under our present constitutional and statutory scheme; see *State* v. *Ross*, supra, 230 Conn. 250 n.31; id., 293 n.8 (*Berdon*, *J.*, dissenting); and considerably more discretion was permitted in its imposition. Consequently, this factor does not aid the defendant.

In sum, we conclude that consideration of the *Geisler* factors counsels against a holding that our state constitution requires a more restrictive limiting construction of § 53a-46a (i) (4) that would exclude murderers who, with callousness and indifference, impose upon their victims physical or psychological pain, suffering or torture beyond that necessary to the underlying killing. Consequently, the defendant's third claim fails.

IV

The defendant claims next that there was insufficient evidence to prove that he committed his offense in an especially heinous, cruel or depraved manner. He argues specifically that the state failed to prove both that the victim experienced extreme physical or psychological pain or suffering beyond that necessarily accompanying his death and that the defendant was callous or indifferent to that pain or suffering.⁵⁸ We disagree.

"[W]e have interpreted the aggravating factor set forth in § 53a-46a (i) (4) to require proof that the defendant engaged in intentional conduct that inflicted extreme physical or psychological pain [suffering] or torture on the victim above and beyond that necessarily accompanying the underlying killing, and that the defendant specifically intended to inflict such extreme pain [suffering or] torture . . . or . . . the defendant was callous or indifferent to the extreme physical or psychological pain, suffering or torture that his intentional conduct in fact inflicted on the victim. . . .

"In reviewing a claim that the evidence fail[ed] to support the finding of an aggravating factor specified in [§ 53a-46a (i)] . . . we subject that finding to the same independent and scrupulous examination of the entire record that we employ in our review of constitutional fact-finding, such as the voluntariness of a confession . . . or the seizure of a defendant. . . . In such circumstances, we are required to determine whether the factual findings are supported by substantial evidence. . . .

"Even with the heightened appellate scrutiny appropriate for a death penalty case, the defendant's challenge to the sufficiency of the evidence of aggravating circumstances must be reviewed, in the final analysis, [first] by considering the evidence presented at the defendant's penalty [phase] hearing in the light most favorable to sustaining the facts . . . found by the [panel]. . . . Second, we determine whether upon the facts so construed and the inferences reasonably drawn therefrom the [finder of fact] reasonably could have concluded that the cumulative force of the evidence established [the existence of the aggravating factor] beyond a reasonable doubt. . . . This court cannot substitute its own judgment for that of the [panel] if there is sufficient evidence to support the [panel's] verdict. . . .

"Furthermore, [i]n viewing evidence [that] could yield contrary inferences, the [panel] is not barred from drawing those inferences consistent with [the existence of the aggravating factor] and is not required to draw only those inferences consistent with [its nonexistence]. The rule is that the [panel's] function is to draw whatever inferences from the evidence or facts established by the evidence it deems to be reasonable and logical. . . .

"[Finally], [i]n [our] process of review, it does not diminish the probative force of the evidence that it consists, in whole or in part, of evidence that is circumstantial rather than direct. . . . It is not one fact, but the cumulative impact of a multitude of facts [that] establishes [the existence of an aggravating factor] in a case involving substantial circumstantial evidence. . . . Indeed, direct evidence of the defendant's state of mind is rarely available. . . . Therefore, intent [or callousness or indifference] is often inferred from conduct . . . and from the cumulative effect of the circumstantial evidence and the rational inferences drawn therefrom." (Internal quotation marks omitted.) *State* v. *Courchesne*, 296 Conn. 622, 777–78, 998 A.2d 1 (2010).

The three judge panel produced a written memorandum of decision explaining its determination that the aggravating factor had been proven beyond a reasonable doubt. The panel summarized the relevant evidence and its findings as follows: "During the evening of September 30, 1997, the defendant murdered [the victim] . . . at the defendant's home in Waterbury. He did this by luring the victim into the backyard of the defendant's home, where he bludgeoned the victim to death by repeated blows to the head with a three pound sledgehammer. . . .

"On September 30, 1997, the victim was thirteen years old. He lived with his mother and his sister in the Bunker Hill section of Waterbury. At approximately 6:30 p.m., the victim left his house and got onto his bicycle.

"Meanwhile, the defendant had left his job at Arett Sales in Cheshire and, at approximately 5 p.m., returned to his house in the Bunker Hill section, where he lived with his mother, his older brother and his younger sister.

"At approximately 7:45 p.m., the defendant encountered the victim as the victim rode his bicycle up to the front of the defendant's home.

"The defendant recognized the victim because he had spent time at the video store where the defendant previously had worked. The defendant asked the victim if his mother or anyone else knew where he was that evening, and the victim replied in the negative. When the defendant heard this, he decided to kill the victim.

"The defendant decided to lure the victim to a secluded place where he could kill him unobserved. Believing that the victim would be interested in snakes, the defendant told him that there were snakes in his backyard, and he asked the victim if he wanted to see them. When the victim agreed, the defendant told him that they would need a flashlight to see the snakes in the darkness, and that he would get one from his car. The defendant went to his car and retrieved a flashlight and a three pound sledgehammer. The defendant slipped the sledgehammer down the front of his pants, rejoined the victim and took him into the backyard of the defendant's home.

"The defendant handed the flashlight to the victim so that he could look for snakes. As the victim was doing so, the defendant took the sledgehammer from his pants, approached the victim from behind, raised the sledgehammer over his head, held it there for a moment, and then hit the victim on the side of the head with the flat surface of the side of the sledgehammer. The victim rolled over and implored the defendant to stop hitting him, but the defendant straddled him 'like a horse,' and began to hit him in the head 'because [he] didn't want [the victim] to scream out and alert the neighbors.' After the defendant had delivered a number of blows with the sledgehammer, the victim made a gurgling sound. The defendant then delivered another one or two blows to ensure that the victim was dead.

"In all, the defendant delivered approximately twelve blows to the victim—four to the head, then eight others on the back and shoulders. The blows to the back and shoulders were not fatal, and did not result in bleeding. [N]one of these blows to the back and shoulders would have rendered the victim unconscious. Any of the blows to the head, however, could have been fatal, fracturing the victim's skull and causing numerous lacerations that bled profusely. Moreover, although any of the blows to the head could have rendered the victim unconscious, none of them necessarily did so.

"During the attack, the victim attempted to protect himself. One of the blows punched out a large fragment of the victim's skull, creating a gaping hole.

"At some point, two dogs in a neighbor's yard began to bark, and the dogs' owner came out of his house to quiet them down. The defendant stopped the beating, and held the flashlight against his body so that the neighbor would not see light coming from his yard. After the neighbor returned to his house, the defendant shone the flashlight on the victim's body, and saw that he was covered in blood and had a large hole in his skull.

"The defendant then decided to dump the victim's body on Fulkerson Drive in Waterbury, which [is] located a short distance from the defendant's house. Realizing that his car was too small to carry both the victim's body and his bicycle in one trip, the defendant took the bicycle to Fulkerson Drive and left it next to a dumpster. He then returned to his house, put garbage bags over the victim's head and lower part of his body, dragged the body to his car, and opened the hatchback. He then removed the rug that covered the rear portion of his car to ensure that it would not be stained with blood, placed the victim's body into the rear portion of the car, and drove to Fulkerson Drive.

"At approximately 8:30 p.m., the defendant drove into a condominium complex on Fulkerson Drive, looking for a place to dispose of the body. Eventually, he located a dark, secluded area, where he stopped the car and threw the victim's body onto the pavement.

"The defendant then drove back to his house. He put the sledgehammer and his blood soaked shirt into plastic bags. The next morning, the defendant took the plastic bags containing the sledgehammer and his shirt with him to work, and he threw them into his employer's trash compactor.

"The victim's body was discovered on Fulkerson Drive at approximately 8:45 p.m. that same night.

"By the next day the defendant had become the focus of the investigation. At 5 p.m., the defendant was approached by members of the Waterbury police department who asked him if he would be willing to go to the police station and answer some questions. The defendant agreed. During the course of his presence at the police station the defendant denied that he knew the victim and claimed no knowledge of the murder. The defendant was allowed to return to his home with the police. "Pursuant to consent by the defendant, the police subsequently searched the defendant's car. That search produced smears in the spare tire wheel well area that appeared to be blood. When confronted with the blood smears in his car, the defendant said, 'I feel sick' and 'I did it.' The defendant further explained that, as he spoke to the victim, he 'had an urge.' He also stated [that] he 'was interested in serial killings and Jeffrey Dahmer' and that, when he saw the victim, the urge to commit murder 'just came over him' The next day, while being transported to court for his arraignment, the defendant told a police detective that he had murdered the victim because he just wanted to know what it was like to kill somebody.

"Additional evidence presented by the state established that the defendant had served in the United States Marine Corps from November, 1996, to September, 1997. While the defendant was stationed in Hawaii, his sergeant had asked the members of his platoon to make a list of their ten goals in life and to post the list in the barracks. The second goal on the defendant's list was to 'kill a man.'

"The panel unanimously finds that the state has proven the aggravating factor beyond a reasonable doubt. The panel unanimously finds that the murder of [the victim] was committed in an especially cruel, heinous and depraved manner.

"The panel further unanimously finds, based on the evidence and beyond a reasonable doubt, that the defendant engaged in intentional conduct that inflicted extreme physical pain and psychological pain (suffering) on the victim above and beyond that necessarily accompanying the underlying killing and [that] the defendant was callous and indifferent to the extreme physical pain and psychological pain and suffering that his intentional conduct in fact inflicted on the victim.

"The panel's findings of intentional conduct that inflicted extreme physical pain and psychological pain and suffering beyond that necessarily accompanying the underlying killing is based upon: the type of weapon used by the defendant; the manner in which the defendant utilized the sledgehammer; the defendant's obsession with violent deaths and serial killers; [and] the defendant's preexisting desire to kill.

"The finding that the victim experienced extreme physical pain and psychological pain and suffering as the result of the defendant's intentional conduct is supported by: the number and nature of sledgehammer blows to the head and torso of the victim; the victim's attempt to protect himself; the profuse bleeding from the victim's wounds; the nature and circumstances of a nighttime attack in a dark and secluded location; and the victim's last words, imploring the defendant to stop hitting him. "The finding that the defendant was callous or indifferent to the extreme physical pain and psychological pain and suffering that his intentional conduct in fact inflicted on the victim is supported by: the defendant's emphasis in his postarrest statements on his own feelings at the time of the murder; the type of weapon used by the defendant; the manner in which the defendant utilized the weapon; and the defendant's lack of remorse immediately following the murder." (Citations omitted.)

The defendant argues, in short, that the evidence did not establish the heinousness, cruelty and depravity of his acts in murdering the victim because the attack was unanticipated, the victim's death likely was swift and, accordingly, the victim simply did not suffer enough either physically or psychologically. We are not persuaded. Courts frequently have concluded that aggravating circumstances similar to Connecticut's cruel, heinous and depraved factor were sufficiently proven in cases in which a victim was killed by beating or bludgeoning, even when the attack is not especially prolonged and the victim's loss of consciousness and death occur rather quickly.⁵⁹ See, e.g., State v. Colon, supra, 272 Conn. 337-38 (defendant repeatedly slammed two year old victim's head into shower wall); see also United States v. Agofsky, 458 F.3d 369, 374–75 (5th Cir. 2006) (defendant stomped fellow inmate's head and neck into concrete floor approximately eleven times), cert. denied, 549 U.S. 1182, 127 S. Ct. 1149, 166 L. Ed. 2d 998 (2007); United States v. Battle, 264 F. Sup. 2d 1088, 1199-1200 (N.D. Ga. 2003) (defendant struck victim in head three times with hammer); McGowan v. State, 990 So. 2d 931 (Ala. Crim. App. 2005) (defendant bludgeoned elderly couple with hammer), cert. denied, 555 U.S. 861, 129 S. Ct. 136, 172 L. Ed. 2d 104 (2008); State v. Kiles, 222 Ariz. 25, 30, 39, 213 P.3d 174 (2009) (defendant beat female victim with tire jack), cert. , 130 S. Ct. 3274, 176 L. Ed. 2d 1188 denied. U.S. (2010); Roberts v. State, 510 So. 2d 885, 894 (Fla. 1987) (defendant killed victim by numerous blows to back of head with baseball bat), cert. denied, 485 U.S. 943, 108 S. Ct. 1123, 99 L. Ed. 2d 284 (1988); Atkins v. State, 497 So. 2d 1200, 1202 (Fla. 1986) (defendant beat six year old child in head and neck with steel rod); Salvatore v. State, 366 So. 2d 745, 747 (Fla. 1978) (defendant bludgeoned victim in head and face with pipe), cert. denied, 444 U.S. 885, 100 S. Ct. 177, 62 L. Ed. 2d 115 (1979); State v. Brooks, 960 S.W.2d 479, 486, 496 (Mo. 1997) (defendant beat child victim in head with bed slat), cert. denied, 524 U.S. 957, 118 S. Ct. 2379, 141 L. Ed. 2d 746 (1998); State v. Barden, 356 N.C. 316, 371-72, 572 S.E.2d 108 (2002) (defendant beat victim in head fourteen times with small sledgehammer and other weapon), cert. denied, 538 U.S. 1040, 123 S. Ct. 2087, 155 L. Ed. 2d 1074 (2003); Willingham v. State, 947 P.2d 1074, 1085 (Okla. Crim. App. 1997) (defendant punched

and kicked female victim in face and slammed her head into wall). In such cases, given the extremely violent and brutal nature of the defendant's chosen method of killing, relatively brief periods of intense physical and psychological suffering generally are sufficient to establish the gratuitous cruelty contemplated by the statutory aggravator.

Consequently, if the state can establish that the victim remained conscious for some part of the defendant's attack, and experienced extreme physical or psychological pain or suffering while conscious, the evidence may be sufficient to prove the aggravator. Evidence that the victim continued to move around during the attack is relevant in this regard. See, e.g., McGowan v. State, supra, 990 So. 2d 1004-1005 (evidence that victim was on hands and knees during part of hammer attack demonstrated that he was conscious and suffered before dying); State v. Barden, supra, 356 N.C. 371 (defendant's statement that victim, following initial blows, reached for his pocket, suggested that victim did not die immediately); Eizember v. State, 164 P.3d 208, 242 (Okla. Crim. App. 2007) (evidence that victim attempted to get up after being struck with butt of shotgun sufficient to demonstrate conscious suffering), cert. denied, 552 U.S. 1269, 128 S. Ct. 1676, 170 L. Ed. 2d 374 (2008); cf. State v. Breton, 235 Conn. 206, 222-24, 663 A.2d 1026 (1995) (evidence that victim moved around room during beating and stabbing attack supports conclusion that she was conscious and suffered extreme physical pain).

Additionally, evidence that a victim attempted to protect himself from the blows inflicted by his attacker demonstrates that the victim remained alive and conscious while being assaulted and, therefore, endured physical and psychological pain and suffering. See Williams v. State, 37 So. 3d 187, 200 (Fla. 2010) ("[t]he existence of a defensive wound is relevant to the [heinous, atrocious, or cruel] analysis-this [c]ourt has affirmed findings of [heinous, atrocious, or cruel factor] where defensive wounds revealed awareness of impending death" [internal quotation marks omitted]); see also State v. Porter, 130 Idaho 772, 790, 948 P.2d 127 (1997) (numerous bruises on victim's forearms appeared defensive and indicative of premortem suffering), cert. denied, 523 U.S. 1126, 118 S. Ct. 1813, 140 L. Ed. 2d 951 (1998); Young v. State, 992 P.2d 332, 344, 348 (Okla. Crim. App. 1998) (defensive fractures to victim's finger, hand and elbow proved her consciousness and awareness of attack with baseball bat), cert. denied, 528 U.S. 837, 120 S. Ct. 100, 145 L. Ed. 2d 84 (1999); State v. Melson, 638 S.W.2d 342, 367 (Tenn. 1982) (defensive injuries to arms and hands of victim, who was killed with ball peen hammer, proved "that there was time for her to realize what was happening, to feel fear, and to try to protect herself"), cert. denied, 459 U.S. 1137, 103 S. Ct. 770, 74 L. Ed. 2d 983 (1983).

Finally, evidence that a victim spoke after the attack began clearly is indicative of consciousness and, therefore, pain and suffering. See *State* v. *Kiles*, supra, 222 Ariz. 30 (defendant admitted that, following initial blow, victim asked him, " '[W]hy did [you] do this?' "); *Salvatore* v. *State*, supra, 366 So. 2d 747 (victim bludgeoned as he cried for help); compare *Herzog* v. *State*, 439 So. 2d 1372, 1380 (Fla. 1983) (where victim was under "heavy influence" of drugs and neither spoke nor resisted during fatal attack, it could be inferred that she was only semiconscious; murder, therefore, was not unnecessarily torturous).

In the present case, evidence on which the panel relied, in particular, the defendant's own sworn statement to the police,⁶⁰ established that the victim remained conscious beyond the first blow to his head that the defendant inflicted with the sledgehammer and, therefore, experienced physical and psychological pain and suffering while some or all of the remaining blows were delivered. Specifically, the defendant stated that, after a second swing of the hammer missed the victim, the victim rolled over and told the defendant to stop hitting him. Despite the victim's request, the defendant continued to hit the victim in the head and torso, "approximately twelve" times,⁶¹ causing profuse bleeding that would have caused the victim to experience psychological distress. The panel also cited the victim's attempt to protect himself as evidence of his suffering. That finding is supported by the evidence.⁶²

Regarding the panel's finding that the defendant was callous and indifferent to the pain and suffering he caused the victim, we disagree with the defendant that the panel made improper inferences from the evidence presented. The defendant's choice of a sledgehammer as a weapon with which to beat the victim repeatedly on his head, causing profuse bleeding and dislodging a portion of the victim's skull, reasonably suggests that the defendant was not concerned with the victim's pain and suffering. See State v. Call, 353 N.C. 400, 425, 545 S.E.2d 190 (defendant lured victim to isolated area and beat him to death with shovel handle and tire iron with no provocation, supporting inference that murder was conscienceless and pitiless), cert. denied, 534 U.S. 1046, 122 S. Ct. 628, 151 L. Ed. 2d 548 (2001). Moreover, the defendant's statements that he killed the victim because he "had an urge" and "just wanted to know what it was like to kill somebody," as well as his general failure at the time to show any remorse for murdering an innocent child,63 are competent evidence of the defendant's callousness and indifference to the pain and suffering he caused the victim to endure. See State v. Rizzo, supra, 266 Conn. 278 ("[i]t is reasonable for a jury to infer, based on a defendant's subsequent lack of remorse, that the defendant was callous or indifferent to the victim's suffering at the time of the offense"); see also Herzog v. State, supra, 439 So. 2d 1379 (defendant's "lack of remorse can be offered to the jury and judge as a factor which goes into the equation of whether or not the crime was especially heinous, atrocious, or cruel" [internal quotation marks omitted]); State v. Oliver, 309 N.C. 326, 346-47, 307 S.E.2d 304 (1983) (defendant's boasting to fellow inmates that he had enjoyed killing victim, who had begged for his life, was evidence of "conscienceless and pitiless murder inflicting psychological torture"); cf. State v. Ross, supra, 230 Conn. 263 (defendant's lack of remorse indicative of intent to inflict suffering on victims); State v. Smith, 649 S.W.2d 417, 434 (Mo. 1983) (defendant's later letter to newspaper, in which he described his reasons for killing victim, evidenced his intent to cause victim's suffering before death), cert. denied, 464 U.S. 908, 104 S. Ct. 262, 78 L. Ed. 2d 246 (1983).

We conclude that the evidence was sufficient to support the panel's findings that the defendant inflicted extreme physical and psychological pain and suffering on the victim beyond that necessarily accompanying his death and that the defendant was callous or indifferent to that pain and suffering. Consequently, the defendant's fourth claim is without merit.

V

The defendant's next claim is that General Statutes (Rev. to 1997) § 53a-46a (d), which directs a capital penalty phase fact finder to determine whether a particular mitigating factor, having been established by the evidence, "is mitigating in nature, considering all the facts and circumstances of the case," is unconstitutional. According to the defendant, requiring the fact finder to make this determination as a prerequisite to the weighing of aggravating and mitigating factors, the final step in the statutory process for determining whether death is the appropriate penalty; see General Statutes (Rev. to 1997) § 53a-46a (f); improperly prevents mitigating evidence offered by the defendant from being given full consideration and effect in violation of the eighth amendment to the United States constitution.

The defendant acknowledges that this claim already was raised, and rejected, in his first appeal; see *State* v. *Rizzo*, supra, 266 Conn. 290–91; but argues that this court decided it incorrectly. We disagree. We have reviewed the authority cited by the defendant, including the authorities that arose after our decision in *Rizzo*,⁶⁴ and we conclude that our previous holding, that the defendant had failed to establish that § 53a-46a (d) was unconstitutional, is not in error.

VI

The defendant claims next that the panel's findings as to mitigation were improper. According to the defendant, it was error for the panel to find proven only one of the mitigating factors that he proposed and to reject all of the others. We disagree.

The following additional procedural history is relevant to this claim. The defendant submitted a list of forty-five proposed mitigating factors to the panel for its consideration, arguing that the factors were both factually proven and mitigating in nature. Generally, the proposed mitigating factors concerned the defendant's age at the time of his crime, his deplorable home environment and neglectful upbringing, his small stature as a child and the resulting bullying and harassment he endured, his positive attributes, talents and contributions to his family and community, his steady employment history, his military service, his cooperation with the police in their investigation of the victim's murder and his eventual remorse for his crime.⁶⁵ The final proposed mitigating factor submitted by the defendant was "[t]he cumulative or combined effect of all the evidence concerning [the defendant's] character, background or history or the nature [or] circumstances of the crime which the court, in fairness and mercy, finds is mitigating in nature and constitutes a basis for a sentence of life imprisonment without the possibility of release."

The panel, in its written memorandum of decision, outlined the law governing the finding of statutory and nonstatutory mitigating factors, and observed that, pursuant to state and federal death penalty jurisprudence, a capital "sentencer may not be precluded from considering, and may not refuse to consider, any constitutionally relevant mitigating evidence" (Citations omitted; internal quotation marks omitted.) After noting that no statutory mitigating factors⁶⁶ were at issue in this case, the panel found, by a preponderance of the evidence, that the cumulative factor recited previously had been proven factually and, further, that it was mitigating in nature considering all of the facts and circumstances of the case. Conversely, the panel did not find that any of the individual factors proposed by the defendant were proven mitigating factors. The defendant argues that, given the evidence presented, no fact finder reasonably could have failed to find that these individual factors were mitigating in nature.⁶⁷ We are not persuaded.68

Our review of this claim is thorough, yet deferential to the panel. "We previously have recognized that, [u]nder our death penalty statute, the defendant must convince the [sentencer] not only of the facts underlying an alleged nonstatutory mitigating factor, but also that the factor is mitigating in nature, considering all the facts and circumstances of the case, such that in fairness and mercy, [it] may be considered as tending either to extenuate or reduce the degree of his culpability or blame for the offense or to otherwise constitute a basis for a sentence less than death. General Statutes [Rev. to 1997] § 53a-46a (d). . . . We also have recognized that, [a]lthough our review of the evidence in mitigation of the death penalty is a heightened one . . . we will not substitute our judgment or opinions for that of a reasonable [sentencer]. . . . Instead, we must determine whether the defendant's proof of a mitigating factor was so clear and so compelling that the [sentencer], in the exercise of reasoned judgment, could not have rejected it." (Citation omitted; internal quotation marks omitted.) *State* v. *Breton*, 264 Conn. 327, 366–67, 824 A.2d 778, cert. denied, 540 U.S. 1055, 124 S. Ct. 819, 157 L. Ed. 2d 708 (2003). This standard of review applies to both aspects of the sentencer's determination as to mitigating factors. Id., 369–70.

We now turn to the evidence presented by the defendant in support of mitigation. Ellen Knight, an investigator for the division of public defender services, testified as to the state of the defendant's home at 15 Marion Avenue shortly after his arrest. Knight described the condition of the property as unlike anything she had ever seen. In short, the house had fallen into severe disrepair, was filthy and overrun with clutter and garbage, and reeked from the presence of several cats and their accumulated waste. The washing machine, oven, a refrigerator and one bathroom were not functional. The kitchen subfloor long had been exposed due to removal, without subsequent replacement, of the linoleum covering, and part of a downstairs ceiling had collapsed from a leak in an upstairs bathroom. The surrounding yard was poorly maintained and overrun with vegetation. Extensive photographic and videotaped evidence showing the condition of the property was submitted into the record after being identified and described by Knight.

Next, the defendant offered testimony from his mother, Joyce Moffatt, his father, Peter Rizzo, his older brother, Brandon Rizzo, and his younger sister, Chelsea Rizzo. Brandon Rizzo is approximately two years older than the defendant and Chelsea Rizzo is approximately three years younger than the defendant. The whole family spoke of the parents' unhappy marriage, their frequent arguments and their eventual divorce in 1988, when the defendant was about ten years old. The divorce was upsetting to the children, particularly to the defendant. Following the divorce, Moffatt began to work long hours at multiple jobs and, due to ongoing financial pressures, was forced to leave the children unattended and unsupervised, often into the evening hours. Also following the divorce, the family home gradually fell into disrepair, ultimately reaching the state previously described. At times, the heat was turned off for nonpayment. Eventually, the washing machine and refrigerator broke and were not repaired. At some point, the attic became inaccessible because raccoons were living in it. The house became very cluttered and dirty, and, because Moffatt consistently was tired, depressed and overwhelmed, she failed to remedy that situation.

There was evidence showing that Peter Rizzo sometimes had failed to abide by the parties' bi-weekly visitation schedule by picking up his children as planned. Additionally, he sometimes fell behind on his child support payments, although he eventually caught up. On one occasion, after having the children with him for the Thanksgiving holiday, he dropped them off early at home while Moffatt was out of state visiting relatives. Although Peter Rizzo generally lived nearby in Cheshire following the divorce, he moved out of state for a period beginning in 1995, when the defendant was about sixteen years old.

Testimony from the Rizzo family, as well as other documentary evidence, established that the defendant had been a small boy who suffered from a nervous stomach, and he remained substantially smaller than his peers throughout childhood and adolescence. Additionally, the defendant had a problem with bedwetting that lasted into his teens, and his brother teased him about this problem. Because of his diminutive stature, he also was picked on at school.

Two of the defendant's neighbors, Barbara Voglesong and Paula Delage, also testified. They confirmed that the defendant and his siblings often were unsupervised and outside alone after dark, and that their house was disheveled and smelled strongly of cat urine. The defendant and his sister played with Voglesong's children often, and Voglesong testified that the defendant seemed to be looking for a mother. A middle school friend of the defendant confirmed that he was unsupervised and "had [a lot of] freedom"

Several witnesses testified as to the defendant's strong interest in violent, gory "slasher films" and horror themed books, an interest he was able to pursue freely due to lack of supervision. Moffatt was either unable or unwilling to prevent the defendant from viewing these materials.

The defendant was an avid and talented cook. At home, he prepared meals for himself and his siblings. While in high school, he received an award for creativity in culinary arts.

Evidence was submitted to show that the defendant was an involved churchgoer. The defendant and his sister continued to attend church by themselves following their parents' divorce, when the rest of the family ceased to go. The defendant brought homemade baked goods to church events and he participated in a Christmas pageant one year.

Testimony from several witnesses, both young and adult, tended to show that the defendant had good relationships with people who thought well of him and enjoyed his company. His parents described him as a giving child who was funny, thoughtful and helpful to other people. Chelsea Rizzo stated that she was close to the defendant and still loved him. Kenneth Sweet, a high school classmate of the defendant's, considered the defendant to be his best friend. The two had socialized and spoke on the telephone a lot. Sweet described the defendant as a "class clown," outgoing and funny. Sean Baranowsky, another high school classmate, also described the defendant as a "clown," who made people laugh. Perrin Markay, a friend of the defendant's during middle school and high school, also described him as a "best friend," as well as a really good person who took care of his sister.

Lynn Connolly managed a video store at which the defendant once had worked, and she lived in an apartment above the store. Connolly testified that the defendant spent much time at her apartment and also at a neighbor's apartment, that she permitted the defendant to baby-sit her children and that she never had any concerns about him. Violet Boisvert also lived in the vicinity of the video store and met the defendant when he was about fifteen years old. She testified that the defendant often visited her home and that she never had any problem with him. Boisvert testified that her family loved the defendant, that he always was welcome in her home and that she trusted him with her children. Mary Sweet McKeown, Kenneth Sweet's mother, testified that the defendant visited her home a few times a month, that he stayed overnight sometimes and that she would wash his clothes for him. McKeown stated that the defendant was like a second son to her, that she trusted him and that she had no concerns about him. Daisy DeJesus, the mother of another high school friend of the defendant, testified that the defendant was welcome at her home, that he ate meals there and that he addressed her as a second mother. DeJesus stated that she was there for the defendant, that she showed him affection and that he seemed like a happy kid.

The defendant demonstrated that he had been a decent student with no disciplinary problems. He was admitted to the culinary arts program at Warren F. Kaynor Regional Vocational-Technical School (Kaynor) after being highly recommended on the basis of his good middle school grades, a strong interview and other considerations. While attending Kaynor, the defendant maintained an average class rank, and he graduated in 1996 in the middle of his class. In his senior year, he was accepted into a culinary school in South Carolina, but ultimately did not attend. Testimony from the defendant's parents suggested that one or both of them had failed to complete paperwork necessary for him to receive financial aid. Following graduation, instead of attending culinary school, the defendant joined the Marine Corps. While in the Marines, the defendant completed boot camp and infantry training, and received a certificate of appreciation for service he had performed as a recruit religious lay reader. During the additional, highly rigorous training that followed, the defendant

became demoralized and caused himself to be discharged from service, apparently by eating marijuana and subsequently failing a drug test.

Evidence was presented about hazing activities, some of a sexual nature, to which the defendant, and approximately five to seven other classmates, were subjected in their sophomore year at Kaynor. Senior classmates, typically within the confines of a locker room, engaged in activities such as throwing the younger boys into lockers, pulling their pants down and "goos[ing]" them. At times, an upperclassman would shove a younger boy's face into the upperclassman's crotch, or the upperclassman would sit on the younger boy's face or on his chest facing his head, when the upperclassman either was clothed or undressed with his private parts exposed. There were rumors that the defendant had been a victim of sexual assault. Although the younger boys complained, their teacher failed to address the matter. Eventually, after an investigation by police and school officials, the upperclassmen were suspended and the teacher resigned, but no criminal charges were brought. With the help of his father, the defendant participated in a civil action against Kaynor, which ultimately was settled. The defendant received about \$7500 as a settlement payment, which he kept and spent himself.

The defendant introduced evidence showing that he had been employed consistently for many years, beginning when he was in middle school. He had worked at a video store, several restaurants and a bakery, for the local newspaper and as a telemarketer. At the video store, he was trusted and given a lot of responsibility. When he returned home after being discharged from the Marine Corps, he immediately secured employment through a temporary agency.

Finally, the defendant presented the expert testimony of James Garbarino, a developmental psychologist who specializes in childhood and adolescence, for the stated purpose of providing context to the panel for its evaluation of the other evidence offered in mitigation. Garbarino testified that the years encompassing adolescence are not subject to fixed definition, and that brain maturation typically continues into the early twenties. He opined that, during adolescence, a person is more prone to impulsive acts. Garbarino also spoke of the importance of adults, particularly parents, being present in a child's life to teach and influence moral behavior, and about the negative effects of abuse and neglect on a child's development. He explained how shame could lead to rage, possibly resulting in violent responses to relatively minor problems. Garbarino also testified that chronic trauma or assaults could lead to "emotional numbing" as an adaptation, making a person appear cold and emotionless. Additionally, he discussed the potential outcomes of "toxic environment[s]," which could be physical or social, and opined that televised violence could affect a child's aggressive behavior. Finally, Garbarino explained how the path of a particular individual's development is determined both by the various risk factors to which he is exposed and the individual's personal characteristics, in particular his resilience. He added that a child's having at least one person in his life who is "crazy about" him can add to the child's resilience.

To rebut the defendant's case in mitigation, the state relied on its cross-examination of defense witnesses. With regard to the condition of the defendant's home, the state's attorney established that, despite the deplorable state of the property, the defendant's family members lived there for years, both before and after his arrest, and essentially chose to live that way. Several witnesses confirmed that, although they were aware that children lived in the house they considered uninhabitable, they never thought to report the situation to the department of children and families.

The defendant's family members verified that their house did not always appear as it did at the time of the defendant's arrest. Rather, prior to the parents' divorce, it was well kept and clean. Additionally, the house was located in a nice neighborhood with many other children and a park. Prior to the divorce, the family celebrated holidays together, attended church and went on camping trips. Moffatt testified that, after the divorce, there was no money available for home repairs, but that her children were her number one concern, she tried to maintain a stable home for them and she sacrificed herself for them. Although she often was absent, no physical harm to the children ever resulted. According to Moffatt, the children were fed, clothed and received presents at holidays, and they attended school and were told they were loved. Nobody ever complained about the children to Moffatt or told her that she had to take better care of them. Moffatt testified that she expressed her love for her children and was physically affectionate with them.

Peter Rizzo testified that he never abused his children, physically or psychologically, and that he loved them very much. He stated that, during his marriage to Moffatt, the house was neat and the children were happy and wanted for nothing. Following the divorce, he supported the children as best he could, and they always had health insurance. Peter Rizzo testified that he has never stopped loving the defendant and has always been in contact with him.

Although both Chelsea Rizzo and Brandon Rizzo found deficiencies in their upbringing, they nevertheless agreed that their parents loved them. Both of them confirmed that, despite their troubled and neglectful childhood experience, they had completed their high school educations, had never been arrested and had maintained steady employment. Brandon Rizzo testified that, although he did not feel close to his parents when growing up, they were available to give him advice if he wanted it.

When cross-examining Garbarino, the state's attorney elicited that Garbarino had not interviewed or evaluated the defendant, nor had he prepared a report specific to the facts of this case. Particularly, Garbarino agreed that he knew "very little" about the case and had read no reports about it other than "one very brief summary" During his questioning of Garbarino, the state's attorney effectively highlighted that many of the risk factors or characteristics of troubled youth about which Garbarino generally had spoken did not apply to the defendant. Specifically, the defendant was academically average, had no prior arrests and no apparent neurological problems and was not involved in a gang. Moreover, there was no indication that the defendant had been physically abused, and neither he nor his family members had issues with criminal violence, drugs or alcohol.

After our careful review of the evidence presented by the defendant in support of mitigation, we disagree that, as to each proposed individual factor, the evidence, viewed within the context of all of the facts and circumstances of the case, "was so clear and so compelling that the [panel], in the exercise of reasoned judgment, could not have rejected it"; (internal quotation marks omitted) State v. Breton, supra, 264 Conn. 367; or that the evidence necessarily "compel[led] a finding that [the established] facts extenuate[d] or reduce[d] the degree of [the defendant's] culpability or blame for the offense or . . . otherwise constitute[d] a basis for a sentence less than death."69 (Internal quotation marks omitted.) Id., 379. The panel reasonably could have concluded that the defendant's childhood, although severely lacking in some respects, was positive in others. The panel might have reasoned that, prior to his parents' divorce, the defendant's home life was fairly normal, despite his parents' unhappiness. Although following the divorce, parental presence and involvement in the defendant's life clearly was deficient, the defendant was able to develop close relationships with other adults and peers who loved and supported him and welcomed him into their homes. The panel might also have credited the testimony of the defendant's family that the parents, although clearly neglectful, nevertheless loved their children. As we previously have explained, "it is not inconsistent or arbitrary for a sentencer to acknowledge, and even to have compassion for, a defendant's past suffering and, nevertheless, to conclude that that suffering does not mitigate the commission of a horrific offense. . . . Put another way, in considering whether certain proved facts are mitigating, the pertinent question is not whether the defendant has established some general ground for sympathy, but whether he has established a reason to hold him less than fully responsible for the conduct with which he is charged." (Citation omitted.) Id. In short, proven facts such as childhood abuse and/or neglect, or divorced and/or otherwise struggling parents, do not invariably result in proven mitigating factors. See, e.g., id., 340–43, 371–73, 379.

Additionally, the panel reasonably could have found uncompelling the argument that the defendant's youth, and the traumatizing aspects of it, were mitigating in nature in light of the substantial achievements the defendant was able to realize despite his tender age and unfortunate circumstances. Specifically, the panel might have questioned how a person could possess the maturity and discipline to complete high school and military training, to maintain several years of steady employment; see footnote 13 of this opinion; and to refrain from abusing drugs or alcohol, but nevertheless lack the awareness and self-control that would have prevented him from murdering an innocent child without reason or provocation.⁷⁰

Moreover, the panel reasonably could have concluded that the testimony of Garbarino was of limited value in establishing mitigation. Because Garbarino had not interviewed or evaluated the defendant, and had only slight familiarity with the facts of the case, he necessarily spoke in generalities. Compare, e.g., State v. Carrasquillo, 290 Conn. 209, 214-15, 962 A.2d 772 (2009) (defendant adduced psychiatric testimony regarding development of adolescent brain generally and defendant's cognitive development in particular, after examining defendant on three occasions). Accordingly, the panel might have reasoned that the defendant's claims regarding his emotional state and the causes of his criminal behavior simply were unproven. Additionally, any mitigating value that the panel might have assigned to the defendant's cooperation with the police could have been undercut by its timing, in that the defendant initially denied any knowledge of the victim's murder and began cooperating only after he was confronted with powerful evidence of his guilt. Similarly, it would not be unreasonable for the panel to have concluded that the defendant's expression of remorse several years after his arrest rang hollow when viewed in conjunction with statements he made shortly after murdering the victim.⁷¹

"[T]he sentencer, in determining whether a proposed, factually proven mitigating factor is actually mitigating in nature, in light of all the facts and circumstances of the case, must make a value judgment about that factor in light of those facts and circumstances." (Internal quotation marks omitted.) *State* v. *Rizzo*, supra, 266 Conn. 295. In the present matter, the mitigating evidence submitted by the defendant was not so clear and compelling that the panel could not reasonably have determined that, when considered as discrete, individual factors, it was not mitigating in nature. Consequently, we must defer to the panel's value judgment. We conclude that the panel's finding of a single cumulative mitigating factor, and its rejection of the remaining proposed individual mitigating factors, was not unreasonable or otherwise improper.

VII

The defendant claims next that the panel improperly determined that the proven aggravating factor outweighed the proven mitigating factor.⁷² According to the defendant, the panel's determination was not a reasoned moral judgment based on the evidence, and the sentence of death that the panel imposed was excessive and disproportionate. The state argues alternatively that the defendant's claim is not reviewable or, even if it is, the panel reasonably concluded that the aggravating factor outweighed the mitigating factor. We agree with the state that the panel's determination was reasonable.

Pursuant to our death penalty scheme, if the state proves the existence of one or more aggravating factors beyond a reasonable doubt, and the defendant fails to prove any statutory mitigating factors but proves one or more nonstatutory mitigating factors by a preponderance of the evidence, the sentencer then weighs the established aggravating factor or factors against the established nonstatutory mitigating factor or factors. If the sentencer finds that the nonstatutory mitigating factor or factors are outweighed by the aggravating factor or factors, the defendant shall be sentenced to death. General Statutes (Rev. to 1997) § 53a-46a (f). Although the statutory language does not supply a standard for the sentencer to employ in making the weighing determination, we concluded in Rizzo that the sentencer must be convinced, beyond a reasonable doubt, that the aggravating factor or factors outweigh, by any degree or amount, the nonstatutory mitigating factor or factors. State v. Rizzo, supra, 266 Conn. 224–25. We required the exacting, beyond a reasonable doubt standard, in part, to ensure reliability and certainty in the ultimate decision-making process. Id., 237. We acknowledged the reality that, once a sentencer arrives at the decision that death is the appropriate penalty, "that decision would be, for all practical purposes, unreviewable on appeal save for evidentiary insufficiency of the aggravating factor^{"73} Id.

In *State* v. *Courchesne*, supra, 296 Conn. 784, we assumed, without deciding, that a claim of improper weighing was reviewable, and we concluded, on the basis of the evidence presented, that the jury reasonably could have found, beyond a reasonable doubt, that the proven aggravating factor outweighed the alleged non-statutory mitigating factors.⁷⁴ We conclude similarly today.

The evidence established, and the panel found, that the defendant murdered the thirteen year old victim in a cruel, heinous and depraved manner. The defendant lured the victim into a secluded backyard under the pretense of looking for snakes, then murdered the victim by beating him in the head repeatedly with a sledgehammer. The defendant's conduct was intentional, and the victim survived long enough to experience extreme physical and psychological pain and suffering beyond that which was necessary to cause his death, as evidenced by his attempt to protect himself and his request for the defendant to stop hitting him. The defendant's choice and use of a sledgehammer as his murder weapon, his postarrest statements and his lack of remorse established that he was callous and indifferent to the victim's pain and suffering. The defendant presented substantial constitutionally relevant mitigating evidence regarding his relative youth, his troubled upbringing and his positive character traits, and he argued that those circumstances extenuated or reduced his culpability and constituted a basis for a sentence less than death. The panel concluded that this evidence, viewed cumulatively, was mitigating in nature. The panel acknowledged the high level of certainty applicable to the task of weighing mitigating and aggravating factors, pursuant to our decision in Rizzo, and determined that the proven aggravator was a weightier sentencing consideration than the proven mitigator. Considering all of the foregoing, we are unable to conclude that the defendant's age,⁷⁵ troubled background and other aspects of his person were of such a compelling character that the panel could not have reasonably concluded, beyond a reasonable doubt, that they were outweighed, by any amount or degree, by the cruelty, heinousness and depravity of the defendant's crime.⁷⁶ Accordingly, the defendant's seventh claim is not availing.

VIII

The defendant argues next that his death sentence was imposed arbitrarily and capriciously in violation of General Statutes § 53a-46b (b) (1)77 and the eighth amendment and contrary to federal guarantees of due process and equal protection because there are no uniform standards in Connecticut guiding prosecutors' decisions to seek the death penalty.78 According to the defendant, due to prosecutors' unbridled discretion and disparate charging practices throughout the state, there is a disproportionately greater likelihood of being sentenced to death in the judicial district of Waterbury. He observes that more of Connecticut's death row inmates have been prosecuted in that judicial district than in any of the others.⁷⁹ We disagree that the defendant has established a constitutional violation, or that his sentence otherwise was a product of passion, prejudice or any other arbitrary factor.⁸⁰

In advancing this claim, the defendant cites no authority that directly supports it, and completely ignores extensive federal and state jurisprudence that rejects it. See McClesky v. Kemp, 481 U.S. 279, 307, 311-12, 313-14 n.37, 107 S. Ct. 1756, 95 L. Ed. 2d 262 (1987); Jurek v. Texas, 428 U.S. 262, 274, 96 S. Ct. 2950, 49 L. Ed. 2d 929 (1976); Proffitt v. Florida, supra, 428 U.S. 254; Gregg v. Georgia, supra, 428 U.S. 198-99 and n.50, 224-26; United States v. Mitchell, 502 F.3d 931, 982 (9th Cir. 2007), cert. denied, 553 U.S. 1094, 128 S. Ct. 2902, 171 L. Ed. 2d 843 (2008); United States v. Sampson, 486 F.3d 13, 24-25 (1st Cir. 2007), cert. denied, 553 U.S. 1035, 128 S. Ct. 2424, 171 L. Ed. 2d 234 (2008); Williams v. Bagley, 380 F.3d 932, 963 (6th Cir. 2004), cert. denied sub nom. Williams v. Bradshaw, 544 U.S. 1003, 125 S. Ct. 1939, 161 L. Ed. 2d 779 (2005); Joubert v. Hopkins, 75 F.3d 1232, 1248 (8th Cir.), cert. denied, 518 U.S. 1029, 116 S. Ct. 2574, 135 L. Ed. 2d 1090 (1996); Davis v. Greer, 13 F.3d 1134, 1144 (7th Cir.), cert. denied, 513 U.S. 933, 115 S. Ct. 328, 130 L. Ed. 2d 287 (1994); Hawkins v. Wong, United States District Court, Docket No. CIV S-96-1155 MCE EFB DP (E.D. Cal. September 2, 2010); Duckett v. McDonough, 701 F. Sup. 2d 1245, 1293 (M.D. Fla. 2010); Kerr v. Thaler, United States District Court, Docket No. 4:06-CV-372-Y (N.D. Tex. September 17, 2009); Moeller v. Weber, 635 F. Sup. 2d 1036, 1044–45 (D.S.D. 2009); Moreland v. Bradshaw, 635 F. Sup. 2d 680, 725-26 (S.D. Ohio 2009); United States v. Tisdale, United States District Court, Docket No. 07-10142-05-JTM (D. Kan. December 8, 2008); Hamilton v. Ayers, 458 F. Sup. 2d 1075, 1144-45 (E.D. Cal. 2006), rev'd in part on other grounds, 583 F.3d 1100 (9th Cir. 2009); Crowe v. Terry, 426 F. Sup. 2d 1310, 1355 (N.D. Ga. 2005), aff'd sub nom. Crowe v. Hall, 490 F.3d 840 (11th Cir. 2007), cert. denied, 553 U.S. 1007, 128 S. Ct. 2053, 170 L. Ed. 2d 798 (2008); Middleton v. Roper, United States District Court, Docket No. 4:03CV543 CDP (E.D. Mo. September 21, 2005); Madrigal v. Bagley, 276 F. Sup. 2d 744, 805 (N.D. Ohio 2003), aff'd, 413 F.3d 548 (6th Cir. 2005); Smith v. Anderson, 104 F. Sup. 2d 773, 846-47 (S.D. Ohio 2000), aff'd, Smith v. Mitchell, 348 F.3d 177 (6th Cir. 2003), cert. denied, 543 U.S. 841, 125 S. Ct. 278, 160 L. Ed. 2d 65, reh. denied, 543 U.S. 1016, 125 S. Ct. 646, 160 L. Ed. 2d 488 (2004); United States v. Davis, 904 F. Sup. 554, 559-60 (E.D. La. 1995); United States v. Cooper, 754 F. Sup. 617, 625 (N.D. Ill. 1990); Phillips v. State, 650 So. 3d 971, 1037–38 (Ala. Crim. App. 2010); State v. Smith, 193 Ariz. 452, 463, 974 P.2d 431, cert. denied, 528 U.S. 880, 120 S. Ct. 191, 145 L. Ed. 2d 161 (1999); Simpson v. State, 339 Ark. 467, 470-71, 6 S.W.3d 104 (1999); People v. Vines, 51 Cal. 4th 830, 889-90, 251 P.3d 943, 124 Cal. Rptr. 3d 830 (2011); Dawson v. State, 581 A.2d 1078, 1099-1100 (Del. 1990), vacated on other grounds, 503 U.S. 159, 112 S. Ct. 1093, 117 L. Ed. 2d 309 (1992); Wade v. State, 41 So. 3d 857, 874–76 (Fla.

2010), cert. denied, U.S. , 131 S. Ct. 1004, 178 L. Ed. 2d 835 (2011); Arrington v. State, 286 Ga. 335, 337, 687 S.E.2d 438 (2009), cert. denied, U.S. , 131 S. Ct. 112, 178 L. Ed. 2d 69 (2010); People v. Thompson, 222 Ill. 2d 1, 54, 853 N.E.2d 378 (2006), cert. denied, 549 U.S. 1254, 127 S. Ct. 1393, 167 L. Ed. 2d 163 (2007); Harrison v. State, 644 N.E.2d 1243, 1258 (Ind. 1995); Hunt v. Commonwealth, 304 S.W.3d 15, 55 (Ky. 2009), cert. denied, U.S. , 131 S. Ct. 203, 178 L. Ed. 2d 122 (2010); Johnson v. State, 333 S.W.3d 459, 471 (Mo. 2011); State v. Gales, 269 Neb. 443, 461-62, 694 N.W.2d 124, cert. denied, 546 U.S. 947, 126 S. Ct. 449, 163 L. Ed. 2d 341 (2005); State v. Koedatich, 112 N.J. 225, 250-57, 548 A.2d 939 (1988), cert. denied, 488 U.S. 1017, 109 S. Ct. 813, 102 L. Ed. 2d 803 (1989); State v. Clark, 128 N.M. 119, 142-43, 990 P.2d 793 (1999); State v. Blakeney, 352 N.C. 287, 312-13, 531 S.E.2d 799 (2000), cert. denied, 531 U.S. 1117, 121 S. Ct. 868, 148 L. Ed. 2d 780 (2001); Romano v. State, 847 P.2d 368, 392–93 (Okla. Crim. App. 1993), aff'd, 512 U.S. 1, 114 S. Ct. 2004, 129 L. Ed. 2d 1 (1994); State v. Longo, 341 Or. 580, 602-603, 148 P.3d 892 (2006), cert. denied, 552 U.S. 835, 128 S. Ct. 65, 169 L. Ed. 2d 53 (2007); Commonwealth v. Crews, 552 Pa. 659, 663-64, 717 A.2d 487 (1998); State v. Moeller, supra, 616 N.W.2d 463; State v. Banks, 271 S.W.3d 90, 154–55 (Tenn. 2008), cert. denied, U.S. , 129 S. Ct. 1677, 173 L. Ed. 2d 1043 (2009); Whitaker v. State, 286 S.W.3d 355, 367 (Tex. Crim. App. 2009); State v. Lafferty, 20 P.3d 342, 379 (Utah 2001), cert. denied, 534 U.S. 1018, 122 S. Ct. 542, 151 L. Ed. 2d 420 (2001); State v. Harris, 106 Wn. 2d 784, 793-94, 725 P.2d 975 (1986), cert. denied, 480 U.S. 940, 107 S. Ct. 1592, 94 L. Ed. 2d 781 (1987).

These cases recognize, in sum, that prosecutorial discretion is an essential component of the criminal justice system in general, and of a constitutional death penalty system in particular, and it often results in leniency. Additionally, prosecutorial discretion is not truly unbridled or standardless; rather, it is constrained by statutes defining capital crimes and aggravating and mitigating factors, our highly detailed capital punishment jurisprudence, ethical codes governing charging decisions and the strength of the evidence available in any given case to support a potential capital prosecution. Finally, the trial process and mandatory appellate review provide further checks against potentially improper pursuit and imposition of the death penalty. Because the defendant's claim is contradicted by overwhelming authority with sound reasoning, we are compelled to reject it.

IX

The defendant's final claim is that the death penalty, in general, constitutes cruel and unusual punishment in violation of the state constitution. Although we previously have rejected this claim; see *State* v. *Ross*, supra, 230 Conn. 249–52; see also *State* v. *Webb*, supra, 238 Conn. 406; the defendant requests that we reconsider it in light of subsequent developments in law and policy.⁸¹ We accept the defendant's invitation to revisit this issue, but again disagree that the death penalty violates the state constitution.⁸²

In *Ross*, the defendant, like the defendant here, raised a general challenge pursuant to the state constitution to the validity of the death penalty under any and all circumstances. After acknowledging that article first, \$ and 9, of the constitution of Connecticut protects against cruel and unusual punishment independently of the eighth amendment to the United States constitution, we conducted an analysis pursuant to the six factor framework of *State* v. *Geisler*, supra, 222 Conn. 684–86, to determine whether the death penalty, per se, was offensive to those state constitutional provisions. We concluded that it was not.⁸³ *State* v. *Ross*, supra, 230 Conn. 249–52.

We initially determined that five of the *Geisler* factors—(1) the text of the constitutional provisions; (2)related Connecticut precedents; (3) persuasive federal precedents; (4) persuasive precedents of other state courts; and (5) historical insights into the intent of our constitutional forbearers-did not support the defendant's claim that the death penalty should be declared unconstitutionally unacceptable on its face. Id., 249. We explained: "In article first, § 8, and article first, § 19, our state constitution makes repeated textual references to capital offenses and thus expressly sustains the constitutional validity of such a penalty in appropriate circumstances. Connecticut case law has recognized the facial constitutionality of the death penalty under the eighth and fourteenth amendments to the federal constitution. See, e.g., State v. Davis, 158 Conn. 341, 358, 260 A.2d 587 (1969), vacated and remanded on other grounds, [Davis v. Connecticut] 408 U.S. 935, 92 S. Ct. 2856, 33 L. Ed. 2d 750 (1972). Federal constitutional law does not forbid such a statute outright. Gregg v. Georgia, supra, 428 U.S. 153. Courts in the overwhelming majority of our sister states have rejected facial challenges to the death penalty under their state constitutions. Finally, Connecticut's history has included a death penalty since 1650, when it was incorporated into Ludlow's Code . . . and such a penalty was considered constitutional at the time of the adoption of the constitution of 1818." (Citation omitted.) State v. Ross, supra, 230 Conn. 249-50.

We thereafter considered the sixth *Geisler* factor, contemporary understandings of applicable economic and sociological norms, and we disagreed with the defendant's argument "that the death penalty is so inherently cruel and so lacking in moral and sociological justification that it is unconstitutional on its face because it is fundamentally offensive to evolving standards of human decency." Id., 251. We reasoned that community standards of acceptable legislative policy choices necessarily were reflected in our constitutional text, our history and the teachings of the jurisprudence of other state and federal courts. Id. We found particularly compelling the fact that, in the ten years following the United States Supreme Court's invalidation of all of the states' capital punishment schemes due to their failure to channel properly the sentencer's discretion, thirty-seven states had passed new death penalty legislation designed to comply with the court's constitutional directives. Id. We concluded that, given that circumstance, "the probability that the legislature of each state accurately reflects its community's standards approaches certainty." (Internal quotation marks omitted.) Id.

We then emphasized that, although the death penalty itself is not cruel and unusual punishment contrary to the state constitution, the imposition of the penalty must conform to constitutional constraints. Specifically, we held that "the due process clauses of our state constitution incorporate the principles underlying a constitutionally permissible death penalty statute that the United States Supreme Court has articulated in [its capital punishment jurisprudence] These principles require, as a constitutional minimum, that a death penalty statute, on the one hand, must channel the discretion of the sentencing judge or jury so as to assure that the death penalty is being imposed consistently and reliably and, on the other hand, must permit the sentencing judge or jury to consider, as a mitigating factor, any aspect of the individual defendant's character or record as well as the circumstances of the particular offense." (Citations omitted.) Id., 252. We concluded that "[o]ur death penalty statute, § 53a-46a, meets these minimum state constitutional law requirements." Id.

Two years later, in *State* v. *Webb*, supra, 238 Conn. 406, an en banc panel comprised entirely of members of this court⁸⁴ reaffirmed the holding of *Ross* recited herein,⁸⁵ and we since have repeated the holding on several occasions without elaboration. See *State* v. *Colon*, supra, 272 Conn. 382–83; *State* v. *Breton*, supra, 264 Conn. 417–18; *State* v. *Reynolds*, supra, 264 Conn. 236–37; *State* v. *Cobb*, supra, 251 Conn. 496–97. The defendant asks that we reconsider these holdings in light of the current legal and sociological landscape.

We agree with the defendant that, in determining whether a particular punishment is cruel and unusual in violation of constitutional standards, we must "look beyond historical conceptions to the evolving standards of decency that mark the progress of a maturing society. . . . This is because [t]he standard of extreme cruelty is not merely descriptive, but necessarily embodies a moral judgment. The standard itself remains the same, but its applicability must change as the basic mores of society change." (Citations omitted; internal quotation marks omitted.) *Graham* v. *Florida*, U.S. , 130 S. Ct. 2011, 2021, 176 L. Ed. 2d 825 (2010). Thus, it is appropriate to revisit our earlier holdings to examine what since has transpired. In so doing, however, we remain cognizant that our constitution contains explicit references to capital punishment; see Conn. Const., art. I, §§ 8 and 19; and, therefore, "expressly sustains the constitutional validity of such a penalty in appropriate circumstances." *State* v. *Ross*, supra, 230 Conn. 249–50. The defendant's claim must be evaluated against this clear textual backdrop.

We first consider developments in the capital punishment jurisprudence of the United States Supreme Court.⁸⁶ In the years since *Ross* and *Webb* were decided, the United States Supreme Court has held that the death penalty is constitutionally impermissible for nonhomicide crimes against individuals; see Kennedy v. Louisiana, 554 U.S. 407, 413, 128 S. Ct. 2641, 171 L. Ed. 2d 525 (2008); and it has adopted categorical rules prohibiting the imposition of the death penalty for defendants who committed their crimes prior to the age of eighteen; see Roper v. Simmons, 543 U.S. 551, 568-71, 125 S. Ct. 1183, 161 L. Ed. 2d 1 (2005); or whose intellectual functioning is in a low range. See Atkins v. Virginia, 536 U.S. 304, 318-21, 122 S. Ct. 2242, 153 L. Ed. 2d 335 (2002). It remains settled federal law, however, that the death penalty in general is constitutionally permissible. Baze v. Rees, 553 U.S. 35, 47, 61, 62 n.7, 128 S. Ct. 1520, 170 L. Ed. 2d 420 (2008); see also Gregg v. Georgia, supra, 428 U.S. 177-78.

Notably, these federal constitutional developments did not change the law in Connecticut, because our legislature had acted ahead of the United States Supreme Court to prohibit executions of persons with mental retardation. See General Statutes § 53a-46a (h) (2), as amended by Public Acts 2001, No. 01-151, § 2. Moreover, from the time they were adopted in 1973, our modern death penalty statutes barred executions of those who committed their capital crimes when they were under eighteen years old; see Public Acts 1973, No. 73-137, § 4; and did not authorize the death penalty for any crime not involving the death of a victim.⁸⁷ See Public Act 73-137, § 3. We are not convinced, therefore, that the recent jurisprudence of the United States Supreme Court suggests that Connecticut, by retaining the death penalty, is out of step with national societal mores. To the contrary, over time, the national landscape has become more closely aligned with Connecticut. Additionally, we do not discern a fundamental disapproval of the death penalty in general from that court's ongoing shaping of the categories of offenses or offenders to which it should apply. Rather, such refinements are consistent with the long-standing principle espoused by the United States Supreme Court that society's ultimate sanction ought to be reserved for the most egregious and culpable of offenders.

We turn to our sister states. It is true that, in the intervening years since our decisions in *Ross* and *Webb*, the number of states in which the death penalty is an available punishment has declined slightly from the thirty-seven that authorized it in 1994. Specifically, the legislatures of three states-Illinois, New Jersey and New Mexico—have voted to abolish the death penalty.⁸⁸ Although it is significant that these states have chosen to abandon capital punishment, the decision to do so in each instance was based on a variety of public policy determinations made by legislators and governors, and did not result from the constitutional command of a court. See, e.g., State v. Ramseur, 106 N.J. 123, 167-97, 524 A.2d 188 (1987) (rejecting claim that death penalty per se was violative of state constitution); State v. Rondeau, 89 N.M. 408, 412, 553 P.2d 688 (1976) (same).

More importantly, at this point in time, a strong majority of jurisdictions-thirty-four states, the federal government and the military-still authorize the death penalty, while only sixteen states do not. See Death Penalty Information Center, "Facts about the Death Penalty," (updated November 17, 2011), p. 1, available at http://www.deathpenaltyinfo.org/documents/Fact Sheet.pdf (last visited November 18, 2011) (copy contained in the file of this case in the Supreme Court clerk's office). Simply put, the recent actions of a handful of states cannot reasonably be characterized as the type of "dramatic shift in the state legislative landscape"; Atkins v. Virginia, supra, 536 U.S. 310; that would call our decisions in Ross and Webb into question. Compare id., 313–15 (holding unconstitutional executions of persons with mental retardation, when thirty states had disallowed them); Kennedy v. Louisiana, supra, 554 U.S. 423 (same, for crime of child rape, when forty-four states had disallowed them); Roper v. Simmons, supra, 543 U.S. 564–65 (same, as to executions of juveniles, when thirty states, including five over prior fifteen years, had disallowed them): Enmund v. Florida, 458 U.S. 782, 788–92, 102 S. Ct. 3368, 73 L. Ed. 2d 1140 (1982) (same, as to executions of codefendants who did not kill, attempt to kill or intend to kill, when forty-two states had disallowed them); Coker v. Georgia, 433 U.S. 584, 595–96, 97 S. Ct. 2861, 53 L. Ed. 2d 982 (1977) (same, for rape of adult woman, where fortynine jurisdictions had disallowed them).

Although "the clearest and most reliable objective evidence of contemporary values is the legislation enacted by the country's legislatures"; (internal quotation marks omitted) *Atkins* v. *Virginia*, supra, 536 U.S. 312; in assessing whether a punishment is constitutionally sound, it also is appropriate for us to consider what is occurring in actual practice. For example, in *Graham* v. *Florida*, supra, 130 S. Ct. 2024, in holding that the sentence of life imprisonment without the possibility of parole was cruel and unusual punishment for a juvenile who had committed a nonhomicide offense, the United States Supreme Court considered, inter alia, that nationwide, only 123 people were serving such sentences in only eleven jurisdictions. In contrast, as to the death penalty generally, as of January 1, 2011, there were 3251 inmates held on death row nationwide by thirty-six states,⁸⁹ the federal government and the military. See Death Penalty Information Center, "Facts about the Death Penalty," supra, p. 2. Unlike the United States Supreme Court in *Graham*, therefore, we cannot conclude that the punishment of death has become a rarity imposed only in limited portions of the nation.

The defendant directs us to the fact that, despite the large number of inmates on death row, the number of executions actually carried out over the past decade generally has declined gradually, hitting a low point in 2008 before rising again.⁹⁰ The numbers remain substantially higher, however, than those in the ten years preceding our decision in Ross.⁹¹ In addition, the decrease in 2007 and 2008 likely was attributable in part to moratoria imposed in 2007 following the United States Supreme Court's grant of certification in *Baze* v. *Rees*, supra, 553 U.S. 41, an appeal in which it was argued, unsuccessfully, that the risk of error in administration of lethal injection, the method of execution utilized by most death penalty states, rendered that form of capital punishment unconstitutional. Also a factor impeding executions in recent years is a shortage of thiopental sodium, which is used in lethal injections, as well as moratoria imposed in various states while new lethal injection procedures are promulgated and challenged. See Death Penalty Information Center, "Death Penalty in Flux," available at http://www.deathpenaltyinfo.org/ death-penalty-flux (last visited November 18, 2011) (copy contained in the file of this case in the Supreme Court clerk's office); Death Penalty Information Center, "Lethal Injection," (2011),available at http:// www.deathpenaltyinfo.org/lethal-injection-moratorium-executions-ends-after-supreme-court-decision (last visited November 18, 2011) (copy contained in the file of this case in the Supreme Court clerk's office). In light of the foregoing, we are hesitant to assume, as the defendant invites us to do, that declines in actual execution rates are attributable to decreased public support for the death penalty.⁹²

We recognize that imposition of new death sentences also has declined substantially over the past decade, from 224 in 2000 to 112 in 2010. Death Penalty Information Center, "Facts about the Death Penalty," supra, p. 3. Various reasons have been posited for the decline, however, including: the high costs of the death penalty at a time when state budgets are strained from a weak economy; publicity about convictions overturned due to DNA evidence; a significant drop in rates of violent crime and murder; improved legal representation for capital defendants, including the greater use of mitigation specialists; and the increasingly available option for prosecutors to seek life sentences without the possibility of parole.⁹³ Although some of these explanations suggest declining public support for the death penalty because it offends contemporary standards of decency and morality, others decidedly do not. Because of the ambiguity underlying the decline in new death sentences, that circumstance does not provide compelling support for abandoning our decisions in *Ross* and *Webb*.⁹⁴

The defendant points to public opinion polls as support for his claim of waning societal support for the death penalty. The most recent polling data indicate, however, that public support for the death penalty in Connecticut remains strong.⁹⁵ According to a Quinnipiac University poll released in March, 2011, 67 percent of Connecticut voters supported the death penalty, while only 28 percent were opposed to it.⁹⁶ D. Schwartz, Quinnipiac University Poll (March 10, 2011), available at http://www.quinnipiac.edu/images/polling/ct/ct03102011.doc (last visited November 18, 2011) (copy contained in the file of this case in the Supreme Court

contained in the file of this case in the Supreme Court clerk's office). When asked to choose between alternative penalties for first degree murder, 48 percent opted for the death penalty, while 43 percent chose life in prison with no chance for parole. Id. On both measures, the percentages favoring the death penalty have increased each year since 2007. Id. Although we recognize the weaknesses inherent in public opinion polls as objective measures of the popular psyche, we mention this data to refute the defendant's contention that it lends support to his constitutional claim.

The defendant also argues that this court should look to practices in some other nations, or to a resolution of the United Nations calling for the abolition of capital punishment, to determine whether the death penalty offends contemporary sociological norms in Connecticut. In its eighth amendment jurisprudence, the United States Supreme Court at times has referenced international norms as support for its own determinations, while at the same time making clear that the opinions prevalent in other nations could never control over a domestic legislative climate running decidedly counter to such opinions. See Graham v. Florida, supra, 130 S. Ct. 2033, (noting that punishment at issue had been rejected in all other nations, but emphasizing that "[t]his observation does not control our decision [and that] judgments of other nations and the international community are not dispositive as to the meaning of the [e]ighth [a]mendment"); Roper v. Simmons, supra, 543 U.S. 578 ("[t]he opinion of the world community [which universally⁹⁷ had ceased to give official sanction to the juvenile death penalty], while not controlling our outcome, does provide respected and significant confirmation for our own conclusions" [emphasis added]).

In State v. Allen, 289 Conn. 550, 585, 958 A.2d 1214

(2008), we took a similar view of the relevance of international norms in a case involving a claim of an unconstitutional sentence. In rejecting the defendant's argument that life in prison with no possibility of release for a juvenile convicted of capital felony and murder was cruel and unusual punishment in violation of the eighth amendment, we recognized that the overwhelming majority of countries around the world had rejected that approach and that that circumstance was constitutionally relevant. We agreed, moreover, that the large number of juveniles serving life sentences in the United States raised troubling questions. Id. We ultimately concluded, however, that the overwhelming weight of authority from courts in this country that the practice was constitutionally sound, strong indications of approval from the United States Supreme Court and no evident trend away from imposing serious adult criminal liability upon juvenile offenders compelled us to defer to the legislative process on what ultimately is a public policy determination. Id., 585–86. We conclude similarly today that international norms cannot take precedence over a domestic legal climate in which capital punishment retains strong legislative and judicial support.

As part of his constitutional claim, the defendant argues that capital punishment is not serving legitimate penological goals of deterrence, incapacitation or rehabilitation.⁹⁸ In support of this argument, he cites to reports and recommendations of various commissions and interest groups and the opinions of certain current or past public officials.⁹⁹ The state, in reply, directs us to similar material purporting to show the contrary. We recognize that assessing the propriety of the death penalty is not exclusively the domain of the legislature, and that this court has an independent duty to determine that the penalty remains constitutionally viable as the sensibilities of our citizens evolve. See Atkins v. Virginia, supra, 536 U.S. 312–13; State v. Ross, supra, 230 Conn. 249. In so doing, however, we must "exercise our authority with great restraint"; State v. Ross, supra, 230 Conn. 249; and refrain from interfering with democratic processes unless there is compelling "reason to disagree with the judgment reached by the citizenry and its legislatures." Atkins v. Virginia, supra, 313. Moreover, it is clear that "[r]easonable people of good faith disagree on the morality and efficacy of capital punishment"; Baze v. Rees, supra, 553 U.S. 61; and that "the value of [that sanction], and its contribution to acceptable penological goals, typically is a complex factual issue the resolution of which properly rests with the legislatures" (Internal quotation marks omitted.) Kennedy v. Louisiana, supra, 554 U.S. 441; see also Roper v. Simmons, supra, 543 U.S. 571 ("[i]n general we leave to legislatures the assessment of the efficacy of various criminal penalty schemes"); Gregg v. Georgia, supra, 428 U.S. 175 ("[i]n a democratic society

legislatures, not courts, are constituted to respond to the will and consequently the moral values of the people" [internal quotation marks omitted]); cf. Baze v. Rees, supra, 69 (Alito, J., concurring) ("[p]ublic policy on the death penalty, an issue that stirs deep emotions, cannot be dictated by the testimony of an expert or two or by judicial findings of fact based on such testimony"). We therefore conclude that, as long as there remains powerful evidence of strong public support for the death penalty in the form of long-standing laws enacted by the democratically elected representatives of this state and other jurisdictions within the United States, we will not attempt to discern a contrary view of the public will, or to answer complex policy questions best answered by the legislative process, by choosing among the competing opinions of interest groups and individuals whose views are not necessarily in accord with those of the general population.¹⁰⁰

One final matter raised by the defendant merits our consideration. In May, 2009, following the filing of the defendant's initial brief, the General Assembly passed No. 09-107 of the 2009 Public Acts (P.A. 09-107), which was intended to repeal the death penalty for crimes committed after the passage of the act. On June 5, 2009, however, P.A. 09-107 was vetoed by the governor, and the legislature did not thereafter muster the two-thirds vote necessary to override the governor's veto.¹⁰¹ Accordingly, P.A. 09-107 failed to become law. Similar legislation was introduced in 2011 and voted out of the judiciary committee, but died before making it to the floor for a full vote in either chamber. Revised Senate Bill No. 1035, 2011 Sess.

Following the aborted passage of P.A. 09-107, the defendant submitted his reply brief. He argues that the legislative repeal of the death penalty, although subsequently vetoed by the governor, evidences a powerful societal repudiation of capital punishment in Connecticut that should compel this court to conclude that such punishment violates the state constitution. We are not persuaded.¹⁰²

The governor, like our legislators, is an elected representative of the people of the state. Additionally, executive approval or veto of legislation is an integral part of the legislative process; see Conn. Const., art. IV, § 15; and it is axiomatic that when the governor exercises this power, he or she is acting in a substantive legislative role. See *Bogan* v. *Scott-Harris*, 523 U.S. 44, 55, 118 S. Ct. 966, 140 L. Ed. 2d 79 (1998); *Bagley* v. *Blagojevich*, United States Court of Appeals, Docket No. 10-1389 (7th Cir. May 2, 2011); *Baraka* v. *McGreevey*, 481 F.3d 187, 197 (3d Cir.), cert. denied, 552 U.S. 1021, 128 S. Ct. 612, 169 L. Ed. 2d 393 (2007); *Torres-Rivera* v. *Calderon-Serra*, 412 F.3d 205, 213 (1st Cir. 2005); *Butts* v. *Dept. of Housing Preservation & Development*, 990 F.2d 1397, 1406 (2d Cir. 1993); see also 1 N. Singer & J. Singer, Sutherland Statutes and Statutory Construction (7th Ed. 2010) § 16:1, p. 729 ("All American [c]onstitutions give to the chief executive a formal and official role in the legislative process, in addition to the important influence he or she usually wields over the legislative process by reason of political power and leadership. The [c]onstitutions of the United States and of nearly every state require as an essential step in enactment that bills which have passed both houses shall be presented to the executive." [Emphasis added.]); 73 Am. Jur. 2d 254, Statutes § 32 (2001) ("[i]n passing on laws that are submitted for approval, the executive is regarded as a component part of the lawmaking body, and as engaged in the performance of a legislative, rather than an executive duty" [emphasis added]). Thus, just as a governor's approval of legislation may provide evidence of the motivations underlying that legislation; Perez v. Rent-A-Center, Inc., 186 N.J. 188, 215, 892 A.2d 1255 (2006) (crediting governor's signing statement as evidence of statute's meaning), cert. denied, 549 U.S. 1115, 127 S. Ct. 984, 166 L. Ed. 2d 710 (2007); Rangolan v. Nassau, 96 N.Y.2d 42, 49, 749 N.E.2d 178, 725 N.Y.S.2d 611 (2001) (same); the absence of approval, which the legislature thereafter is unable to override, signifies that public support for the failed legislation was tenuous.

Accordingly, we are unable to accept the premise underlying all of the defendant's various arguments as to the import of P.A. 09-107, which, generally stated, is that the legislature's vote establishes definitively a lack of public support for the death penalty and, therefore, the governor's veto of that act thwarted the public will. Rather, a more plausible view is that "[t]he [governor] is a representative of the people just as the members of the Senate and of the House are, and it may be, at some times, on some subjects, that the [governor] elected by all the people is rather more representative of them all than are the members of either body of the [l]egislature whose constituencies are local and not [statewide]" (Internal quotation marks omitted.) Immigration & Naturalization Service v. Chadha, 462 U.S. 919, 948, 103 S. Ct. 2764, 77 L. Ed. 2d 317 (1983).

In light of the foregoing, we disagree that we properly may discern contemporary community standards on the basis of a "truncated [product] of the legislative process"; (internal quotation marks omitted) *Wilson* v. *Eu*, 1 Cal. 4th 707, 727, 823 P.2d 545, 4 Cal. Rptr. 2d 379 (1992); that ultimately failed to gain *all* of the constitutional approvals necessary to become the binding law of this state. Cf. *Kennedy* v. *Louisiana*, supra, 554 U.S. 431 (declining to discern contemporary norms based on proposed legislation). Simply put, "[t]he [g]overnor is a part of the legislative process and a veto renders a legislative action as if it had not occurred." *Washington State Legislature* v. *Lowry*, 131 Wn. 2d 309, 330, 931 P.2d 135 (1997). We conclude that the death penalty, as a general matter, does not violate the state constitution. Accordingly, we reaffirm our earlier holdings to that effect in *State* v. *Ross*, supra, 230 Conn. 249–52, and *State* v. *Webb*, supra, 238 Conn. 406.

The judgment is affirmed.

In this opinion PALMER, McLACHLAN, VERTE-FEUILLE and DiPENTIMA, Js., concurred.

* This appeal originally was argued before a panel of this court consisting of Chief Justice Rogers, Justices Norcott, Katz, Palmer, McLachlan and Vertefeuille and Chief Judge DiPentima. Thereafter, Justice Katz resigned from this court and did not participate in the consideration or decision of the case, and Justice Zarella was added to the panel. Justice Zarella has read the record and briefs, listened to a recording of the oral argument and participated in the resolution of this case.

 1 General Statutes (Rev. to 1997) § 53a-46a provides in relevant part: "(b) For the purpose of determining the sentence to be imposed when a defendant is convicted of or pleads guilty to a capital felony, the judge or judges who presided at the trial or before whom the guilty plea was entered shall conduct a separate hearing to determine the existence of any mitigating factor concerning the defendant's character, background and history, or the nature and circumstances of the crime, and any aggravating factor set forth in subsection (i). . . . Such hearing shall be conducted . . . before [a] jury . . . or . . . before the court, on motion of the defendant and with the approval of the court and the consent of the state. . . ."

Unless otherwise noted, all subsequent references to \$ 53a-46a are to the 1997 revision of the statute.

² We clarified the appropriate burden of persuasion applicable to the fact finder's weighing of aggravating factors against mitigating factors pursuant to § 53a-46a (e) and (f). *State* v. *Rizzo*, supra, 266 Conn. 224–43.

³ The sixth amendment to the United States constitution provides in relevant part: "In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed" The sixth amendment right to a jury trial is made applicable to the states through the due process clause of the fourteenth amendment. See Duncan v. Louisiana, 391 U.S. 145, 149, 88 S. Ct. 1444, 20 L. Ed. 2d 491 (1968). Article first, § 8, of the Connecticut constitution provides in relevant part: "In all criminal prosecutions, the accused shall have a right . . . to a speedy, public trial by an impartial jury. . . ." Article first, § 19, of the Connecticut constitution, as amended by article four of the amendments, provides in relevant part: "The right of trial by jury shall remain inviolate, the number of such jurors, which shall not be less than six, to be established by law; but no person shall, for a capital offense, be tried by a jury of less than twelve jurors without his consent. . . ." Because the defendant does not contend that he is afforded greater jury trial rights under the constitution of Connecticut, we assume for purposes of this appeal that the rights arising from the state and federal constitutions are coextensive. See State v. Gore, 288 Conn. 770, 776 n.7, 955 A.2d 1 (2008); see also State v. Marino, 190 Conn. 639, 646, 462 A.2d 1021 (1983) (state constitution does not demand more elaborate procedure for waiver of right to jury than that required under federal constitution).

⁴ General Statutes § 53a-45 provides in relevant part: "(b) If a person indicted for murder or held to answer for murder after a hearing conducted in accordance with the provisions of section 54-46a waives his right to a jury trial and elects to be tried by a court, the court shall be composed of three judges designated by the Chief Court Administrator or his designee, who shall name one such judge to preside over the trial. Such judges, or a majority of them, shall have power to decide all questions of law and fact arising upon the trial and render judgment accordingly. . . ."

General Statutes § 54-82 provides: "(a) In any criminal case, prosecution or proceeding, the party accused may, if he so elects when called upon to plead, be tried by the court instead of by the jury; and, in such case, the court shall have jurisdiction to hear and try such case and render judgment and sentence thereon.

"(b) If the accused is charged with a crime punishable by death or imprisonment for life and elects to be tried by the court, the court shall be composed of three judges to be designated by the Chief Court Administrator, or his designee, who shall name one such judge to preside over the trial. Such judges, or a majority of them, shall have power to decide all questions of law and fact arising upon the trial and render judgment accordingly.

"(c) If the party accused does not elect to be tried by the court, he shall be tried by a jury of six except that no person, charged with an offense which is punishable by death or life imprisonment, shall be tried by a jury of less than twelve without his consent."

 $^{\scriptscriptstyle 5}$ The transcript indicates that court did not reconvene until 11:20 a.m. on Monday and that, prior to that time, defense counsel had spoken with the defendant twice.

⁶ The defendant also draws our attention to Judge O'Keefe's statement, when the defendant first proposed waiving a jury, that the judge would not be part of the three judge panel "[g]iven [his] involvement so far in the case" Because Judge O'Keefe ultimately was chosen to serve on that panel, the defendant argues that his waiver was based on prejudicial misinformation. Because, as we hold in part II of this opinion, a reasonable person would not conclude that a judge's pretrial involvement in a case and the knowledge thereby gained necessarily impairs his or her impartiality, this claim is meritless.

⁷ We disagree that the defendant's claim is preserved simply because his waiver of his right to a jury was made contrary to his counsels' advice. Counsel raised no formal objections to the waiver during the colloquy. Furthermore, at no time during the penalty phase proceedings that followed the waiver did the defendant or his counsel move to revoke that waiver, or attempt to introduce any evidence that might have called its effectiveness into question. Finally, after the panel's imposition of sentence, the defendant did not file a motion to vacate the judgment and cause the proceedings to be set for a jury trial on the ground that he "was not fully cognizant of his rights" at the time of his jury waiver or because "the proper administration of justice require[d]" such a result. General Statutes § 54-82b (b); see also *State* v. *Ouellette*, 271 Conn. 740, 751 n.16, 859 A.2d 907 (2004) (§ 54-82b [b] applicable after commencement of trial "to remedy any [jury] waiver that was invalid").

⁸ Pursuant to *State* v. *Golding*, supra, 213 Conn. 239–40, "a defendant can prevail on a claim of constitutional error not preserved at trial only if *all* of the following conditions are met: (1) the record is adequate to review the alleged claim of error; (2) the claim is of constitutional magnitude alleging the violation of a fundamental right; (3) the alleged constitutional violation clearly exists and clearly deprived the defendant of a fair trial; and (4) if subject to harmless error analysis, the state has failed to demonstrate harmlessness of the alleged constitutional violation beyond a reasonable doubt. In the absence of any one of these conditions, the defendant's claim will fail." (Emphasis in original.)

⁹ In addition to seeking *Golding* review, the defendant argues that the trial court committed plain error in accepting his jury waiver. Because we conclude that the defendant validly waived his right to a jury, it necessarily follows that the trial court did not commit plain error. See *State* v. *Woods*, supra, 297 Conn. 589 n.5; see also *State* v. *Corona*, 69 Conn. App. 267, 274–75, 794 A.2d 565, cert. denied, 260 Conn. 935, 802 A.2d 88 (2002).

¹⁰ "The most basic rights of criminal defendants are . . . subject to waiver A criminal defendant may knowingly and voluntarily waive many of the most fundamental protections afforded by the [c]onstitution. See, e.g., *Ricketts* v. *Adamson*, 483 U.S. 1, 10 [107 S. Ct. 2680, 97 L. Ed. 2d 1] (1987) (double jeopardy defense waivable by pretrial agreement); *Boykin* v. *Alabama*, 395 U.S. 238, 243 [89 S. Ct. 1709, 23 L. Ed. 2d 274] (1969) (knowing and voluntary guilty plea waives privilege against compulsory self-incrimination, right to jury trial, and right to confront one's accusers); *Johnson* v. *Zerbst*, 304 U.S. 458, 465 [58 S. Ct. 1019, 82 L. Ed. 1461] (1938) ([s]ixth [a]mendment right to counsel may be waived)." *United States* v. *Mezzanatto*, 513 U.S. 196, 201, 115 S. Ct. 797, 130 L. Ed. 2d 697 (1995).

¹¹ Connecticut is not alone in permitting defendants to waive jury rights in capital sentencing proceedings, provided the waiver is knowing, voluntary and intelligent; see, e.g., *Peraita* v. *State*, 897 So. 2d 1161, 1195–96 (Ala. Crim. App. 2003); *Winkles* v. *State*, 21 So. 3d 19, 23 (Fla. 2009); *People* v. *Maxwell*, 173 Ill. 2d 102, 119, 670 N.E.2d 679 (1996), cert. denied, 520 U.S. 1174, 117 S. Ct. 1445, 137 L. Ed. 2d 551 (1997); *Baker* v. *State*, 367 Md. 648, 690, 790 A.2d 629, cert. denied, 535 U.S. 1050, 122 S. Ct. 1814, 152 L. Ed. 2d 817 (2002); *Bishop* v. *State*, 812 So. 2d 934, 945 (Miss.), cert. denied, 537 U.S. 976, 123 S. Ct. 468, 154 L. Ed. 2d 335 (2002); *Mack* v. *State*, 119 Nev. 421, 427, 75 P.3d 803 (2003); *State* v. *Ketterer*, 111 Ohio St. 3d 70, 72, 855 N.E.2d 48 (2006); and the defendant does not contest generally the propriety of jury waiver in the capital punishment context. We agree with the defendant, however, that a trial court should be particularly cautious when considering whether to permit a capital defendant to waive a sentencing jury. See *Patton v. United States*, supra, 281 U.S. 312–13 (observing that caution exercised by court, in accepting jury waiver, should "increas[e] in degree as the offenses dealt with increase in gravity"); cf. *California v. Ramos*, 463 U.S. 992, 998–99, 103 S. Ct. 3446, 77 L. Ed. 2d 1171 (1983) ("the qualitative difference of death from all other punishments requires a correspondingly greater degree of scrutiny of the capital sentencing determination").

Although some of the foregoing cases and other capital cases cited in this opinion predate Ring v. Arizona, supra, 536 U.S. 609, which established that there is a constitutional, and not merely a statutory, right to have a jury find aggravating factors in the penalty phase of a capital trial, the standard for determining whether a jury waiver is valid is the same regardless of whether the right is constitutional or statutory in origin. See People v. Robertson, 48 Cal. 3d 18, 36, 767 P.2d 1109, 255 Cal. Rptr. 631 (applying knowing, voluntary and intelligent standard to waiver of statutory right, prior to Ring, to capital penalty phase jury), cert. denied, 493 U.S. 879, 110 S. Ct. 216, 107 L. Ed. 2d 169 (1989); People v. Maxwell, supra, 173 Ill. 2d 117 ("[d]espite the different origins of a defendant's [constitutional] right to a jury at the guilt phase of the proceedings and his [statutory] right [prior to Ring] to a jury at the capital sentencing hearing, the waiver of either right to a jury must be knowing, intelligent, and voluntary"); Jones v. State, 310 Md. 569, 597, 530 A.2d 743 (1987) (to be effective, waiver of statutory right, prior to Ring, to capital sentencing jury must be knowing and voluntary), vacated on other grounds, 486 U.S. 1050, 108 S. Ct. 2815, 100 L. Ed. 2d 916 (1988); Commonwealth v. O'Donnell, 559 Pa. 320, 345, 740 A.2d 198 (1999) (finding, prior to *Ring*, "that a capital defendant's waiver [of] his statutory right to a penalty-phase jury must be knowing, voluntary and intelligent"); see also United States v. Mezzanatto, 513 U.S. 196, 210-11, 115 S. Ct. 797, 130 L. Ed. 2d 697 (1995) (upholding criminal defendant's waiver of protections afforded by court rule where defendant had conferred with counsel prior to waiver and "has never complained that he entered into the waiver agreement at issue unknowingly or involuntarily").

¹² We emphasize that, because the defendant never sought to withdraw his jury waiver as invalidly effected; see footnote 7 of this opinion; the question presented by his unpreserved claim "is not in full measure whether [he] acted knowingly and intelligently in waiving a jury trial, as in cases where an evidentiary hearing upon that subject has been held." *State* v. *Marino*, 190 Conn. 639, 643, 462 A.2d 1021 (1983). Rather, "[w]e must decide whether the bare appellate record before us furnishes sufficient assurance of an effective waiver at least to satisfy constitutional requirements for the disclosure of such a waiver on the record." Id., 644. Our focus is on "the adequacy of the record to show a waiver of a jury trial when its effectiveness is first questioned on appeal without the benefit of a factual exploration of that issue at some evidentiary proceeding." Id., 646.

¹³ The record indicates that the defendant had worked even prior to reaching the minimum age for employment, beginning when he was fourteen years old.

¹⁴ We disagree with the defendant's assertion that his counsel's opposition to his jury waiver "is a factor . . . showing that the waiver was not intelligently entered." A waiver of jury rights made contrary to the advice of counsel is not necessarily unknowing or unintelligent; see, e.g., State v. Smith, supra, 100 Conn. App. 313; even in a capital case. See Peraita v. State, 897 So. 2d 1161, 1196-97 (Ala. Crim. App. 2003), aff'd, 897 So. 2d 1227 (Ala. 2004); Thanos v. State, 330 Md. 77, 91-94, 622 A.2d 727 (1993). In fact, the right to a jury is personal to a criminal defendant, and it is his decision alone whether to waive it. See State v. Gore, supra, 288 Conn. 777; see also Rules of Professional Conduct 1.2 (a). Moreover, as a logical matter, we expect that counsel opposed to a defendant's proposed waiver would provide every piece of information possible as to the perceived advantages of a jury trial in attempting to dissuade the defendant from waiving a jury. Even if disregarded, such advice would lead to a more informed, and therefore more intelligent, waiver. We note that "a decision [to waive a jury] need not be wise to be legally 'intelligent.'" Thanos v. State, supra, 94.

¹⁵ In this regard, the defendant's assertions on appeal that he acted "impulsively . . . with minimal consultation with his attorneys" and that he "knew very little about what he was doing" are directly contradicted by the record.

¹⁶ The defendant argues that the following are among the circumstances that contributed to the involuntariness of his decision to waive his right to a jury: Due to the defendant's incarceration since the age of eighteen, his psychological development was not that of a normal adult; the transportation of the defendant each day from prison to voir dire proceedings and the

restraints that he wore during those proceedings left him feeling despondent; the trial court employed a lighthearted, humorous or sarcastic tone in overseeing the voir dire proceedings, lessening their seriousness and making the defendant feel that his life was unimportant; the trial court remarked unevenly on prospective jurors' views of capital punishment, speaking more positively to those who favored it than to those who opposed it; and the appearance that jury selection would continue indefinitely.

We have reviewed carefully the entire record of the proceedings prior to the defendant's jury waiver. As to some of the assertions, we conclude that they simply are contrary to the record. For example, we disagree with the defendant's characterization of the trial court's demeanor. A review of the voir dire transcripts reveals an overall concern with fairness and seriousness that permeated the entire proceedings, no palpable sarcasm, and only isolated examples of brief and mildly humorous quips that occurred with minimal frequency.

Moreover, we discern no pattern of more positive comments by the court to jurors who favored capital punishment. First, very few prospective jurors expressed definitive views on capital punishment. Rather, in response to the multiple similar questions posed by counsel, most panel members' answers best can be described as nuanced, internally inconsistent and/or equivocal. Likewise, the trial court's comments to prospective jurors, while generally positive and encouraging, also vary and defy neat categorization. Finally, the specific comments that the defendant deems more favorable were directed at times to potential jurors that the defendant had dismissed, and at other times to potential jurors that the state had dismissed. In short, the defendant's characterization of the pattern of the court's comments is highly subjective and not verifiable.

The record is also contrary to the defendant's assertion that it appeared that voir dire would drag out for another ten weeks. On April 13, 2005, the eighteenth day of jury selection and two days before the defendant's initiation of a jury waiver, an on the record discussion between the court and counsel at the close of the day indicated that jury selection was proceeding at a typical rate for a capital case. On April 14, 2005, the nineteenth day of jury selection and one day prior to the defendant's waiver, the court indicated that seven of twelve jurors had been chosen. The court thereafter indicated, as it had repeatedly throughout the voir dire proceedings, that it expected to have a jury chosen and to begin the penalty phase proceedings on May 9, 2005, in other words, within three to four weeks. On the morning of the day the defendant chose to waive a jury, an eighth juror was chosen. In sum, it was clear that jury selection would not continue much longer.

Turning to the remaining circumstances cited by the defendant as allegedly contributing to the involuntariness of his jury waiver, because the defendant never complained about those circumstances during the penalty phase proceedings and his counsel never raised any question as to his competence generally or his ability to validly waive his rights, the record is completely silent as to what effect, if any, the conditions of his incarceration, transport and restraint might have had on the defendant's personal development or his decision to waive his right to a jury. This court cannot, as the defendant requests, rely on excerpts from social science texts or journal articles that were not recognized as authoritative by an expert and admitted into evidence during the penalty phase proceedings; see Conn. Code Evid. § 8-3 (8); see also Pestey v. Cushman, 259 Conn. 345, 367, 788 A.2d 496 (2002); to make factual findings regarding the defendant's state of mind for the first time on direct appeal. It is axiomatic that this court does not find facts. State v. Joyce, 229 Conn. 10, 27 n.19, 639 A.2d 1007 (1994). Moreover, although we understand the defendant's desire to supplement the factual record with new materials supportive of his unpreserved claim, "well established principles governing appellate review of factual decisions preclude us from utilizing this material to find facts on appeal. See, e.g., State v. Dillard, 66 Conn. App. 238, 248 n.11, 784 A.2d 38 (that information was not before the trial court, and, on appeal, we do not take new evidence), cert. denied, 258 Conn. 943, 786 A.2d 431 (2001); C. Tait & E. Prescott, Connecticut Appellate Practice and Procedure (3d Ed. 2000) § 8.8 (a), pp. 305-306 (an appellate court does not retry a case, admit new evidence or weigh the evidence)." (Internal quotation marks omitted.) State v. Ovechka, 292 Conn. 533, 547 n.19, 975 A.2d 1 (2009); see also Moore v. Moore, 173 Conn. 120, 122, 376 A.2d 1085 (1977) (adjudicative facts, i.e., those concerning parties and events of particular case, are not subject to judicial notice, without affording parties opportunity to be heard); E. Margolis, "Beyond Brandeis: Exploring the Uses of Non-Legal Materials in Appellate Briefs," 34 U.S.F. L. Rev. 197, 216 (2000) ("it is clear that non-legal information introduced for the purpose of assessing adjudicative facts should be presented to the trial court, and not on appeal").

If the defendant possesses compelling evidence in support of this claim, the claim is better pursued in a collateral proceeding where a hearing can be held and the evidence evaluated by a trier of fact. See, e.g., Lewis v. Commissioner of Correction, 117 Conn. App. 120, 123-24, 977 A.2d 772 (considering invalid jury waiver claim as part of ineffectiveness of counsel claim in habeas corpus proceeding; evidence was developed regarding what counsel told defendant and whether defendant felt pressured to waive jury), cert. denied, 294 Conn. 904, 982 A.2d 647 (2009); see also Jells v. Mitchell, 538 F.3d 478, 509-10 (6th Cir. 2008) (considering, in habeas proceeding, evidence outside trial record, including affidavits from defendant and counsel, to evaluate claim that counsel was ineffective in advising defendant to waive jury for capital sentencing proceeding); Moreland v. Bradshaw, 635 F. Sup. 2d 680, 698-705 (S.D. Ohio 2009) (considering, in habeas proceeding, testimony from defense counsel and prosecutors to determine whether defendant's jury waiver was invalid because he was under influence of sodium pentothal); Ciummei v. Commonwealth, 378 Mass. 504, 511-14, 392 N.E.2d 1186 (1979) (considering, in writ of error proceeding, evidence outside trial record in support of claim that defendant's jury waiver was not knowing and voluntary).

¹⁷ In the event of a hung jury in the penalty phase of a capital trial, the trial court has three options: "it may declare a mistrial; it may make factual findings 'acquitting' the defendant of the death penalty; or it may exercise its discretion, pursuant to General Statutes § 54-56, to dismiss the death penalty proceeding." *State* v. *Daniels*, 209 Conn. 225, 231, 550 A.2d 885 (1988), cert. denied, 489 U.S. 1069, 109 S. Ct. 1349, 103 L. Ed. 2d 817 (1989). Accordingly, it is possible that a hung jury will lead to the imposition of a sentence of less than death either with, or without, the necessity of a retrial.

¹⁸ Apparently, the brain imaging test produced no mitigating evidence.

¹⁹ Rule 23 (a) of the Federal Rules of Criminal Procedure, which reflects the holding of *Patton* v. *United States*, supra, 281 U.S. 312, requires that: (1) the defendant knowingly, intelligently and voluntarily waive his right to a jury; (2) the prosecution consent to any waiver; (3) the trial court accept the waiver; and (4) the waiver be written. These requirements have "frequently been held constitutionally adequate" *State* v. *Ouellette*, supra, 271 Conn. 756.

Corresponding Connecticut provisions similarly do not mandate a canvass. General Statutes § 54-82b (b) requires only that the defendant, at the time he is put to plea, be "advise[d] . . . of his right to trial by jury . . ." Similarly, Practice Book § 42-1 directs that upon election of a court trial, "the judicial authority shall advise the defendant of his or her right to a trial by jury and that a failure to elect a jury trial . . . may constitute a waiver of that right. . . ." As noted in this opinion, a capital defendant's waiver of a sentencing jury requires both the consent of the state and the approval of the court. General Statutes (Rev. to 1997) § 53a-46a (b). Additionally, like the Connecticut and the federal rules, the American Bar Association Standards for Criminal Justice do not provide for a canvass. See A.B.A., Standards for Criminal Justice: Discovery and Trial by Jury (3d Ed. 1996) standard 15-1.2

²⁰ The United States Court of Appeals for the Second Circuit has "recommended that a district court go beyond a written waiver and individually inform each defendant, on the record, of the fundamental attributes of a jury trial before accepting a waiver." (Internal quotation marks omitted.) *United States* v. *Carmenate*, supra, 544 F.3d 107; see also *United States* v. *Lilly*, 536 F.3d 190, 197 (3d Cir. 2008) (noting that Courts of Appeal for the First, Second, Third, Fourth, Sixth, Seventh, Ninth, Tenth, and D.C. Circuits all have endorsed "[s]ome form of waiver colloquy" in order to build record that defendant's waiver of his right to jury trial is knowing, voluntary, and intelligent).

²¹ This court long ago observed that "personal interrogation of the defendant to determine his understanding of the significance of his execution of the [jury] waiver form" was the preferable approach, although it was not constitutionally required. *State* v. *Marino*, supra, 190 Conn. 644. "Undoubtedly," we opined, "a more comprehensive colloquy [than the minimal one at issue in *Marino*] is generally desirable where a defendant elects trial without a jury." Id., 641 n.1, 646. Consistent with that suggestion, canvassing a defendant who wishes to waive his jury rights appears to have been standard practice in Connecticut even prior to our decision in *Gore*. ²² "Waiver of a jury, although certainly an important election, still leaves in place another form of fact finding; it has not as much weight or consequence as a guilty plea, which is tantamount to a conviction and involves implicitly . . . the waiver of three constitutional rights—to confront adverse witnesses, to be free of compulsion to testify against oneself, and to be tried by jury" *Ciummei* v. *Commonwealth*, 378 Mass. 504, 508, 392 N.E.2d 1186 (1979); cf. *United States* v. *Olano*, 507 U.S. 725, 733, 113 S. Ct. 1770, 123 L. Ed. 2d 508 (1993) ("[w]hether a particular right is waivable; whether the defendant must participate personally in the waiver; whether certain procedures are required for waiver; and whether the defendant's choice must be particularly informed or voluntary, all depend on the right at stake").

²³ Our opinion in *Gore* was released on September 23, 2008. The defendant was canvassed as to his waiver of his right to a jury on April 18, 2005.

²⁴ We also remain cognizant that this case, unlike Gore, involves the death penalty, and we reiterate that in capital cases, courts should be particularly cautious in accepting a jury waiver, in part by canvassing the defendant thoroughly to ensure the waiver is knowing, voluntary and intelligent. At the same time, "although capital cases do require a more extensive colloquy than other types of cases, the simple fact that the case is capital does not mandate an exhaustive colloquy." Sowell v. Bradshaw, 372 F.3d 821, 834 (6th Cir. 2004), cert. denied, 544 U.S. 925, 125 S. Ct. 1645, 161 L. Ed. 2d 485 (2005); see also State v. Ketterer, 111 Ohio St. 3d 70, 75, 855 N.E.2d 48 (2006) (in death penalty case, defendant "need not have a complete or technical understanding of the jury trial right in order to knowingly and intelligently waive it" nor is "trial court required to inform the defendant of all the possible implications of waiver" [internal quotation marks omitted]). This is because the trial court may rely not just on the colloquy, but on the totality of the circumstances, when determining whether the defendant's choice is constitutionally sound. State v. Gore, supra, 288 Conn. 776.

²⁵ "See *Brady* v. *United States*, 397 U.S. [742, 757, 90 S. Ct. 1463, 25 L. Ed. 2d 747 (1970)] (defendant misapprehended the quality of the [s]tate's case); [id.] (defendant misapprehended the likely penalties); [id.] (defendant failed to anticipate a change in the law regarding relevant punishments); *McMann* v. *Richardson*, 397 U.S. 759, 770 [90 S. Ct. 1441, 25 L. Ed. 2d 763] (1970) (counsel misjudged the admissibility of a confession); *United States* v. *Broce*, 488 U.S. 563, 573 [109 S. Ct. 757, 102 L. Ed. 2d 927] (1989) (counsel failed to point out a potential defense); *Tollett* v. *Henderson*, 411 U.S. 258, 267 [93 S. Ct. 1602, 36 L. Ed. 2d 235] (1973) (counsel failed to find a potential constitutional infirmity in grand jury proceedings)." (Internal quotation marks omitted.) *United States* v. *Ruiz*, supra, 536 U.S. 630–31.

²⁶ The defendant argues that this court cannot assume that his counsel advised him of the various consequences of his jury waiver "[i]n the absence of any evidence that counsel did so," and where there is "no suggestion on the record to support that presumption." The current record, however, offers many such suggestions. Prior to being canvassed by the trial court, the defendant met twice with his counsel for a period he described variously as "much time" and "[p]lenty of time," and, thereafter, he repeatedly refused the court's offers of more time in which to confer. After meeting with his counsel, the defendant stated that "the law has been explained to me by both of my lawyers, very thoroughly"; that counsel "thoroughly explained the differences between a jury trial and a court trial"; and that counsel had provided explanations both "in writing and verbally" The defendant stated further that he "fe[lt] very satisfied that [he had] been given every bit of information to make this decision, and [that he had] no further questions to [his] lawyers" Defense counsel confirmed on the record that they had "explained the various ramifications of the [waiver] decision" to the defendant and that they had "explained what [the defendant] said [they] explained."

When a defendant indicates that he has been advised by counsel and is satisfied with the advice received, the trial court is entitled to rely on that representation in determining whether a jury waiver is knowing and intelligent. See *State* v. *Woods*, supra, 297 Conn. 586 ("[t]he fact that the defendant was represented by counsel and that he conferred with counsel concerning waiver of his right to a jury trial supports a conclusion that his waiver was constitutionally sound"); *State* v. *Ouellette*, supra, 271 Conn. 758 ("[W]e cannot assume that in performing his duty of competent representation [defense] counsel did not advise the defendant of the consequences of his choice, even to the extent of the refinements the defendant now demands. . . . In addition, we will not assume that the defendant did not

fully discuss the decision to forgo a jury trial with defense counsel." [Citation omitted; internal quotation marks omitted.]); *State* v. *Cobb*, supra, 251 Conn. 373 ("[a]lthough the presence of counsel does not by itself mean that the defendant's interests and rights are protected . . . [t]he fact of counsel being present and having advised the defendant [concerning jury waiver] is a factor to be considered in determining the question of the need for or sufficiency of any admonition given by the court" [internal quotation marks omitted]); cf. *Bradshaw* v. *Stumpf*, 545 U.S. 175, 183, 125 S. Ct. 2398, 162 L. Ed. 2d 143 (2005) (guilty plea is constitutionally invalid if defendant personally; "the constitutional prerequisites of a valid plea may be satisfied where the record accurately reflects that the nature of the charge and the elements of the crime were explained to the defendant by his own, competent counsel").

²⁷ See *North Carolina* v. *Alford*, 400 U.S. 25, 37, 91 S. Ct. 160, 27 L. Ed. 2d 162 (1970) (defendant pleading under *Alford* doctrine neither admits guilt nor protests innocence, but merely acknowledges that state has evidence sufficient to obtain conviction).

²⁸ But see *Commonwealth* v. *O'Donnell*, 559 Pa. 320, 346–47, 740 A.2d 198 (1999) (finding invalid waiver of capital sentencing jury where trial court, in addition to failing to advise defendant of unanimity requirement for death sentence, failed to engage in any two-way dialogue to ensure that defendant knew what right she was waiving, that she had discussed it with her counsel or that she in fact had chosen to waive it; in short, "there was no meaningful colloquy of [the defendant] and no indication that she understood the significance of her decision"); see also *State* v. *Martinez*, 132 N.M. 32, 39, 43 P.3d 1042 (2002) (holding, without considering totality of circumstances, that trial court's failure to advise capital defendant of unanimity requirement for death sentence "rendered his jury waiver unknowing and unintelligent").

²⁹ In support of his argument that the trial court was required to explain to him the possible consequences of a hung jury, the defendant cites Harris v. State, 295 Md. 329, 339-40, 455 A.2d 979 (1983). We have reviewed carefully that decision, as well as additional relevant case law, and conclude that the authority favoring the defendant's position is either distinguishable or unpersuasively reasoned. In Harris, the Maryland Supreme Court concluded that a capital defendant's jury waiver was invalid because the trial court had failed to advise him that, in the event of a hung jury, the court statutorily was required to impose a life sentence. Id.; see also Trimble v. State, 321 Md. 248, 261, 582 A.2d 794 (1990) (applying Harris to conclude similarly where trial court had misadvised defendant that its decision to impose life sentence in event of hung jury was discretionary rather than mandatory); Piper v. Weber, 771 N.W.2d 352, 356-60 (S.D. 2009) (citing Harris to conclude similarly where trial court, in addition to failing to advise defendant that statute required sentence of life imprisonment in event of hung jury, had misadvised him that jury would have to agree unanimously to either life imprisonment or death sentence and, further, defense counsel had misadvised him that, if he pleaded guilty, he had no right to penalty phase jury).

In other cases, the reviewing courts have held, contrary to *Harris*, that an otherwise valid waiver was not undermined by a trial court's failure to advise a capital defendant that, pursuant to statute, a life sentence automatically would result if the jury did not agree unanimously to a death sentence. See *Whitehead* v. *Cowan*, 263 F.3d 708, 732 (7th Cir. 2001) (noting that Illinois courts previously have reached that conclusion, and also have declined to require that defendant be informed that jury's decision to impose death penalty must be unanimous), cert. denied, 534 U.S. 1116, 122 S. Ct. 927, 151 L. Ed. 2d 890 (2002); see also *People* v. *Shatner*, 174 Ill. 2d 133, 154, 673 N.E.2d 258 (1996) (Illinois courts repeatedly have held that defendant need not be expressly advised that vote of single juror may preclude imposition of death penalty).

In *People* v. *Robertson*, supra, 48 Cal. 3d 36–38, the Supreme Court of California rejected the defendant's claim that his waiver of his right to a jury was invalid because the trial court failed to advise him of the statutory requirement that life imprisonment be imposed in the event of a jury dead-lock. The court examined the totality of the circumstances before upholding the validity of the waiver, and noted specifically: that the defendant was represented by two apparently competent counsel who, over the course of several days, had discussed with him " 'at length'" the nature and consequences of the waiver; that counsel had expressed on the record their sound tactical reasons for recommending a jury waiver; and that the trial court, before accepting the waiver, engaged in an extensive colloquy with the defendant to determine that his waiver was knowing, voluntary and intelligent. Id. That court concluded that the rule sought by the defendant was

"too stringent for any situation," because "no waiver requires the court to explain every single conceivable benefit and burden of the choice being made." Id., 38. The court explicitly declined to follow the reasoning of *Harris* as "unpersuasive" Id., 38 n.6.

All of the preceding decisions, regardless of whether they tend to support or favor the defendant's position, are distinguishable because they involved statutory mandates that life sentences be imposed in the event of jury deadlock, whereas in Connecticut, that result is but one of three discretionary options available to the trial court. State v. Daniels, 209 Conn. 225, 231, 550 A.2d 885 (1988), cert. denied, 489 U.S. 1069, 109 S. Ct. 1349, 103 L. Ed. 2d 817 (1989). Moreover, we agree with the Supreme Court of California that *Harris* is contrary to the law governing jury waivers and, like that court, we decline to follow it. When determining in Harris that the defendant's jury waiver was invalid, the Court of Appeals of Maryland cited no authority, conducted no analysis of the totality of the circumstances and instead reasoned simply that the information omitted from the canvass "may very well [have been] significant" to one facing a possible death sentence. Harris v. State, supra, 295 Md. 340. Although this statement may be true, it is not, as we have explained herein, the test for a constitutionally valid waiver. See Iowa v. Tovar, supra, 541 U.S. 92 (defendant need not have full and complete appreciation of all consequences flowing from waiver); United States v. Ruiz, supra, 536 U.S. 629 (defendant need not know specific detailed consequences of invoking waived right); Johnson v. Zerbst, supra, 304 U.S. 464 (court must consider totality of circumstances in assessing validity of waiver); State v. Gore, supra, 288 Conn. 776-77 (same); see also Harris v. State, supra, 341 (Murphy, C. J., dissenting) (describing majority analysis as "badly strained and totally at odds with the governing law"). Because Trimble and Piper rely on Harris, and also because they are factually distinguishable, we similarly consider them to be unpersuasive.

 30 Channing explained his concern to the trial court as follows: "I know that I posited the question [of whether the defendant wanted a life sentence without the possibility of release or to be executed] . . . to him, and he said he wanted justice, and I described the adversarial—you know, process to him that requires us to pull hard for our side, and I couldn't get him to say, well, you know, I want to live, you know, I want—I want a sentence of life without the possibility of release.

"I mean, I understand he trusts—he trusts the judiciary and I'm not saying he shouldn't. I'm just saying that we prepared this case for a unanimous verdict for [twelve] people, for [twelve] different kinds of people, people that I don't—I don't think that will necessarily—we won't have any input into choosing for a three judge panel, and I think his chances are much better for the jury, and I couldn't get him to say that that's what he wants, he wants—that he wants the best chance as possible. He just says he wants justice."

³¹ The defendant's claim that he actively sought a death sentence also is belied by the record of the proceedings subsequent to his jury waiver. Specifically, there is no indication that the defendant in any way prevented his counsel from putting forth the best case possible on his behalf. Rather, the defendant permitted his counsel to file two separate motions to impose a life sentence, to introduce extensive evidence and to submit a list of fortyfive suggested mitigating factors for the panel's consideration. In this regard, the present case is readily distinguishable from those cited by the defendant involving defendants' refusals to present mitigating evidence, to pursue appeals or to challenge obviously unconstitutional statutes.

³² Practice Book § 1-22 provides in relevant part: "(a) A judicial authority shall, upon motion of either party or upon its own motion, be disqualified from acting in a matter if such judicial authority is disqualified from acting therein pursuant to Rule 2.11 of the Code of Judicial Conduct or because the judicial authority previously tried the same matter and a new trial was granted therein or because the judgment was reversed on appeal. A judicial authority may not preside at the hearing of any motion attacking the validity or sufficiency of any warrant the judicial authority issued nor may the judicial authority sit in appellate review of a judgment or order originally rendered by such authority. . . ."

Practice Book § 1-23 provides: "A motion to disqualify a judicial authority shall be in writing and shall be accompanied by an affidavit setting forth the facts relied upon to show the grounds for disqualification and a certificate of the counsel of record that the motion is made in good faith. The motion shall be filed no less than ten days before the time the case is called for trial or hearing, unless good cause is shown for failure to file within such time."

³³ There is no indication in the record as to what, precisely, the brain imaging tests revealed. The defendant argues, however, that because Judge

O'Keefe knew that the testing had been done and, thereafter, no evidence derived from the testing was introduced at the penalty phase hearing, the judge "could not avoid concluding that the results were not favorable to the defendant and did not establish a developmental problem."

³⁴ The defendant also claims that Judge O'Keefe's more favorable comments toward jurors who spoke positively about capital punishment and his failure to maintain the seriousness of the proceedings exacerbated the appearance of impropriety created by his having presided over voir dire. Because we concluded in part II of this opinion that the defendant's characterization of Judge O'Keefe's comments and the voir dire proceedings is inapt, we need not address this argument.

³⁵ Although the defendant cites the due process clauses of both the state and federal constitutions, he has not provided an independent analysis of the state claim as required by *State* v. *Geisler*, 222 Conn. 672, 685, 610 A.2d 1225 (1992). Accordingly, we will consider the due process argument only pursuant to § 1 of the fourteenth amendment to the United States constitution, which provides in relevant part: "No State shall . . . deprive any person of life, liberty or property, without due process of law" See *State* v. *Canales*, 281 Conn. 572, 592–93 n.12, 916 A.2d 767 (2007).

³⁶ Pursuant to General Statutes § 51-39 (c), "[w]hen any judge . . . is disqualified to act in any proceeding before him, he may act if the parties thereto consent in open court." We repeatedly have held that a party's failure to object to a particular judge or to move for his recusal prior to or during trial is the functional equivalent of consent. See, e.g., *State* v. *Fitzgerald*, 257 Conn. 106, 117, 777 A.2d 580 (2001); *Timm* v. *Timm*, 195 Conn. 202, 205, 487 A.2d 191 (1985); *State* v. *Kohlfuss*, 152 Conn. 625, 630–31, 211 A.2d 143 (1965). The reason is that "[i]t would be inequitable to permit the defendant to notice the purported bias, proceed to trial, hoping to prevail on the merits, and then, after losing at trial, request a reversal for the alleged bias not objected to earlier." *State* v. *Fitzgerald*, supra, 117.

³⁷ One commentator explains: "The United States Supreme Court has never held that an appearance of bias on the part of a state trial court judge, alone, violates the [c]onstitution; that is, there is no Supreme Court decision which clearly establishes that an appearance of bias or partiality, where there is no actual bias, violates the [d]ue [p]rocess [c]lause or any other constitutional provision. While the [c]ourt has occasionally suggested, in dicta, that something less than actual bias could result in a due process violation, such references appear to be limited to situations in which the circumstances were such as to give rise to a strong probability of actual bias." R. Flamm, Judicial Disqualification: Recusal and Disqualification of Judges (2010 Sup.) § 2.5.2, pp. 22–24. In short, "an appearance of bias, in and of itself, will never offend the [d]ue [p]rocess [c]lause." Id., p. 25; see also *State* v. *Canales*, 281 Conn. 572, 595–96, 916 A.2d 767 (2007) (declining to find due process violation for judge's failure to recuse where defendant claimed no actual bias).

³⁸ See, e.g., General Statutes § 51-183c (requiring different judge, in case of court trial, after new trial is granted or judgment is reversed on appeal and, in case of jury trial, after new trial is granted); General Statutes § 51-183h (disallowing judge from hearing motion attacking validity or sufficiency of arrest warrant that he or she signed); Practice Book § 1-19 (requiring, for trial of nonsummary contempt charges, different judge than judge who issued order that was disobeyed or who oversaw proceedings during which contempt was committed); Code of Judicial Conduct 2.11 (a) (5) (A) (requiring disgualification when judge previously acted as attorney in same matter): see State v. Niblack, 220 Conn. 270, 280, 596 A.2d 407 (1991) (judge who participates in negotiation of plea agreement between state and criminal defendant should not preside at trial and sentencing if negotiations are unsuccessful); Timm v. Timm, 195 Conn. 202, 204, 487 A.2d 191 (1985) (judge who engages in pretrial settlement discussion in court case should disqualify himself or herself from presiding over case, although disqualification may be waived by parties).

³⁹ Similarly, courts routinely hold that a judge's familiarity with a criminal defendant and his or her prior offenses through participation in a separate, earlier trial of the defendant; see, e.g., *State* v. *Webb*, 238 Conn. 389, 461, 680 A.2d 147 (1996); see also annot., 85 A.L.R.5th 560, § 2 [a] (2001); or with his or her current offenses through participation in the trial of a codefendant; see, e.g., *Boyd* v. *State*, 321 Md. 69, 78–80, 581 A.2d 1 (1990); see also annot., 72 A.L.R.4th 657–61, § 2 [a] and [b] (1989); does not create grounds for disqualification.

 $^{\rm 40}$ In Liteky v. United States, supra, 510 U.S. 541, the United States Supreme

Court was considering whether a judge's recusal was warranted under 28 U.S.C. § 455 (a), which contains disqualification guidelines similar to those found in rule 2.11 (a) of the Code of Judicial Conduct.

⁴¹ "The primary reason for the rule permitting judges who have presided over earlier proceedings in a case to continue to sit in later proceedings in the same matter is simple and straightforward: Were the rule otherwise, a judge could never reach the end of a case without being disqualified through exposure to it during its earlier stages. Litigation, moreover, frequently unveils uncomplimentary facts about individuals and their cases. Should disqualification result merely because such facts were learned during the course of litigation—or because conclusions were ultimately reached on the basis of those facts—the law of judicial disqualification would likely cause the judicial system to grind to a halt." R. Flamm, supra, § 12.7, p. 322.

⁴² In support of this claim, the defendant has submitted a transcript from the later proceeding. We agree with the defendant that this court may take judicial notice of files or records of the Superior Court in the same or other cases. See, e.g., *Ajadi* v. *Commissioner of Correction*, supra, 280 Conn. 522 n.13. Accordingly, we have reviewed the transcript.

⁴³ The following provides further context for that comment. In the course of criticizing Foster for not admitting his crimes, Judge O'Keefe explained that he considered the testimony of Foster's incarcerated coconspirators, who had implicated Foster, to be credible. He then stated: "When you arrest murderers, get them under control in proper settings like maximum security penitentiaries, they start to act close to human beings. They're not human, but they come close. What you had was these individuals coming in and attempting to do something decent. They are still murderers. They still deserve to be punished for this. But many had no motive for false testimony"

⁴⁴ Diego Vas was convicted of, inter alia, murder in connection with the shooting death of his six year old daughter. *State* v. *Vas*, 44 Conn. App. 70, 71, 687 A.2d 1295, cert. denied, 240 Conn. 910, 689 A.2d 474 (1997).

⁴⁵ Mark Chicano was convicted of, inter alia, felony murder in connection with the beating and strangulation deaths of two adults and an eleven year old child. *State* v. *Chicano*, 216 Conn. 699, 703–704, 584 A.2d 425 (1990), cert. denied, 501 U.S. 1254, 111 S. Ct. 2898, 115 L. Ed. 2d 1062 (1991).

⁴⁶ Eric Steiger was convicted of, inter alia, murder in connection with the shooting deaths of two men. *State* v. *Steiger*, 218 Conn. 349, 350–51, 355, 590 A.2d 408 (1991).

⁴⁷ Adrian Peeler was convicted of conspiracy to commit murder in connection with the shooting deaths of a woman and her young son. *State* v. *Peeler*, 267 Conn. 611, 614, 619, 841 A.2d 181 (2004).

⁴⁸ Because there is a strong presumption that judges perform their duties impartially, a claim that a judge was required to recuse himself or herself on the basis of bias must be supported by more than mere speculation; *State* v. *Shabazz*, 246 Conn. 746, 769, 719 A.2d 440 (1998), cert. denied, 525 U.S. 1179, 119 S. Ct. 1116, 143 L. Ed. 2d 111 (1999); conclusory opinion; *State* v. *Ortiz*, supra, 83 Conn. App. 151; or representations of counsel. *State* v. *Weber*, 6 Conn. App. 407, 413, 505 A.2d 1266, cert. denied, 199 Conn. 810, 508 A.2d 771 (1986).

⁴⁹ It is axiomatic that a trial court's rulings adverse to a defendant cannot in themselves demonstrate bias. See *Liteky* v. *United States*, supra, 510 U.S. 555; *State* v. *Santangelo*, supra, 205 Conn. 602. Accordingly, in the absence of something more, Judge O'Keefe's determination that death was the appropriate sentence does not lend support to the defendant's claim.

⁵⁰ See Practice Book § 43-10 (6) ("(i]n cases where sentence review is available [those involving sentences of three years or more; General Statutes § 51-195], the judicial authority shall state on the record, in the presence of the defendant, the reasons for the sentence imposed").

⁵¹ The eighth amendment to the United States constitution prohibits, inter alia, the infliction of "cruel and unusual punishments"

 52 Article first, § 8, of the constitution of Connecticut provides in relevant part that in all criminal prosecutions: "No person shall . . . be deprived of life, liberty or property without due process of law"

Article first, § 9, of the constitution of Connecticut provides in relevant part: "No person shall be . . . punished, except in cases clearly warranted by law."

We previously have held that these provisions, Connecticut's due process clauses, impliedly prohibit punishment that is cruel and unusual. *State* v. *Ross*, 230 Conn. 183, 246–47, 646 A.2d 1318 (1994), cert. denied, 513 U.S. 1165, 115 S. Ct. 1133, 130 L. Ed. 2d 1095 (1995).

⁵³ As part of the present claim, the defendant argues that this court improperly changed the meaning of § 53a-46a (i) (4) in Ross, after defining the factor in Breton. We previously rejected a similar claim. State v. Cobb, supra, 251 Conn. 445-46. The defendant argues further that applying the limiting construction of § 53a-46a (i) (4) set forth in State v. Cobb, supra, 445, to his case amounts to a retroactive application of a substantive change in the law that violates his right to due process because the opinion in Cobb postdates the defendant's criminal conduct. See, e.g., Bouie v. Columbia, 378 U.S. 347, 352, 84 S. Ct. 1697, 12 L. Ed. 2d 894 (1964) (unforeseeable and retroactive expansion of scope of criminal statute by judicial construction violates due process). We disagree because this construction appeared first in Ross, which predates the defendant's criminal conduct. See State v. Cobb, supra, 443. In addition, because the core construction in Breton was not intended to be comprehensive; see id., 444-46; the subsequent elaboration cannot reasonably be characterized as "unexpected and indefensible by reference to the law which had been expressed prior to the [defendant's criminal] conduct"; (internal quotation marks omitted) State v. Courchesne, 296 Conn. 622, 724, 998 A.2d 1 (2010); or as "a marked and unpredictable departure from prior precedent" (Internal quotation marks omitted.) Id., 725.

⁵⁴ Article first, § 8, of the state constitution, which provides generally for due process in criminal prosecutions, supplies no particular guidance to the question at hand.

 55 The defendant directs our attention to *United States* v. *Hall*, 152 F.3d 381, 414 (5th Cir. 1998), a decision of the United States Court of Appeals for the Fifth Circuit that rejected a vagueness challenge to the heinous, cruel or depraved aggravating factor contained in the Federal Death Penalty Act, 18 U.S.C. § 3592 (c) (6). In *Hall*, the jury was instructed, consistently with the statutory language, that the government was required to "prove that the killing involved either torture or serious physical abuse to the victim." (Internal quotation marks omitted.) Id. The jury was instructed further that the infliction of torture, i.e., severe mental or physical pain or suffering, or serious physical abuse, must be specifically intended by the defendant. Id. In sustaining the constitutionality of this construction, however, the Court of Appeals did not indicate that its holding was dependent on the inclusion of the specific intent language. Indeed, such reasoning would have been inconsistent with the United States Supreme Court's decisions in *Proffitt* and *Walton*.

⁵⁶ The only such decision of which we are aware is *People* v. *Superior Court*, 31 Cal. 3d 797, 657 P.2d 76 (1982) (concluding, under state constitutional due process analysis, that limiting construction approved in *Proffitt* is impermissibly vague).

⁵⁷ In all of these cases, *both* prongs of the intent element of § 53a-46a (i) (4) were determined to apply, i.e., the evidence was sufficient to show that each defendant intended to cause his victim additional pain or suffering, *and* that he was callous and indifferent to that pain or suffering. Accordingly, experience does not substantiate the defendant's argument that our construction of § 53a-46a (i) (4) encompasses vastly more capital murderers than would a construction requiring a specific intent to cause gratuitous pain and suffering. Rather, the two groups overlap considerably.

⁵⁸ The defendant does not dispute that his conduct in striking the victim repeatedly with a sledgehammer was intentional, and that he engaged in that conduct with the intent to kill the victim.

⁵⁹ Compare State v. Johnson, supra. 253 Conn. 78 (concluding that cruel, heinous and depraved aggravating factor was unproven in case in which victim, while seated in his police cruiser, was killed quickly by single gunshot wound to lung and heart that was inflicted from distance during 6.6 second fusillade of bullets). In Johnson, we reasoned that "the absence of extreme pain or torture above and beyond that necessarily accompanying the killing . . . [was] attributable both to the instrument of death and the rapidity with which unconsciousness and death ensued." (Citation omitted; emphasis added; internal quotation marks omitted.) Id., 70. We acknowledged that, "[g]iven the manner in which [the victim] was murdered and the speed with which he died, as reprehensible as the attack was," it did not rise to the level of cruel, heinous and depraved, a category which is reserved for only the most "horrible" and "noxious" of killings. (Emphasis added.) Id., 72. In contrast, implicit in the cases cited in the main text is a recognition that a victim's conscious experience in being beaten or bludgeoned to death is likely to be especially painful and horrific, even when the murder is accomplished relatively efficiently.

⁶⁰ The quoted portions of the panel's memorandum of decision correspond to language in the defendant's statement.

⁶¹ The defendant takes issue with the court's finding as to the number of blows he inflicted on the victim, arguing that the fact that the victim suffered twelve injuries does not prove that he endured twelve direct hits from the sledgehammer. The panel's memorandum of decision states the number of blows as approximate, however, and does not attempt to distinguish between direct and indirect strikes, i.e., those that might have been inflicted after the hammer was deflected off of the victim's skull. In any event, after reviewing the jurisprudence governing this claim, we conclude that the distinction the defendant attempts to draw is not determinative of the outcome.

⁶² Specifically, Joy Reho, a criminologist in the forensic biology unit of the state forensic science laboratory, testified that both the front and back sides of the victim's bicycle gloves were "[h]eavily saturated" with blood and that they had been "in contact with a bloody source for a period of time." Although she could not say so with complete certainty, Malka Shah, an associate medical examiner from the office of the chief medical examiner, testified that the blood could have gotten on the gloves when the victim raised his hands to his head in an attempt to protect his head. Shah testified further that the victim had no bleeding injuries to his limbs or torso. On the basis of this testimony, we disagree with the defendant that the inference drawn by the panel, that the defendant had attempted to protect himself, was an unreasonable one. Compare Williams v. State, supra, 37 So. 3d 199-200 (mere presence of blood on victim's jeans, with no evidence as to how blood likely got there or what pattern of blood indicated, did not establish that victim was standing, and hence was conscious, when blows to head were delivered).

Although the defendant argues that the panel should have drawn a different inference as to the source of the blood on the victim's gloves, we do not agree. We reiterate that, "[i]n viewing evidence [that] could yield contrary inferences, the [panel] is not barred from drawing those inferences consistent with [the existence of the aggravating factor] and is not required to draw only those inferences consistent with [its nonexistence]. The rule is that the [panel's] function is to draw whatever inferences from the evidence or facts established by the evidence it deems to be reasonable and logical." (Internal quotation marks omitted.) State v. Courchesne, supra, 296 Conn. 778. Moreover, "[p]roof of a material fact by inference from circumstantial evidence need not be so conclusive as to exclude every other hypothesis. . . . Thus, in determining whether the evidence supports a particular inference, we ask whether that inference is so unreasonable as to be unjustifiable. . . . In other words, an inference need not be compelled by the evidence; rather, the evidence need only be reasonably susceptible of such an inference." (Internal quotation marks omitted.) State v. Reynolds, supra, 264 Conn. 97. Here, the bloody gloves and the testimony of Reho and Shah reasonably and logically suggest that the victim attempted to protect his head with his hands.

The defendant argues additionally that the defendant's interest in serial killings does not reasonably indicate that the victim experienced pain and suffering beyond that necessary to cause his death. We agree. The trial court cited that circumstance, however, in support of its finding that the defendant's conduct was intentional, not in support of its finding that the victim experienced extreme physical and psychological pain and suffering as a result of the defendant's intentional conduct.

⁶³ Again, contrary to the defendant's argument, there was evidence sufficient to show that the defendant lacked remorse. Sergeant Eugene Coyle, who took the defendant's statement and interacted with him both prior and subsequent to his arrest, testified that the defendant, throughout that period of time, never exhibited any remorse or regret for killing the victim, nor indicated that he was sorry for what he had done. According to Coyle, the defendant's demeanor—when directing police to the victim's body and bicycle, giving his statement, recounting the killing, drawing a map of his yard and reporting why he had killed the victim—consistently remained "stoic" or "matter of fact."

The defendant cites extensively to extra record nonlegal materials to argue that the trial court's factual finding as to his lack of remorse was erroneous, and to request that this court draw different factual inferences from his behavior. For the reasons explained in footnote 16 of this opinion, the defendant's citation to material that was not admitted into evidence is not properly used to attack the trial court's factual findings on appeal, and, therefore, we do not consider it.

⁶⁴ The defendant cites *Abdul-Kabir* v. *Quarterman*, 550 U.S. 233, 127 S. Ct. 1654, 167 L. Ed. 2d 585 (2007), which involved a federal habeas petition brought pursuant to 28 U.S.C. § 2254. Because the United States Supreme Court's task in *Abdul-Kabir* was to determine whether the Texas Court of Criminal Appeals had misapplied the law as clearly established by decisions of the United States Supreme Court as of the date of the Texas court's decision, which was November 24, 1999; id., 237–38; *Abdul-Kabir* necessarily did not create new law, not existing at the time of our decision in *Rizzo*, that might warrant revisiting this issue.

⁶⁵ The specific list of suggested mitigating factors submitted by the defendant was as follows:

"1. [The defendant] was an eighteen year old adolescent, not having reached full physiological or emotional maturity, when he murdered [the victim].

"2. [The defendant's] parents were so physically and emotionally absent from [the defendant] during his formative years that they provided deficient nurturance, guidance, support, protection, supervision or discipline for his normal emotional and social development.

"3. [The defendant's] parents were unwilling and/or unable to communicate with [the defendant] about the most emotionally damaging and/or stressful events in his life (e.g., his parents' divorce, the incident at Kaynor . . . and [the defendant's] posthigh school career plans).

"4. [The defendant's parents] did not provide [the defendant] with clear expectations for behavior and they failed to supervise and monitor [the defendant] as a child and teen.

"5. [The defendant] was neglected as defined by [General Statutes] § 46b-120 [8] in that he had been denied proper care and attention, physically, emotionally or morally, or was permitted to live under conditions, circumstances or associations injurious to his well-being.

"6. [The defendant] suffered significant emotional distress as a result of his parents' volatile conflicts, repeated separations, eventual divorce and his father moving away from him.

"7. The [defendant's] family was characterized by conflict and negative family relationships that adversely affected [the defendant's] emotional development.

"8. [The defendant] suffered neglect as a result of his mother's persistent depression and anger over the divorce.

"9. After the divorce of his parents, [the defendant's] family home at 15 Marion Avenue, Waterbury, fell into such complete disrepair that it was nearly impossible for anyone to perform household tasks like cooking, bathing, or laundering bedding and clothing. The house was in such an extremely unhealthy state that it was unfit for human habitation or normal child development.

"10. [The defendant] and his siblings suffered poor living conditions despite the fact that his parents had the financial resources to provide for them. "11. The absence of responsible, caring and interested adults in [the

"11. The absence of responsible, caring and interested adults in [the defendant's] home was so extreme that [the defendant] was forced to seek basic necessities such as food, shelter, assistance with laundry, and nurturing from friends and neighbors (maternal and paternal figures) in the community.

"12. After the divorce, [the defendant's] mother did not secure any responsible child care for her children and left [them] alone and unattended.

"13. [The defendant] was too young to understand the potential danger of seeking out inappropriate alternative maternal and paternal figure[s] outside his home.

"14. [The defendant's] mother deprived her son of normal social peer interaction by continually refusing to allow any nonfamily members into the family home.

"15. [The defendant's mother] inappropriately exposed her young son [the defendant] to excessive media violence during his childhood and did not provide the appropriate guidance and supervision to prevent his continuing exposure to the potentially damaging violent content.

"16. [The defendant's] parents did not seek mental health counseling for their son during the most emotionally damaging and stressful events in his life (e.g., his parents' divorce and the incidents at Kaynor . . .).

"17. [The defendant's father] knew of the deplorable physical and emotional conditions that [the defendant] was living in, but did nothing to take physical custody or otherwise rescue his son from neglect.

⁴18. [The defendant's father] moved out of state and became less involved with [the defendant] despite being aware of the deplorable conditions that [the defendant] was enduring.

"19. [The defendant's father] consistently chose his own happiness over the emotional and physical well-being of his son.

"20. [The defendant's] plans to attend the Johnson and Wales culinary program were thwarted by his parents' failure to fill out the basic financial aid paperwork necessary for him to attend.

"21. [The defendant] was physically small, underweight, and a chronic bed wetter into his teenage years, resulting in humiliation and ridicule from family members and peers.

"22. [The defendant's] experiences of having been humiliated and bullied were significant enough to damage his emotional well-being.

"23. [The defendant], while a freshman and sophomore at . . . Kaynor . . . was subjected to repeated acts of physical hazing and sexual harassment by upper-class students.

"24. [The defendant] demonstrated remarkable perseverance and resilience despite living under conditions of extreme neglect which shows his potential to learn from his mistakes.

"25. [The defendant] was a good grammar and middle school student resulting in his acceptance into Kaynor

"26. [The defendant] had a genuine interest in and talent for cooking and baking, and graduated from the culinary program in the middle of his class in 1996 from Kaynor

"27. [The defendant] was accepted as a student into the culinary program at Johnson and Wales University in South Carolina.

"28. [The defendant] displayed kindness in helping to provide for his mother, family, and friends by purchasing necessities and gifts for them.

"29. [The defendant] reached out to the church as a positive influence in his life; he attended church throughout his childhood and teenage years, often bringing his sister . . . with him, and he continued to be actively involved in church activities even after his parents stopped attending.

"30. [The defendant] maintained a steady history of employment from the age of fourteen until the time of his arrest. "31. [The defendant] joined the United States Marine Corps at the age

"31. [The defendant] joined the United States Marine Corps at the age of seventeen.

"32. [The defendant] successfully completed boot camp at Parris Island and infantry training at Camp Geiger.

"33. [The defendant] volunteered to serve as the lay reader for the Marine recruits in his boot camp platoon and delivered the prayer during the graduation ceremony.

"34. [The defendant] took responsibility for his actions when he cooperated with the police and confessed to the murder of [the victim].

"35. [The defendant] took responsibility for his actions when he cooperated with the police and consented to the searches of his home and his car. "36. [The defendant] took responsibility for his actions when he cooper-

ated with the police when he disclosed to them the location in the rear yard at 15 Marion Avenue where he murdered [the victim].

"37. [The defendant] took responsibility for his actions when he cooperated with the police when he disclosed to them the location of the murder weapon.

"38. [The defendant] cooperated with the police when he disclosed the location of where he placed [the victim's] body.

"39. [The defendant's] cooperation saved the Waterbury police department a lot of time and effort.

"40. [The defendant] cooperated with resolution of this case by voluntarily pleading guilty to the murder of [the victim], thereby taking both personal and legal responsibility for the murder.

"41. [The defendant] has shown remorse for the murder of [the victim]. "42. [The defendant's] act of murdering [the victim] was a tragic behavioral aberration considering that he has no prior juvenile or criminal record.

"43. Life imprisonment without the possibility of release is the appropriate sentence for [the defendant].

"44. Any other factor concerning [the defendant's] character, background, or history or the nature and circumstances of the crime that has not been specifically suggested which the court may, in fairness and mercy, find is mitigating in nature and constitutes a basis for a sentence of life imprisonment without the possibility of release.

"45. The cumulative or combined effect of all the evidence concerning [the defendant's] character, background or history or the nature [or] circumstances of the crime which the court, in fairness and mercy, finds is mitigating in nature and constitutes a basis for a sentence of life imprisonment without the possibility of release."

 66 Under our death penalty scheme, once the state establishes the existence of an aggravating factor, specified in § 53a-46a (i), beyond a reasonable doubt, the burden shifts to the defendant "to establish the existence of a mitigating factor by a preponderance of the evidence. . . . In this regard, the statutory scheme sets out two types of mitigating factors: (1) statutory mitigating factors, as defined in § 53a-46a (h), which, if found, preclude the imposition of the death penalty under any circumstances; and (2) nonstatutory mitigating factors, as defined in § 53a-46a (d)." (Citation omitted.) *State* v. *Rizzo*, supra, 266 Conn. 180.

⁶⁷ The panel was not required to make explicit findings as to the remaining forty-four proposed mitigating factors; see *State* v. *Rizzo*, supra, 266 Conn. 310; and, accordingly, it did not do so. We agree with the defendant, however, that, because the panel found the cumulative factor factually proven, it necessarily found at least some of the proposed individual factors factually proven, but concluded that they were not mitigating in nature, considering all of the facts and circumstances of the case.

⁶⁸ The defendant also claims that, because the panel necessarily found some individual proposed mitigating factors factually proven; see footnote 67 of this opinion; he statutorily and constitutionally was entitled to have them weighed as individual mitigating factors, and not merely as part of the cumulative mitigating factor found by the panel. According to the defendant, because the panel found no individual mitigating factors proven while simultaneously finding the cumulative mitigating factor proven, his statutory and constitutional rights have been violated. The defendant is incorrect.

Pursuant to Connecticut's death penalty scheme, the defendant bears the burden of proving, "by a preponderance of the evidence . . . both the underlying factual basis of a mitigating factor *and its mitigating nature*." (Emphasis in original; internal quotation marks omitted.) *State v. Rizzo*,

supra, 266 Conn. 239; see also General Statutes (Rev. to 1997) § 53a-46a (c). Thus, the statute clearly contemplates the outcome present in this case—proposed mitigating factors being proven as a factual matter, yet not found to be mitigating in nature. *State* v. *Rizzo*, supra, 296–97. Furthermore, as explained in part V of this opinion and *Rizzo*, we repeatedly have upheld the constitutionality of this provision. In short, "the mere establishment of the factual bases of mitigating evidence does not compel a conclusion, as a matter of law, that a defendant has proved the existence of mitigation." Id., 295.

The defendant argues, nevertheless, that because the panel concluded that the proven individual factors, viewed cumulatively, were mitigating in nature, it also must have found that those individual factors had some, however minimal, mitigating quality and, therefore, they were entitled to independent consideration in the final determination whether to impose the death penalty. We are not persuaded. Although each proven factor might have established something good or sympathetic about the defendant, the panel apparently found that the factors were not mitigating in nature until they were viewed collectively. As we have explained, § 53a-46a (d) "does not require a capital sentencer to give mitigating force to any particular proven factor solely because that factor establishes something good about the defendant." (Internal quotation marks omitted.) Id., 295-96; see also State v. Reynolds, supra, 264 Conn. 135 (§ 53a-46a [d] does not require panel to find existence of mitigation if defendant establishes "anything positiveno matter how slight" about himself). In any event, the cumulative mitigating factor, which a capital defendant has a right to submit for consideration; see State v. Reynolds, supra, 139, provides a mechanism for the sentencer to consider all constitutionally relevant information about the defendant and the case when making its final sentencing determination, even though that information, when viewed piecemeal, is not found to be mitigating in nature. The panel acknowledged its constitutional duty to consider all relevant mitigating evidence, and we are convinced that it did.

⁶⁹ In *Rizzo*, the penalty phase was tried to a jury, and the jury did not specify which of the proposed nonstatutory mitigating factors it had found proven. Consequently, in discussing the mitigating factors, we allowed that the jury reasonably could have found any of the proposed factors proven and, therefore, we drew all inferences in the defendant's favor when we outlined the evidence presented and facts potentially found. *State* v. *Rizzo*, supra, 266 Conn. 192–201 and 193 n.16. Here, because it is clear that the panel found only the cumulative factor proven, we view the evidence with an eye toward sustaining the panel's determinations unless they are unreasonable. *State* v. *Breton*, supra, 264 Conn. 366–67.

⁷⁰ The panel also might have questioned the defendant's suggestion that his murdering the victim was an impulsive "behavioral aberration"; see footnote 65 of this opinion; in light of a statement he made to a television reporter during a jailhouse interview conducted by telephone in April, 2000. The taped statement was introduced into evidence as part of the state's case to prove the aggravating factor. In the course of the interview, the defendant stated: "I had planned to kill someone back when I was [about] fourteen [years old], and it went all through my teens, and there [were] certain kids I'd pick out in the neighborhood. And I'd say, you know, that's the perfect victim. I watch[ed] from my bedroom window. And I could time it when they're going by, when there's nobody around." The defendant explained further: "I wanted to kill all through the teenage years, being obsessed with all these people that did it and got away [with it] and these crazy ways that they did it."

⁷¹ There was evidence in the record of the defendant's eventual remorse, specifically, his April, 2000 interview with a television reporter, which was introduced as part of the state's case. In that interview, the defendant stated that remorse recently had started to set in after he had "met somebody" and, perhaps because of experiencing love, he had begun to "have feelings back." According to the defendant, he was "sincerely sorry about killing [the victim]" Moreover, he expressed empathy for the victim's family, imagining what it would feel like if the victim were his brother.

The panel reasonably could have found that the defendant's statements of remorse in 2000 lacked mitigating quality in light of their belated expression, particularly when contrasted against other words of the defendant, written shortly after the commission of his crime, that charitably can be described as boastful, callous and lacking in remorse. On October 10, 1997, the defendant wrote to John Fleischer, a friend he had made while undergoing training in the Marine Corps. Like the interview with the television reporter, that letter was introduced into evidence as part of the state's case. The letter stated in relevant part: "Well [let's] just say, you might be reading about me one day. Just add me on to your long list of famous killers, like Jeffrey Dahmer, John Gacy, Henry Lucas, and so on.

"Yes, from the news article [e]nclosed [you'll have] learned, I've been arrested for murdering a [thirteen year] old boy. I beat the backside of his skull in with a sledgehammer in my backyard and dropped his body on a side road [with] his head wrapped in a plastic bag. So way back in July, when me you Jones and Sims talked about the truth if we could actually kill another person? Well I did. That knocks off number two on my goal list!

"I probably [won't] go to trial until early [1999] maybe late [1998]. But I will keep you informed if you continue to write me. I suppose you can let everyone know, [there's] no secret. If I can get my hands on a better article, I'll mail it to you. You [should've] seen it, I was on the entire front page of my paper and many [other] papers and all over the news! I am sorry for what I've done, because my life is now over, [I'm] either facing life in prison with no [parole] or the death sentence, which in [Connecticut] is lethal injection. Anyway, now that my life is through, [how's] yours doing?"

⁷² In the course of his argument on this claim, the defendant repeatedly refers to "the mitigating factors," as if the panel had found multiple proposed factors both proven factually and mitigating in nature. As explained in part VI of this opinion, the panel found proven the cumulative mitigating factor only, and we have concluded that that finding was not improper.

⁷³ As we concluded in part IV of this opinion, there was sufficient evidence to support the panel's finding of the cruel, heinous and depraved aggravating factor. Moreover, as we concluded in part VI of this opinion, the panel's findings as to mitigation were not improper. To the extent the defendant, in arguing this issue, has repeated his attacks on the propriety of the panel's findings on aggravation and mitigation, we will not respond to those attacks anew.

⁷⁴ Because the penalty phase in *Courchesne* was tried to a jury, there were no findings, as there are in the present case, as to the specific mitigating factor or factors found. Accordingly, we evaluated the defendant's claim with reference to all of the mitigating factors alleged. *State* v. *Courchesne*, supra, 296 Conn. 629.

⁷⁵ In advancing this claim, the defendant emphasizes the fact that he was just shy of his nineteenth birthday when he murdered the victim. He argues that that factor, as a general matter, strongly diminishes culpability and, therefore, carries heavy weight to offset the aggravating factor and, further, renders the punishment of death disproportionate. Although the defendant's age undoubtedly was a consideration; see, e.g., Johnson v. Texas, 509 U.S. 350, 367, 113 S. Ct. 2658, 125 L. Ed. 2d 290 ("[t]here is no dispute that a defendant's youth is a relevant mitigating circumstance"), reh. denied, 509 U.S. 941, 114 S. Ct. 15, 125 L. Ed. 2d 767 (1993); the specific weight to assign to it in the weighing process was a matter for the panel to decide in its discretion, just as with any other nonstatutory mitigating factor. As the defendant acknowledges, statutory and constitutional eligibility for the death penalty begins at age eighteen. See General Statutes (Rev. to 1997) § 53a-46a (h) (1); see also Roper v. Simmons, 543 U.S. 551, 568, 125 S. Ct. 1183, 161 L. Ed. 2d 1 (2005). Consequently, the cases from which he quotes that concern juveniles are inapposite. See id., 568-69; see also Eddings v. Oklahoma, 455 U.S. 104, 115-16, 102 S. Ct. 869, 71 L. Ed. 1 (1982). To the extent that the defendant suggests the line between eligibility for, and categorical exclusion from, capital punishment has been drawn in the wrong place, that argument is best directed at the legislature. See State v. Allen, 289 Conn. 550, 585, 958 A.2d 1214 (2008) (declining to strike, as violative of eighth amendment, statute mandating life imprisonment without possibility of release for those who commit capital felonies while under age eighteen because "[t]he delineation between juveniles and adults for purposes of prosecution and punishment is a public policy determination reserved to the legislative branch of government, except where constitutional principles apply"); State v. Heinemann, 282 Conn. 281, 310, 920 A.2d 278 (2007) (declining to hold that sixteen year old was entitled to jury instruction that would have directed jury to consider his age when evaluating his defense of duress, with aim of accounting for differences in how adolescents evaluate risks, because doing so "would usurp the legislature's role and require this court to vitiate what is an inherently legislative determination that sixteen year olds are to be treated like adults for purposes of criminal liability").

⁷⁶ The defendant requests that this court consider extra-record social science reference materials to evaluate the reasonableness of the panel's

weighing determination. For the reasons previously explained; see footnote 16 of this opinion; we cannot rely on evidence not introduced at trial to second-guess the panel's determination. Cf. *State* v. *Arthur H.*, 288 Conn. 582, 588 n.4, 953 A.2d 630 (2008) (declining to consider similar materials, first introduced on appeal, in deciding whether trial court abused discretion when ordering defendant to register as sex offender.).

 77 General Statutes § 53a-46b (b) requires this court to review all death sentences to determine whether they are "the product of passion, prejudice or any other arbitrary factor"

⁷⁸ The defendant also claims state constitutional violations, but the only argument he provides in support of those claims is a conclusory reference to *Geisler* analyses in different portions of his brief that are directed at different issues. Accordingly, we deem any state constitutional claim regarding the present issue to be abandoned due to inadequate briefing.

⁷⁹ According to the defendant, at the time he was sentenced, six of Connecticut's ten death row inmates had been prosecuted in the judicial district of Waterbury and, at the time his brief was filed, six of thirteen.

⁸⁰ As part of this claim, the defendant also argues that his sentence was an improper product of the presiding judge's bias regarding mitigating evidence. Because we disagree that the defendant has established the factual predicate of this argument; see part II of this opinion; we do not address it further.

⁸¹ In advancing this claim, the defendant cites to extra-record reference materials as evidence of contemporary societal norms to advocate for a new constitutional rule rather than, as in parts I, IV and VII of his brief, to attempt to readjudicate this particular case on appeal. See footnotes 16, 63 and 76 of this opinion. We have in the past permitted citation to such evidence in this context. See *Connecticut Coalition for Justice in Education Funding, Inc.* v. *Rell*, 295 Conn. 240, 310 n. 56, 990 A.2d 206 (2010) (considering scientific studies in the context of the sixth *Geisler* factor, although not part of the trial court record"); see also *Moore* v. *Moore*, 173 Conn. 120, 122, 376 A.2d 1085 (1977) (legislative facts, that is, facts that "help determine the content of law and policy," are subject to judicial notice); E. Margolis, "Beyond Brandeis: Exploring the Uses of Non-Legal Materials in Appellate Briefs," 34 U.S.F. L. Rev. 214 (2000) (opining that it is appropriate to introduce nonlegal material in support of policy arguments at the appellate stage of litigation").

⁸² The defendant also argues that the death penalty, per se, constitutes a violation of the eighth amendment to the United States constitution. Clearly, we are bound by precedents of the United States Supreme Court holding to the contrary. See, e.g., *Gregg* v. *Georgia*, supra, 428 U.S. 168–87. It is the prerogative of that court alone to overrule its own precedents, even if subsequent decisions or developments may appear to have significantly undermined the rationale for an earlier holding. See *United States* v. *Hatter*, 532 U.S. 557, 567, 121 S. Ct. 1782, 149 L. Ed. 2d 820 (2001).

⁸³ In *State* v. *Ross*, supra, 230 Conn. 183, 286, four members of a five judge panel voted to sustain the constitutionality of the death penalty, with Justice Berdon in dissent.

⁸⁴ In contrast, in *State* v. *Ross*, supra, 230 Conn. 183, the five judge panel that decided the appeal had been comprised of three members of this court and two Appellate Court judges sitting by designation.

⁸⁵ In *State* v. *Webb*, supra, 238 Conn. 551, the vote sustaining the constitutionality of the death penalty was four to three, with Justices Berdon, Norcott and Katz in dissent.

⁸⁶ We undertake, in essence, a partial *Geisler* analysis regarding what has occurred since 1994, because our constitutional text and history remain the same, and this court repeatedly has sustained the constitutionality of the death penalty generally and our death penalty statutes in particular. Accordingly, our focus is on recent federal and state jurisprudence and contemporary economic and sociological norms.

⁸⁷ When originally enacted, § 53a-54b authorized a capital felony conviction for a nonhomicide offense that, nevertheless, contributed to the death of a person. See Public Act 73-137, § 3 (6) (identifying as capital felony illegal sale, for economic gain, of cocaine, heroin or methadone to person who dies as direct result of use of such cocaine, heroin or methadone). This provision was eliminated in 2001. See Public Act No. 01-151, § 3. Since then, Connecticut's statutorily enumerated capital felonies have included only various types of murders.

⁸⁸ Moreover, in *People* v. *LaValle*, 3 N.Y.3d 88, 120, 817 N.E.2d 341, 783 N.Y.S.2d 485 (2004), the New York Court of Appeals held that a jury deadlock instruction prescribed by New York's death penalty statute violated that

state's constitution. Because state legislators have not cured the statutory defect, New York effectively has been without a death penalty since 2004.

Notably, the New Mexico ban is prospective only and no clemency has been granted to convicted capital offenders, leaving that state's existing death row intact. Given that circumstance, it is unlikely that the New Mexico legislature was convinced that the death penalty is intolerable under any and all circumstances. See *Atkins* v. *Virginia*, supra, 536 U.S. 342 (Scalia, J., dissenting) (legislation that abolished death penalty for persons with mental retardation prospectively only "is not a statement of absolute moral repugnance, but one of current preference between two [constitutionally] tolerable approaches").

⁸⁹ This statistic includes two inmates in New Mexico who remain on death row despite that state's repeal of the death penalty because the repeal, by its terms, is prospective only. It also includes sixteen Illinois inmates who were on death row in January of 2011, but were subsequently granted clemency by that state's governor when the repeal of the death penalty in Illinois took effect on July 1, 2011, bringing the number of inmates held on death row nationwide to 3235 in thirty-five states.

 90 The numbers of executions carried out, nationwide, over the previous sixteen years, are as follows: 1994–31; 1995–56; 1996–45; 1997–74; 1998–68; 1999–98; 2000–85; 2001–66; 2002–71; 2003–65; 2004–59; 2005–60; 2006–53; 2007–42; 2008–37; 2009–52; 2010–46. See Death Penalty Information Center, "Facts about the Death Penalty," supra, p. 1. As of October 21, 2011, 38 executions have taken place. See id.

⁹¹ The numbers of executions carried out, nationwide, in the decade preceding *Ross* were, as follows: 1983–5; 1984–21; 1985–18; 1986–18; 1987–25; 1988–11; 1989–16; 1990–23; 1991–14; 1992–31; 1993–38. See Death Penalty Information Center, "Facts about the Death Penalty," supra, p. 1.

⁹² Moreover, although the pace of executions has slowed in recent years, they still occur at a rate substantially higher than that typically considered by the United States Supreme Court to evidence a dearth of public support for a particular punishment. See, e.g., *Kennedy* v. *Louisiana*, supra, 554 U.S. 433 (no executions of child rapists since 1964, or for any nonhomicide offense since 1963); *Roper* v. *Simmons*, supra, 543 U.S. 564–65 (only three executions of juvenile offenders in ten year period); *Atkins* v. *Virginia*, supra, 536 U.S. 316 (only five executions of defendants with mental retardation in thirteen year period); *Enmund* v. *Florida*, supra, 458 U.S. 794 (only six executions of nontriggerman felony murderers between 1954 and 1982).

⁹³ See Death Penalty Information Center, "The Death Penalty in 2010: Year End Report," (December, 2010), available at http://www.deathpenalty info.org/documents/2010YearEnd-Final.pdf (last visited November 18, 2011) (copy contained in the file of this case in the Supreme Court clerk's office); N. Lewis, "Death Sentences Decline, And Experts Offer Reasons," N.Y. Times, December 15, 2006, p. A28.

⁹⁴ Indeed, declining imposition of capital punishment may indicate that the death penalty is being employed precisely as was intended, to punish only the very worst of society's criminals, and only after a vigorous legal process has ensured that the defendant has been found guilty after a fair trial with demanding procedural safeguards. As the United States Supreme Court has observed, "the relative infrequency of jury verdicts imposing the death sentence does not indicate rejection of capital punishment per se. Rather, [it] . . . may well reflect the humane feeling that this most irrevocable of sanctions should be reserved for a small number of extreme cases." *Gregg v. Georgia*, supra, 428 U.S. 182.

⁹⁵ The defendant filed his initial brief in this appeal in 2008, when support for the penalty appeared somewhat weaker, and he referred to an earlier Quinnipiac poll reflecting that circumstance.

⁹⁶ The views of Connecticut residents are consistent with those held nationally. A 2010 Gallup poll showed 64 percent of Americans in favor of the death penalty and 29 percent in opposition to it. See Gallup, "In U.S., 64% Support Death Penalty in Cases of Murder," (November 8, 2010), available at http://www.gallup.com/poll/144284/Support-Death-Penalty-Cases-Murder.aspx (last visited November 18, 2011) (copy contained in the file of this case in the Supreme Court clerk's office).

⁹⁷ Unlike the punishments at issue in *Graham* and *Roper*, capital punishment in general has not lost the support of the entire world community. According to Amnesty International, ninety-six countries have abolished the death penalty for all crimes and nine have abolished it for all but "exceptional crimes," thirty-four countries retain the death penalty but have not executed anyone in the last ten years, and fifty-eight countries retain the death penalty

and, apparently, have employed it recently. See Amnesty International, "Abolitionist and Retentionist Countries," available at http://www.amnesty.org/ en/death-penalty/abolitionist-and-retentionist-countries (last visited November 18, 2011) (copy contained in the file of this case in the Supreme Court clerk's office).

⁹⁸ The defendant deemphasizes retribution, which is recognized as a constitutionally legitimate purpose of punishment. *Graham* v. *Florida*, supra, 130 S. Ct. 2028. In explaining her veto of legislation intended to repeal the death penalty, then Governor M. Jodi Rell relied expressly on this justification, among others. See Governor's Veto Message for Public Act 09-107 Bill Notification Release No. 19 (June 5, 2009), available at http://www.ct.gov/governorrell/cwp/view.asp?A=1716&Q=441210 (last visited November 18, 2011) (copy contained in the file of this case in the Supreme Court clerk's office).

⁹⁹ The defendant also includes lengthy quotes from the opinions of dissenting justices in capital cases, which express views similar to those reflected in the commission and interest group reports. He further observes that death row inmates have been exonerated in other jurisdictions, but makes no suggestion that any person on Connecticut's death row, presently or previously, was convicted wrongfully.

¹⁰⁰ As the Supreme Court of New Jersey observed when upholding that state's death penalty against a general constitutional challenge, "[t]he 'contemporary standard of decency' against which the death penalty must be tested . . . is that of the community, not that of its scientists, penologists, or jurists." *State* v. *Ramseur*, supra, 106 N.J. 171.

¹⁰¹ The repeal legislation originally had passed in the House of Representatives with ninety members voting in favor of it, fifty-six members voting against it and five members abstaining. The vote had been closer in the Senate, with nineteen members voting in favor of the legislation and seventeen voting against it.

In support of this claim, the defendant cites extensively, but selectively, to the portions of the legislative history of P.A. 09-107 in which some supporters of repeal expressed their beliefs that the death penalty is morally wrong, arbitrarily imposed or penologically ineffective. He ignores or discounts other portions of the legislative history that suggest that the attempted repeal was motivated by practical rather than moral concerns, as well as the portions reflecting substantial opposition to the repeal.

¹⁰² The defendant also argues that the unsuccessful repeal attempt deprives the death penalty of the legislative authorization necessary for its constitutionality, and that "[t]he state constitution does not empower the [g]overnor to authorize the death penalty after its repudiation by the General Assembly" Obviously, all of our current death penalty legislation was enacted via the process specified in our constitution, which requires both legislative and gubernatorial approval, and subsequently has been upheld by this court against numerous constitutional challenges. The defendant provides no direct support for the proposition that a legislature's unsuccessful repeal attempt somehow vitiates a law that was enacted constitutionally by a previous legislature and governor, and we are not aware of any. Moreover, to the extent the defendant raises a new claim as to purported constitutional limitations on the governor's authority to veto death penalty legislation, a claim to which the state has had no opportunity to reply, we need not address his arguments. SS-II, LLC v. Bridge Street Associates, 293 Conn. 287, 302, 977 A.2d 189 (2009) (parties may not raise new claims in reply brief). In any event, the defendant's arguments in this regard are meritless.