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Can You Call a 9-Year-Old a Psychopath?

By JENNIFER KAHN

One day last summer, Anne and her husband, Miguel, took their 9-year-old son, Michael, to a Florida elementary school for the first day of what the family chose to call "summer camp." For years, Anne and Miguel have struggled to understand their eldest son, an elegant boy with high-planed cheeks, wide eyes and curly light brown hair, whose periodic rages alternate with moments of chilly detachment. Michael's eight-week program was, in reality, a highly structured psychological study — less summer camp than camp of last resort.

Michael's problems started, according to his mother, around age 3, shortly after his brother Allan was born. At the time, she said, Michael was mostly just acting "like a brat," but his behavior soon escalated to throwing tantrums during which he would scream and shriek inconsolably. These weren't ordinary toddler's fits. "It wasn't, 'I'm tired' or 'I'm frustrated' — the normal things kids do," Anne remembered. "His behavior was really out there. And it would happen for hours and hours each day, no matter what we did." For several years, Michael screamed every time his parents told him to put on his shoes or perform other ordinary tasks, like retrieving one of his toys from the living room. "Going somewhere, staying somewhere — anything would set him off," Miguel said. These furies lasted well beyond toddlerhood. At 8, Michael would still fly into a rage when Anne or Miguel tried to get him ready for school, punching the wall and kicking holes in the door. Left unwatched, he would cut up his trousers with scissors or methodically pull his hair out. He would also vent his anger by slamming the toilet seat down again and again until it broke.

When Anne and Miguel first took Michael to see a therapist, he was given a diagnosis of "firstborn syndrome": acting out because he resented his new sibling. While both parents acknowledged that Michael was deeply hostile to the new baby, sibling rivalry didn't seem sufficient to explain his consistently extreme behavior.

By the time he turned 5, Michael had developed an uncanny ability to switch from

full-blown anger to moments of pure rationality or calculated charm — a facility that Anne describes as deeply unsettling. "You never know when you're going to see a proper emotion," she said. She recalled one argument, over a homework assignment, when Michael shrieked and wept as she tried to reason with him. "I said: 'Michael, remember the brainstorming we did yesterday? All you have to do is take your thoughts from that and turn them into sentences, and you're done!' He's still screaming bloody murder, so I say, 'Michael, I thought we brainstormed so we could avoid all this drama today.' He stopped dead, in the middle of the screaming, turned to me and said in this flat, adult voice, 'Well, you didn't think that through very clearly then, did you?'"

Anne and Miguel live in a small coastal town south of Miami, the kind of place where children ride their bikes on well-maintained cul-de-sacs. (To protect the subjects' privacy, only first or middle names have been used.) The morning I met them was overcast and hot. Seated on a sofa in the family's spacious living room, Anne sipped a Coke Zero while her two younger sons — Allan, 6, and Jake, 2 — played on the carpet. So far, she said, neither of the younger boys exhibited problems like Michael's.

"We have bookshelves full of these books — 'The Defiant Child', 'The Explosive Child,' " she told me. "All these books with different strategies, and we try them, and sometimes they seem to work for a few days, but then it goes right back to how it was." A former elementary-school teacher with a degree in child psychology, Anne admitted feeling frustrated despite her training. "We feel like we've been spinning our wheels," she said. "Is it us? Is it him? Is it both? All these doctors and all this technology. But nobody has been able to tell us, 'This is the problem, and this is what you need to do.'"

At 37, Anne is voluble and frank. She had recently started managing a food truck, and the day we met, she was in Florida business mufti: a Bluetooth headset and iPhone, jean shorts and a fluorescent green tank top emblazoned with the name of her business. Miguel is more reserved. A former commercial pilot who now works as a real estate agent, he often acted as the family's mediator, negotiating tense moments with the calm of a man who has landed planes in stormy conditions.

"In the beginning, I thought it was us," Miguel said, as his two younger sons played loudly with a toy car. "But Michael defies logic. You do things by the book, and he's still off the wall. We became so tired of fighting with him in public that we really cut back on our social life."

Over the last six years, Michael's parents have taken him to eight different therapists and

received a proliferating number of diagnoses. "We've had so many people tell us so many different things," Anne said. "Oh, it's A.D.D. — oh, it's not. It's depression — or it's not. You could open the DSM and point to a random thing, and chances are he has elements of it. He's got characteristics of O.C.D. He's got characteristics of sensory-integration disorder. Nobody knows what the predominant feature is, in terms of treating him. Which is the frustrating part."

Then last spring, the psychologist treating Michael referred his parents to Dan Waschbusch, a researcher at Florida International University. Following a battery of evaluations, Anne and Miguel were presented with another possible diagnosis: their son Michael might be a psychopath.

For the past 10 years, Waschbusch has been studying "callous-unemotional" children — those who exhibit a distinctive lack of affect, remorse or empathy — and who are considered at risk of becoming psychopaths as adults. To evaluate Michael, Waschbusch used a combination of psychological exams and teacher- and family-rating scales, including the Inventory of Callous-Unemotional Traits, the Child Psychopathy Scale and a modified version of the Antisocial Process Screening Device — all tools designed to measure the cold, predatory conduct most closely associated with adult psychopathy. (The terms "sociopath" and "psychopath" are essentially identical.) A research assistant interviewed Michael's parents and teachers about his behavior at home and in school. When all the exams and reports were tabulated, Michael was almost two standard deviations outside the normal range for callous-unemotional behavior, which placed him on the severe end of the spectrum.

Currently, there is no standard test for psychopathy in children, but a growing number of psychologists believe that psychopathy, like autism, is a distinct neurological condition — one that can be identified in children as young as 5. Crucial to this diagnosis are callous-unemotional traits, which most researchers now believe distinguish "fledgling psychopaths" from children with ordinary conduct disorder, who are also impulsive and hard to control and exhibit hostile or violent behavior. According to some studies, roughly one-third of children with severe behavioral problems — like the aggressive disobedience that Michael displays — also test above normal on callous-unemotional traits. (Narcissism and impulsivity, which are part of the adult diagnostic criteria, are difficult to apply to children, who are narcissistic and impulsive by nature.)

In some children, C.U. traits manifest in obvious ways. Paul Frick, a psychologist at the University of New Orleans who has studied risk factors for psychopathy in children for two

decades, described one boy who used a knife to cut off the tail of the family cat bit by bit, over a period of weeks. The boy was proud of the serial amputations, which his parents initially failed to notice. "When we talked about it, he was very straightforward," Frick recalls. "He said: 'I want to be a scientist, and I was experimenting. I wanted to see how the cat would react.'"

In another famous case, a 9-year-old boy named Jeffrey Bailey pushed a toddler into the deep end of a motel swimming pool in Florida. As the boy struggled and sank to the bottom, Bailey pulled up a chair to watch. Questioned by the police afterward, Bailey explained that he was curious to see someone drown. When he was taken into custody, he seemed untroubled by the prospect of jail but was pleased to be the center of attention.

In many children, though, the signs are subtler. Callous-unemotional children tend to be highly manipulative, Frick notes. They also lie frequently — not just to avoid punishment, as all children will, but for any reason, or none. "Most kids, if you catch them stealing a cookie from the jar before dinner, they'll look guilty," Frick says. "They want the cookie, but they also feel bad. Even kids with severe A.D.H.D.: they may have poor impulse control, but they still feel bad when they realize that their mom is mad at them." Callous-unemotional children are unrepentant. "They don't care if someone is mad at them," Frick says. "They don't care if they hurt someone's feelings." Like adult psychopaths, they can seem to lack humanity. "If they can get what they want without being cruel, that's often easier," Frick observes. "But at the end of the day, they'll do whatever works best."

The idea that a young child could have psychopathic tendencies remains controversial among psychologists. Laurence Steinberg, a psychologist at Temple University, has argued that psychopathy, like other personality disorders, is almost impossible to diagnose accurately in children, or even in teenagers — both because their brains are still developing and because normal behavior at these ages can be misinterpreted as psychopathic. Others fear that even if such a diagnosis can be made accurately, the social cost of branding a young child a psychopath is simply too high. (The disorder has historically been considered untreatable.) John Edens, a clinical psychologist at Texas A&M University, has cautioned against spending money on research to identify children at risk of psychopathy. "This isn't like autism, where the child and parents will find support," Edens observes. "Even if accurate, it's a ruinous diagnosis. No one is sympathetic to the mother of a psychopath."

Mark Dadds, a psychologist at the University of New South Wales who studies antisocial behavior in children, acknowledges that "no one is comfortable labeling a 5-year-old a psychopath." But, he says, ignoring these traits may be worse. "The research showing that

this temperament exists and can be identified in young children is quite strong." Recent studies have revealed what appear to be significant anatomical differences in the brains of adolescent children who scored high on the youth version of the Psychopathy Checklist — an indication that the trait may be innate. Another study, which tracked the psychological development of 3,000 children over a period of 25 years, found that signs of psychopathy could be detected in children as young as 3. A small but growing number of psychologists, Dadds and Waschbusch among them, say that confronting the problem earlier may present an opportunity to help these children change course. Researchers hope, for example, that the capacity for empathy, which is controlled by specific parts of the brain, might still exist weakly in callous-unemotional children, and could be strengthened.

The benefits of successful treatment could be enormous. Psychopaths are estimated to make up 1 percent of the population but constitute roughly 15 to 25 percent of the offenders in prison and are responsible for a disproportionate number of brutal crimes and murders. A recent estimate by the neuroscientist Kent Kiehl placed the national cost of psychopathy at \$460 billion a year — roughly 10 times the cost of depression — in part because psychopaths tend to be arrested repeatedly. (The societal costs of nonviolent psychopaths may be even higher. Robert Hare, the co-author of "Snakes in Suits," describes evidence of psychopathy among some financiers and business people; he suspects Bernie Madoff of falling into that category.) The potential for improvement is also what separates diagnosis from determinism: a reason to treat psychopathic children rather than jail them. "As the nuns used to say, 'Get them young enough, and they can change,'" Dadds observes. "You have to hope that's true. Otherwise, what are we stuck with? These monsters."

When I first met Michael, he seemed shy but remarkably well behaved. While his brother Allan ran through the house with a plastic bag held overhead like a parachute, Michael entered the room aloofly, then curled up on the living room sofa, hiding his face in the cushions. "Can you come say hello?" Anne asked him. He glanced at me, then sprang cheerfully to his feet. "Sure!" he said, running to hug her. Reprimanded for bouncing a ball in the kitchen, he rolled his eyes like any 9-year-old, then docilely went outside. A few minutes later, he was back in the house, capering antically in front of Jake, who was bobbing up and down on his sit-and-ride scooter. When the scooter tipped over, Michael gasped theatrically and ran to his brother's side. "Jake, are you O.K.?" he asked, wide-eyed with concern. Earnestly ruffling his youngest brother's hair, he flashed me a winning smile.

If the display of brotherly affection felt forced, it was difficult to see it as fundamentally disturbed. Gradually, though, Michael's behavior began to morph. While queuing up a

Pokémon video on the family's computer upstairs, Michael turned to me and remarked crisply, "As you can see, I don't really like Allan." When I asked if that was really true, he said: "Yes. It's true," then added tonelessly, "I hate him."

Glancing down a second later, he noticed my digital tape recorder on the table. "Did you record that?" he asked. I said that I had. He stared at me briefly before turning back to the video. When a sudden noise from the other room caused me to glance away, Michael seized the opportunity to grab the recorder and press the erase button. (Waschbusch later noted that such a calculated reprisal was unusual in a 9-year-old, who would normally go for the recorder immediately or simply whine and sulk.)

It was tempting to scrutinize Anne and Miguel for signs of dysfunctional dynamics that might be the source of Michael's odd behavior. But the family seemed, if anything, exceedingly normal. Watching Anne ride herd on her two younger boys that afternoon, I found her to be brusque and no-nonsense. When Allan started running around the living room and then crashing into the sofa cushions, she spoke sharply: "Allan! Stop it." (He did.) When Jake and Allan grew whiny about a shared toy, she arbitrated the dispute with a tone of patient exasperation familiar to most parents. "Just let him play with it for five minutes, Allan, and then it'll be your turn." And when she grew touchy about parenting strategies — Anne favors structure and strict rules; Miguel is inclined to be lenient — Miguel listened quietly, then conceded that his relaxed approach might be "optimistic."

It certainly seemed so. As the night progressed, Michael's behavior grew more violent. At one point, while Michael was downstairs, Jake clambered goofily onto the computer chair and accidentally unpaused Michael's Pokémon video. Allan giggled, and even Miguel smiled affectionately. But the amusement was brief. Hearing Michael on the stairs, Miguel said, "Uh oh!" and whisked Jake out of the chair.

He wasn't fast enough. Seeing the video playing, Michael gave a keening scream, then scanned the room for the guilty party. His gaze settled on Allan. Grabbing a wooden chair, he hoisted it overhead as though to do violence but paused for several seconds, giving Miguel a chance to yank it away. Shrieking, Michael ran to the bathroom and began slamming the toilet seat down repeatedly. Dragged out and ordered to bed, he sobbed pitifully. "Daddy! Daddy! Why are you doing this to me?" he begged, as Miguel carried him to his room. "No, Daddy! I have a greater bond with you than I do with Mommy!" For the next hour, Michael sobbed and screamed, while Miguel tried to calm him. In the hall outside his room, Miguel apologized, adding that it was "an unusually bad night."

"What you saw, that was the old Michael," he continued. "He was like that all day long. Kicking and hitting, slamming the toilet seat." But he also noted that Allan had provoked Michael, at one point taunting him for crying. "He loves to poke at him when he can," Miguel said.

From the bedroom, Michael called out: "He knows the consequences, so I don't know why he does it. I will hurt him."

Miguel: "No you won't."

Michael: "I'm coming for you, Allan."

An hour later, after the boys were finally asleep, Miguel and I sat down at the kitchen table. Growing up, he said, he had also been a difficult child — albeit not so problematic as Michael. "A lot of parents didn't want me around their kids, because they thought I was crazy," he said, closing his eyes at the memory. "I didn't listen to adults. I was always in trouble. My grades were horrible. I would be walking down the street and I would hear them say, in Spanish: 'Ay! Viene el loco!' — 'Here comes the crazy one.'"

According to Miguel, this antisocial behavior lasted until his late teens, at which point, he said, he "grew up." When I asked what caused the change, he looked uncertain. "You learn to pacify the rough waters," he said at last. "It just happens. You learn to control yourself from the outside in."

If Miguel's trajectory seemed to offer some hope for Michael, Anne remained doubtful. Recalling the chipper hug that Michael gave her earlier that evening, she shook her head. "Two hugs in 10 minutes?" she said. "I haven't gotten two hugs in two weeks!" She suspected that Michael had been trying to manipulate me and was using similar tricks to manipulate his therapists: conning them into believing he was making progress by behaving well during the hour that he was in treatment. "Miguel likes to think that Michael is growing and maturing," she said. "I hate to say it, but I think that's him developing a larger skill set of manipulation." She paused. "He knows how to get what he wants."

One morning, I met up with Waschbusch at the site of his summer treatment program, a small elementary school tucked into the northwest corner of the Florida campus. Before becoming interested in psychopathy, Waschbusch specialized in attention-deficit-hyperactivity disorder, and for the past eight summers has helped run a summer-camp-style treatment program for kids with severe A.D.H.D. Last year was the first time he included a separate program for callous-unemotional, or C.U., kids — a dozen children between 8 and

11. Michael was one of his earliest referrals.

Waschbusch's study is one of the first to look at treatments for C.U. children. Adult psychopaths are known to respond to reward far more than punishment; Waschbusch hoped to test whether this was true in children as well. But the process had been challenging. Where the A.D.H.D. kids were disruptive and hard to control, the C.U. kids showed a capacity for mayhem — screaming, tipping over desks, running laps around the classroom — that Waschbusch called "off the charts."

"We had kids who were trying to climb the fence and run into the next field during P.E., kids who had to be physically restrained many times a day," Waschbusch said, as we made our way to the school's playground. "It really blew us away." With short-cropped iron gray hair and an earnest, slightly distracted manner, Waschbusch came across as surprisingly cheerful — though he was also vigilant. While leading me down the school's main hallway, he warily scanned each classroom door we passed, as if to confirm that no child was about to burst out of it. The study had a ratio of one counselor for every two children. But the kids, Waschbusch said, quickly figured out that it was possible to subvert order with episodes of mass misbehavior. One child came up with code words to be yelled out at key moments: the signal for all the kids to run away simultaneously.

"The thing that's jumped out at me most is the manipulativeness that these kids are showing," he said, shaking his head in wonder. "They're not like A.D.H.D. kids who just act impulsively. And they're not like conduct-disorder kids, who are like: 'Screw you and your game! Whatever you tell me, I'm going to do the opposite.' The C.U. kids are capable of following the rules very carefully. They just use them to their advantage."

As we talked, Waschbusch led me to the school's outdoor basketball court, where a highly structured game of keep-away was in progress. Initially, the game appeared almost normal. Standing in a circle, kids tried to pass the ball to one another, over the head of the kid in the middle, while the counselors gave constant feedback — praising focus and sportsmanship and taking careful note of any misbehavior. When the ball flew wide on a pass, a burly boy with short-cropped hair gave his receiver a smoldering look. "That anger — that goes beyond what you see in ordinary kids," Waschbusch said. "These kids, they take offense easily and react disproportionately. The same is true for grudges. If one of the kids scored a goal on him" — the smolderer — "he would be furious. He would be angry at that kid for days."

I had observed the same intense, focused anger in Michael. One night, while Michael

watched his Pokémon video, Allan climbed up to sit in the chair next to him with the strap end of a Beyblade launcher dangling from his mouth. Michael looked at him with hatred, then calmly turned back to the computer. Thirty seconds passed. Suddenly, Michael pivoted, grabbed the strap with vicious force and hurled the launcher across the room.

At the summer program, though, Michael seemed less violent than morose. Outfitted in red shorts and a blue baseball cap, he played well in keep-away, but appeared bored in the group evaluation circle that came afterward. While a counselor tallied points, Michael lay on the ground, flicking a thread he had pulled out of his shirt.

The summer program was now in its seventh week, and most of the children had yet to show signs of improvement. Some, including Michael, were actually worse; one had begun biting the counselors. At the start of the program, Waschbusch noted, Michael's behavior was comparatively good: he would sometimes jump up from his desk or run around the classroom but would only rarely have to be forcibly removed, as often happened with the wildest children. Since then, his behavior had spiraled badly — in part, Waschbusch thought, because Michael had been trying to impress another child in the program, a girl I'll refer to as L. (Her name has been abbreviated to her first initial to protect her privacy.)

Charming but volatile, L. quickly found ways to play different boys off one another. "Some manipulation by girls is typical," Waschbusch said as the kids trooped inside. "The amount she does it, and the precision with which she does it — that's unprecedented." She had, for example, smuggled a number of small toys into camp, Waschbusch told me, then doled them out as prizes to kids who misbehaved at her command. That strategy seemed particularly effective with Michael, who would often go to detention screaming her name.

According to Waschbusch, calculated behavior like L.'s distinguishes so-called "hot-blooded" conduct disorders from more "coldblooded" problems like psychopathy. "Hot-blooded kids tend to act out very impulsively," he added as we followed the children inside. "One theory is that they've got a hyperactive threat-detection system. They're very fast to recognize anger and fear." Coldblooded, callous-unemotional children, by contrast, are capable of being impulsive, but their misbehavior more often seems calculated. "Instead of someone who can't sit still, you get a person who may be hostile when provoked but who also has this ability to be very cold. The attitude is, 'Let's see how I can use this situation to my advantage, no matter who gets hurt from that.'

Researchers have linked coldblooded behaviors to low levels of cortisol and below-normal function in the amygdala, the portion of the brain that processes fear and other aversive

social emotions, like shame. The desire to avoid those unpleasant feelings, Waschbusch notes, is part of what motivates young children to behave. "Normally, when a 2-year-old pushes his baby sister, and his sister cries, and his parents scold him, those reactions make the kid feel uncomfortable," Waschbusch continued. "And that discomfort keeps him from doing it again. The difference with the callous-unemotional kids is that they don't feel uncomfortable. So they don't develop the same aversion to punishment or to the experience of hurting someone."

Waschbusch cited one study that compared the criminal records of 23-year-olds with their sensitivity to unpleasant stimuli at age 3. In that study, the 3-year-olds were played a simple tone, then exposed to a brief blast of unpleasant white noise. Though all the children developed the ability to anticipate the burst of noise, most of the toddlers who went on to become criminals as adults didn't show the same signs of aversion — tensing or sweating — when the advance tone was played.

To test the idea that C.U. children may be less responsive to reward and punishment than the average child, Waschbusch established a system in which kids were awarded points for behaving well and docked points for acting out, and then he modified it to include weeks where either the reward (points earned) or the punishment (points lost) were augmented. At the end of each week, children chose prizes, based on the number of points they'd earned. Every day, Waschbusch and his counselors tracked each child's behavior — the number and severity of outbursts, any instances of good behavior — and entered the results into a blinded data set. With just a dozen children in the program, Waschbusch admitted, the observations were more like a series of case studies than like a trial with robust statistics. Still, he hoped that the data would provide a starting point for researchers trying to treat C.U. children.

"So little is known about how these kids operate," Waschbusch said, following the ragged lineup indoors. Even now, he noted, the idea that C.U. kids might respond differently to treatment was largely untested. "This is uncharted territory," he admitted. "People are worried about labeling, but if we can identify these kids, at least we have a chance to help them." He paused. "And if we miss that chance, we might not get another one."

The morning after my visit, Waschbusch invited me to watch a videotape made during one of the program's classroom sessions. The viewing took place in a room jammed with extra chairs and a small TV on rollers. William Pelham, the chairman of Florida International's psychology department, stopped by to say hello. "Dan's going to prevent the next Ted Bundy," he told me cheerfully.

Waschbusch stared intently at the screen. As the camera panned across the classroom, Michael shoved at his desk uncomfortably, then tipped back in his chair, fidgeting. "Michael, you're not on task," a counselor reprimanded gently. "O.K.!" Michael said angrily. Next to him, a tiny boy with glasses dropped his pencil on the floor repeatedly, earning a reprimand, then pretended to chew on his own arm.

After lunch, the situation deteriorated. During class, L. hurled an eraser at another girl but instead hit a slight, dark-haired boy, who promptly scooted his chair backward at high speed, crashing into the desk of the students behind him. Watching L. chase the boy around the room, Waschbusch dismissed the idea that she was simply out of control. "This is planned," he said grimly. "She knows exactly what she's doing." When a counselor ordered L. to sit down, she returned to her chair and drew quietly for two minutes, earning 10 reward points. "That's the difference, right there," Waschbusch said, pointing at the screen. "If this were impulsivity, she'd already be up and running around again."

One of the challenges of working with severely disturbed children, Waschbusch noted, is figuring out the roots of their behavioral problems. This is particularly true for callous-unemotional kids, he said, because their behavior — a mix of impulsivity, aggression, manipulativeness and defiance — often overlaps with other disorders. "A kid like Michael is different from minute to minute," Waschbusch noted. "So do we say the impulsive stuff is A.D.H.D. and the rest is C.U.? Or do we say that he's fluctuating up and down, and that's bipolar disorder? If a kid isn't paying attention, does that reflect oppositional behavior: you're not paying attention because you don't want to? Or are you depressed, and you're not paying attention because you can't get up the energy to do it?"

In addition to refining the psychological measures that test for C.U. in children, Waschbusch also hopes to gain a better sense of why some callous-unemotional children grow up to be deeply troubled adults while others do not. Magnetic resonance imaging on the brains of adult psychopaths has shown what appear to be significant anatomical differences: a smaller subgenual cortex and a 5 to 10 percent reduction in brain density in portions of the paralimbic system, regions of the brain associated with empathy and social values, and active in moral decision making. According to James Blair, a cognitive neuroscientist at the National Institute of Mental Health, two of these areas, the orbitofrontal cortex and the caudate, are critical for reinforcing positive outcomes and discouraging negative ones. In callous-unemotional children, Blair says, that connection may be defective, with negative feedback not registering the way it would in a normal brain.

These differences, researchers say, are most likely genetic in origin. One study calculated

the heritability of callous-unemotional traits at 80 percent. Donald Lynam, a psychologist at Purdue University who has spent two decades studying "fledgling psychopaths," says that these differences may eventually solidify to produce the unusual mixture of intelligence and coldness that characterizes adult psychopaths. "The question's not 'Why do some people do bad things?' "Lynam told me by phone. "It's 'Why don't more people do bad things?' And the answer is because most of us have things that inhibit us. Like, we worry about hurting others, because we feel empathy. Or we worry about other people not liking us. Or we worry about getting caught. When you start to take away those inhibitors, I think that's when you end up with psychopathy."

While the chance of inheriting a predisposition to psychopathy is high, Lynam noted, it is no higher than the heritability for anxiety and depression, which also have large genetic risk factors, but which have still proved responsive to treatment. Waschbusch agreed. "In my view, these kids need intensive intervention to get them back to normal — to the place where other strategies can even have an effect. But to take the attitude that psychopathy is untreatable because it's genetic" — he shook his head — "that's not accurate. There's a stigma that psychopaths are the hardest of the hardened criminals. My fear is that if we call these kids 'prepsychopathic,' people are going to draw that inference: that this is a quality that can't be changed, that it's immutable. I don't believe that. Physiology isn't destiny."

In the 1970s, the psychiatry researcher Lee Robins conducted a series of studies on children with behavioral problems, following them into adulthood. Those studies revealed two things. The first was that nearly every psychopathic adult was deeply antisocial as a child. The second was that almost 50 percent of children who scored high on measures of antisocial qualities did not go on to become psychopathic adults. Early test scores, in other words, were necessary but not sufficient in predicting who ultimately became a violent criminal.

That gap is what gives researchers hope. If a genetic predisposition to psychopathy is a risk factor, the logic goes, that risk might be mitigated by environmental influences — the same way that diet can be used to lower an inherited risk for heart disease. Like many psychologists, Frick and Lynam also suspect that the famously "intractable" nature of psychopathy may actually be overblown, a product of uninformed treatment strategies. Researchers are now careful to distinguish between callous-unemotional traits observed in children and full-blown adult psychopathy, which, like most psychological disorders, becomes harder to treat the longer it persists.

Still, Frick acknowledges that it's not yet clear how best to intervene. "Before you can

develop effective treatments, you need several decades of basic research just to figure out what these kids are like, and what they respond to," he said. "That's what we're doing now — but it will take a while to get real traction."

And there are other challenges. Since psychopathy is highly heritable, Lynam says, a child who is cold or callous is more likely to have a parent who is the same way. And because parents don't necessarily bond to children who behave cruelly, those children tend to get punished more and nurtured less, creating what he calls "a self-fulfilling prophecy."

"It reaches a point where the parents just stop trying," Lynam said. "A lot of the training is about trying to get these kids' parents to re-engage, because they feel like they've tried it all and nothing works."

Anne admitted to me that this had been her experience. "As horrible as this is to say, as a mom, the truth is that you put up a wall. It's like being in the army, facing a barrage of fire every day. You have to steel yourself against the outbursts and the hate."

When I asked Anne if she worried about Michael's behavior taking a psychological toll on his brothers — Allan, in particular, seemed to worship Michael — she seemed surprised by the idea. Then she told me that the previous week, Allan had "run away" to a friend's house, located more than a mile from home. "Of course we were worried sick," she added hastily. "But Allan is confident that way."

Anne is a strict disciplinarian, she said, particularly with Michael, who she worries would otherwise simply run wild. She mentioned an episode of "Criminal Minds" that terrified her, in which a couple's younger son was murdered by his older brother. "In the show, the older brother didn't show any remorse. He just said, 'He deserved it, because he broke my plane.' When I saw that, I said, 'Oh my God, I so don't need that episode to be my life story down the line.' "She laughed awkwardly, then shook her head. "I've always said that Michael will grow up to be either a Nobel Prize winner or a serial killer."

Told that other parents might be shocked to hear her say such a thing, she sighed, then was silent for several seconds. "To them I'd say that they shouldn't judge until they've walked in my shoes," she said finally. "Because, you know, it takes a toll. There's not a lot of joy and happiness in raising Michael."

While it may be possible to modify a callous-unemotional child's behavior, what's less clear is whether it's possible to make up for underlying neurological deficits — like a lack of empathy. In one oft-cited study, an inmate therapy group that halved the recidivism rate in

violent prisoners famously increased the rate of "successful" crimes in psychopaths, by improving their ability to mimic regret and self-reflection. A related article recently speculated that treating antisocial children with Ritalin could be dangerous, because the drug suppresses their impulsive behavior and might enable them to plan crueller and more surreptitious reprisals.

In another study, the researcher Mark Dadds found that as C.U. children matured, they developed the ability to simulate interest in people's feelings. "We called the paper 'Learning to Talk the Talk,' " Dadds said. "They have no emotional empathy, but they have cognitive empathy; they can say what other people feel, they just don't care or feel it." When Anne worried that Michael might have begun manipulating his therapists — faking certain feelings to score points — she might have been more right than she knew.

Most researchers who study callous-unemotional children, however, remain optimistic that the right treatment could not only change behavior but also teach a kind of intellectual morality, one that isn't merely a smokescreen. "If a person doesn't have the hardware to do emotion processing, you won't be able to teach it," Donald Lynam observes. "It may be like diabetes: you're never really going to cure it. But if your idea of success is that these kids aren't as likely to become violent and end up in jail, then I think treatment could work."

Frick is willing to go further. If treatment is begun early enough, he says, it may be possible to rewire the brain so that even C.U. children might develop greater empathy, through therapies that teach everything from identifying emotions (C.U. children tend to have difficulty recognizing fear in others) to basics of the Golden Rule. No one has yet tested such treatments in C.U. children, but Frick notes that one early study indicated that warm, affectionate parenting seems to reduce callousness in C.U. kids over time — even in children who initially resist such closeness.

As of January, Waschbusch's analysis of the reward-versus-punishment strategies showed little consistency — possibly because the study group was so small. This summer, he plans to expand the program from one group to four: each group will be split between C.U. children and children with conduct disorder. Waschbusch hopes that by comparing the two, it will be possible to evaluate the differences in their responses to treatment.

As for Michael, it was hard to tell whether the program had helped. During the last week at camp, he bit a counselor on the arm, something he'd never done before. At home, Miguel said, Michael had become slyer in his disobedience. "He doesn't scream as much," he told me. "He just does what he wants and then lies about it."

Miguel said he still had hope that Michael's development would follow a similar path to his own. "Sometimes when Michael does things, I know exactly why," he said with a shrug. "Because I've done the same kind of thing." In the meantime, he offers Michael what advice he can. "I try to tell him: You're here with a lot of other people, and they all have their own ideas of what they want to be doing. Whether you like it or not, you just have to get along."

Jennifer Kahn teaches at the University of California Berkeley Graduate School of Journalism. This is her first article for the magazine.

Editor: Sheila Glaser