How can we predict which of our kids will be successful? Those who are bold? Those who are confident? Those who are willing to take risks? There is no foolproof formula. But if you were at the CrossFit Games this year, you may be inclined to venture a guess.

While I was there, I witnessed strength of character and a level of poise I had thought might be missing in this generation. I saw the best of our future.
CrossFit Kids (continued...)

Teenage CrossFitters like Josh, Connor, Kallista, Mariah, and David were simply amazing. Surrounded by world-class competitors who have years of training and experience on them, these kids walked into the arena ready for battle. No fanfare. No expressions of self-doubt. In their minds, their ability to perform was as good as the next guy’s, even if the next guy was bigger and stronger.

I’ll never forget the scenes. Connor gutted through Sunday’s event next to an NFL player. Kallista stood tall next to the highlighted finalists, even after she took a scary spill. Mariah pumped out deadlifts and burpees like her life depended on it. David suffered a severe asthma attack and refused to give up. Josh pumped out clean and jerks with good form right up to the second the clock ran out. Their efforts inspired all of us who saw.

We shook our heads and wondered, “How do they do it? What makes them so tough?” But for them, their performances weren’t extraordinary or even remarkable. They simply did what they went there to do—complete the events and compete.

I suspect Coach Glassman foresaw this scenario when Jeff and Mikki Martin began to develop a CrossFit Kids program. Now well established, CrossFit Kids programs are profoundly changing the lives of children and teens around the world, in the gym and beyond. We’re cultivating a group of kids who are better equipped to face whatever life brings them. It isn’t about winning or losing. It’s about character building and defining success in a positive manner.

CrossFit Kids are working from a different paradigm than most of their peers. They view themselves as competent and capable. Appropriate risk taking and weathering the storms of life come more naturally to them. They’re disciplined; they know how to persevere; they have learned to accept delayed gratification.

CrossFit Kids no longer look at obstacles as blocks to their progress. They see them as opportunities to apply themselves and succeed. It is rarely a question of whether they can do something. It’s a question of when they will do it. For example, young Keegan wanted to do a front flip. For several weeks he pulled out the tumbling mat and practiced for hours. At first, he would under rotate and land squarely on his backside. Everyone watched and kept their fingers crossed. We encouraged and congratulated him on his progress. Finally he completed a perfect front flip. Only a few weeks later, Keegan was filmed doing an amazing front flip/burpee combo.

This was not a unique experience for Keegan. At the CrossFit Games, he was determined to win the Indo board contest. For two days, he kept a close watch on the contest standings. Whenever someone improved on Keegan’s time, he climbed back on the board and bested that competitor’s effort by 10 to 15 seconds. He is now the proud owner of the prized Indo board. It never occurred to him that he wouldn’t win the contest. Just like his quest for a front flip, Keegan
Unusual? Not for CrossFit Kids. These kids are confident in their abilities and experience successes because they are willing to take risks and because their experiences have repeatedly reinforced the fact that they can complete tasks once thought to be too difficult. We have seen shy children who once hid in the back of the class become eager to demonstrate movements. We have witnessed kids with little confidence who used to hide behind long hair and hats step into leadership roles to coordinate a CrossFit Kids project. A child who cried and left the workout floor every time something new was introduced now hangs with a trainer until she learns the movement. We regularly see kids step up to stacks of tires that stand as tall as their shoulders and just...jump! No doubt, no negotiating process about the possibility of failing, just a jump. CrossFit is changing our kids’ willingness to try, and sometimes to fail—and it’s teaching them to weigh the risks and understand the relative importance of different kinds of risks and failures.

Justin was a cautious, quiet child who would rather miss out on the fun than risk embarrassment. Day after day, he held back from difficult tasks, not out of laziness but from fear of failure. CrossFit dodgeball was a glaring example. At first, Justin would stand at the far corner of the mat, head down, hoping no one would see him and throw the ball his way. Through his CrossFit Kids experiences, Justin has overcome this fear and become a child who faces tasks head on. He is no longer embarrassed by failure. He now realizes that failure is sometimes the inevitable byproduct of the noble art of “trying” and that the occasional failure determines his overall success and self-worth far less than his former reluctance to ever throw his hat into the arena in the first place.

This newfound confidence has spilled over into other areas of Justin’s life. His willingness to try new things, to allow others to witness his attempts (successful or not), and the peace he feels about the outcome of his efforts have had big effects on his relationships and endeavors. He won an award in his elementary-school class this year for asserting himself to include and welcome others, especially new kids. His parents report a level of independence and emotional resilience that once eluded him. Justin’s beliefs about himself and his ability to navigate the world have been indelibly altered through hard work applied and “risk for reward.”

For CrossFit Kids, working hard is a matter of course. They have learned to gut out even the most difficult of workouts. As a result, they have discovered something universally valuable about themselves. They are able to rise above adversity to a level of achievement they did not previously know they could grasp, crashing through boundaries they once viewed as insurmountable. They learn to appreciate not
only their own abilities but also those of their peers. They possess a unique understanding of the intrinsic value of a job well done. “Sloppy” doesn’t exist in their vocabularies. They do the work, going after it again and again until they get it right, thereby grasping the concept of delayed gratification. Achieving the seemingly impossible is a regular occurrence, and these experiences are beginning to permeate other aspects of their lives.

As the daughter of a CrossFit Brand X trainer, McKenna spends a good portion of her time in the gym. From the age of six, she desperately wanted to do a kipping pull-up. She watched quietly as her siblings and older friends celebrated their first successful pull-ups. For two years, McKenna would leave her friends in the “kid’s area,” skip over to the pull-up bar, and make her best attempt at a kipping pullup. Every time she failed. But she did not become discouraged and wonder if she would ever achieve a kipping pull-up. She just kept trying. Her experiences in CrossFit Kids had shown her that her physical abilities were limited only by her willingness and dedication to try. Four months ago, McKenna finally got her first kipping pull-up. What a celebration! Kids and adults high-fived and cheered. And, as of last week, McKenna can now do 15 consecutive kipping pull-ups.

Her story isn’t just about kipping pull-ups though. McKenna has learned she can overcome the difficult circumstances of her life and that good things come to those who work hard, even if it takes time. At age eight, she is teaching herself to play piano and guitar (with a little help from her brothers). She spends hours a week practicing her writing. Her cartwheels, once downward tumbles, are approaching perfection. When some older boys began to bully her at school, she stood up to them with the confidence and fierceness of a warrior. (The bullies don’t bother her any more.) McKenna has learned to manage these situations not because she has an extraordinary level of discipline (though CrossFit Kids is cultivating that in her) but because she believes she can handle life’s situations. She can prevail.

**Rewiring the brain**

We recognize this as more than a mindset or a surplus of self-confidence though. We believe CrossFit Kids is actually changing the way our kids process information.

The brain is said to be “plastic.” It can change and adapt in relation to its environment. Scientific studies demonstrate that experiences and behavior alter the structure of our brains, the way our brains physiologically function, and the way we interpret information. (We discuss all of this in greater detail at the CrossFit Kids Certification Seminars.) It is our belief that involvement in CrossFit has caused these kids to cognitively and physically respond to challenges in a different manner than they once did.

Motor activity can alter the function and efficiency of the brain. Studies have shown that learning new motor skills actually changes and strengthens connections (synapses) in the brain. Exercise has been demonstrated to improve brain function, as measured by data including higher standardized test scores, increased capacities in advanced reasoning and executive functions, and a countering of the negative effects of stress and depression. These are significant changes in the way the brain processes and responds to stimuli.

Experiences too can change the structure of the brain. Most of us are familiar with the phenomenon of blind people possessing acute hearing. There is actually a physiological basis for this. Studies of the blind have demonstrated the visual cortex may remain stagnant or actually shrink due to lack of stimulation. At the same time, those areas that are compensating for the inability to process visual stimuli, such as the auditory regions, grow larger. A map of this brain would deviate from the “norm” simply based on its response to the experience of blindness.

In like manner, behavior can change the structure of the brain. Consider, for example, a blind person who reads using Braille. It has been documented that the areas of the brain that are responsible for sense of touch grow
larger in response to the repeated stimulation caused by use of this sense. The brain physically changes because of the individual’s behavior.

Kids’ brains, then, must be constantly being restructured in response to their experiences and behavior. All evidence points to this possibility.

Our experiences can change the way our brains “fire.” A comparison of children with post-traumatic stress disorder and non-traumatized children showed that the brains of the two groups functioned differently, responding to the same test stimulus with activity in different cerebral areas. Their brains were actually operating differently. Concurrently, and possibly as a function of their brain activity, the traumatized children outwardly responded to said situations in a different manner than non-traumatized children.

Could our kids’ brains be functionally changing because of these experiences? We believe so.

There is no denying the extraordinary demands of a CrossFit workout. The mental and physical capacities required to complete one of these workouts goes beyond the average modern human experience. We are seeing our kids begin to respond to these challenges in a manner that deviates from the norm.

Our experiences can determine the way in which we interpret situations. A study comparing Eastern and Western cultures asked participants to interpret photographic scenes. The interpretations were consistent within cultures. However, between cultures the scenes were interpreted in completely different ways. Just as the experiences of each culture were similar, so were the ways in which each culture interpreted a given situation.

CrossFit is a culture all its own. It has its own language (Anyone else understand “WOD” or “AMRAP” or “the girls”?) and standards for behavior and achievement (“I PR’d Helen today”). No one “gets” a CrossFitter like another CrossFitter. Our kids are learning to interpret situations and challenges based on this culture and their CrossFit experiences. Their responses to any given situation are colored by what their participation in CrossFit has taught them about themselves and the world.
CrossFit Kids (continued...)

Our laboratory is a CrossFit box. Here we rely on observable, measurable, and repeatable data to formulate our theories and CrossFit Kids programming. As with everything CrossFit, we are working with the empirical and measurable, without full knowledge of the mechanisms at work inside the black box. We observe that our kids are experiencing physiological and cognitive changes in their brains as a result of their participation in CrossFit. While we are unable to definitively prove many of our theories at this time (in part because of a lack of access to some very expensive and highly technical medical equipment), we find the possibilities more than just a bit intriguing. Besides, a lack of medical equipment has never stood in the way of CrossFit progress. We don’t need academics or scientists in lab coats. Our kids are continuously proving the plausibility of our theories.

At CrossFit Kids certification seminars, we talk a great deal about how to best equip our kids with the greatest number of life tools. We are trying to fill their tool boxes with experiences and skills to physically, emotionally, and cognitively navigate their futures. Do the stories told here guarantee that Keegan, Justin, and McKenna will become great achievers? Will Connor, Mariah, Kallista, David, and Josh be our future leaders? There is no way we can make those predictions. What we can do is continue to encourage their participation in those activities that develop their confidence, determination, and strength offer them the greatest chances for long-term success. CrossFit is an important part of that plan.

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