

**CLINICAL  
CONTRIBUTIONS**

# Building Emotional Muscle in Children and Parents

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*The concept of “emotional muscle” arose from clinical work in relation to therapeutic impasse and as a criterion for moving toward a “good good-bye.” It was applied to work at Allen Creek Preschool, a non-profit psychoanalytic school in Ann Arbor, Michigan, dedicated to the emotional and cognitive growth of families and their children from 0–6 years of age. The idea of building emotional muscle makes immediate intuitive sense to parents, children, teachers, therapists, and patients. It is a bridge between the abstract concepts and findings of developmental researchers and the everyday practicalities of family life, school, and the consulting room. The concept of “emotional muscle” promotes multidisciplinary understanding of personality structure and growth and contributes to the use of multi-modal therapeutic techniques.*

*Keywords: emotional muscle, resilience, self-regulation, parent-child development*

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HARD WORK HAS DEVELOPED A BAD REPUTATION, AND MOST PEOPLE seem to think that easy is desirable. As Thomas Friedman described it in a recent book, “In some ways, the subprime mortgage mess and housing crisis are metaphors for what has come over America in recent years: A certain connection between hard work, achievement, and accountability has been broken. . . . Subprime lenders told us that we could have the American dream—a home of our own—without the discipline or sacrifice that home ownership requires” (2008). Along with the idealization of easy comes a fantasy that infancy and childhood are naturally magically idyllic, and should unfold effortlessly. Nothing could be further from the reality. There are untold thousands of parents who worry they must be doing something wrong, because they aren’t finding parenting easy. Equally, many parents and caretakers hesitate to demand work from children.

In Ann Arbor, Michigan, a group of educators and mental health professionals created a non-profit preschool as a laboratory to discover what work is needed to raise children who will become kind, productive, joyful, and creative members of the community. Allen Creek Preschool offers programs for parents with children from birth to 6. Much of the material we describe here comes from what we have learned as psychoanalytic family consultants, parents, and teachers working together at Allen Creek for a good beginning for children. Other background for our ideas comes from our clinical practices, and the consulting work we have done for nearly 50 years in relation to people of all ages at schools and centers around the world.

As we have followed families’ growth, we have seen that there is a quality that stands out as important in all the arenas of parenting and child development. We call this “emotional muscle.” Everyone needs to develop and exercise their physical muscles for health and well-being through their lives; without exercise, physical muscles will atrophy and many ailments and discomforts ensue. Emotional muscles are needed for happiness and sturdiness in the face of life’s ordinary and extraordinary challenges. It takes work from children, parents, and other adults to develop and maintain emotional muscle.

Here are a few examples to illustrate what we are calling emotional muscle:

At sharing time in the Under Ones class at Allen Creek Preschool, Thea’s mom described the night before, when 6-month-old Thea was sitting in her high chair, a sippy cup in one hand and a spoon in the other. She was trying to get the cup to her mouth, but the spoon was in the way. Her parents watched her efforts as she twisted the cup, tilted her head, twirled the spoon, banged the cup with the spoon and so on. After sev-

eral minutes, Thea managed to grab the cup's second handle with the hand holding the spoon. She brought it to her mouth and sighed and gurgled. Her mom congratulated her dad on being able to let Thea work it out, persisting in trying to solve the problem.

To us, Thea's parents were using emotional muscle in refraining from stepping in prematurely to fix the situation, tolerating their own reactions to seeing her frustration. They could see that Thea was not distressed, that the difficulty was not overwhelming her, and therefore the work was good for her. Baby Thea was learning persistence, trying different solutions, and tolerating frustration. Then she had the intense satisfaction of mastering the challenge.

Toko, 15 months old, loved his Junior Toddler class and the children he saw there regularly with their parents. One day he was busy with the garage at the far end of the room when he saw his friend Janie hesitating at the classroom doorway and clinging to her mother's leg. Toko went to the shelf and picked up the doll Janie usually liked to play with. He walked over to the door and handed it to her. Janie then came happily into the room and hung up her coat.

At this early age, Toko showed empathy—he was already able to see that Janie was having a different feeling from his and that she was worried. He could interrupt and defer his own play to address her need. He differentiated what she needed from what toy he would have wanted for comfort or distraction. His intervention was effective and he registered this with a smile, as he returned to his cars.

It took the first couple of months of Junior Toddler class (children 1 to 2 years old with a parent) for Sally and Amy to work out their possessive battles over the toy baby stroller. So it was clear that the stroller was very precious. One day, a younger child was to join the class. The children had been prepared, but no one was sure how the older ones would react. Sally made a bee-line for the stroller at the beginning of class, piled in several baby dolls and took them for a walk around the classroom. Then she carefully took each one out, put them to bed in the cradle, and pushed the stroller over to Bettina, the new younger girl. Bettina beamed at Sally, and Sally smiled and patted her.

Sally was only just 2 years old, but she was able to think beyond herself, imagine Bettina's situation and feelings, and offer the younger child something precious to herself. The parents and teachers in the room had been able to support Sally's empathy and sense of agency, and Sally built on that support to help another child.

Some of the girls in the Preschool class (3 years old) built a platform to dance on. When Victor wanted to play, they told him "girls only." Victor

thought for a minute and fetched a long wooden block. He climbed on to the “stage,” said “I’ll be the singer” and used the block as a microphone. The girls hesitated, then danced happily while Victor sang.

Victor used appropriate assertion in succeeding despite the girls’ opposition. He was not aggressive; his feeling of wanting to play triggered his creative thinking, so that he could find an imaginative solution to solve the problem of exclusion.

3-year-olds Nellie and Nora were standing by the fish tank in the classroom, each claiming it was her turn to feed the fish. The teacher watched as the feelings began to intensify, but actively waited to see how the girls would work it out. Nora went over to the job chart and said, “Look—it is my turn today, but it’s your turn tomorrow. So today I’ll feed the fish and you can watch me, and tomorrow you’ll feed the fish and I can watch you.” Nellie happily accompanied Nora back to the fish tank and they implemented their plan.

One set of emotional muscles in action here was the teacher’s restraint, just as we saw with baby Thea’s parents. In regard to the children, first they relied on an objective external symbol, the job chart, rather than solely on their own desires. Then they made a plan that involved negotiation, delay, turn-taking, and mutual caretaking. Both girls felt capable and competent, with pleasure in their independent solution.

There were not enough trikes for every one of the 4-year-olds to ride at once, and the children were pushing ahead of each other to get outside for a first turn. The teachers discussed the problem with the children and they all came up with a plan. Before outside time each day, the teachers offered a handful of paper strips for the children to choose from. Half of them said “bike” and the other half said “wait.” One day Ted, whose feelings were often fragile, drew a “wait” slip. He struggled not to cry. The family consultant visiting that day remarked to Ted, “It takes stronger muscles to wait than even to ride the bike.” Ted swelled with pride. The family consultant then wondered out loud if those bikes needed a gas station. Ted set himself up at the side of the bike path; all the bikes stopped to refuel, paid for their gas and proceeded. Ted was happy and busy until his turn came and another child took his place as the gas station attendant. The next time Ted picked a “wait” slip he spontaneously started the gas station game with great pleasure.

There were big demands on Ted to delay his satisfaction and accept a substitute. The teachers had made the judgment that the 4-year-olds were probably capable of this, but they knew it wouldn’t be easy. Different children struggled on different days with their various reactions.

The emotional muscle Ted gained from his experience had many facets. He learned that it could feel good to have an alternative pleasure from the one he had first imagined. This allowed him to leave the negative feeling of disappointment behind, rather than repress it or continue to be ruled by it. He experienced internal pride and pleasure in himself and his achievement, instead of depending on outside approval. His spontaneous revival of the game the next time indicated that he had truly taken the lesson inside himself and grown from it.

At a parent group 5-year-old Polly's mother described taking her in the car to pick up her older brother from school. The mom wanted to hear about the boy's day, but Polly kept whining to have her CD played in the car. After a few fruitless exchanges, Polly's mother said to her, "I think you're strong enough to wait." Polly subsided, then reached her arms out to the side, flexed her muscles, and smiled.

Polly's mother showed emotional muscle when she reached past her own annoyance to share responsibility with Polly and demand of her something she knew Polly was capable of. She called upon her intellect to use something she had learned in discussions with family consultants and other parents at Allen Creek to help Polly feel good about stopping herself, instead of being passively forced by anger or threats. Polly used what her teachers and parents had helped her with many times before when she indeed could activate her "waiting muscles." Mother and child both felt pleasure about their joint effort, which is self-reinforcing.

Jeffrey had avoided group games when he was younger. At 8 years old, however, he initiated baseball games in the playground. When he struck out, the teacher heard him say, "Even A-Rod strikes out more often than he hits."

Jeffrey had accepted that perfection was an unrealistic goal, and he was able to find pleasure in trying and in the playing itself. He bounced back quickly from failure, and he did not give up his real ambitions to be a better baseball player, maybe even a major-leaguer.

As these stories illustrate, emotional muscle means having the capacity to

- Access the full range of feelings
- Tolerate frustration, conflict, tension, and other feelings
- Put feelings into words
- Change emotional states to signals
- Use emotional signals to activate thinking
- Accept substitutions and compromises
- Plan ahead
- Anticipate good outcomes and pleasure

- Reflect on an experience to learn, grow, and move on
- Accept the universality of imperfection
- Realistically assess what's possible
- Take joy in process as well as product
- Let go of negative feelings
- See each other person as a separate individual
- Love more than one person
- Transform relationships
- Integrate the reality of time
- Defer immediate gratification in favor of long-term gains
- Persist
- Be flexible about means or goals
- Generate strategies to deal with stress or setbacks. Learn to bounce back.
- Differentiate assertion from aggression
- Assert oneself
- Stay focused on person or task
- Consider changing oneself instead of controlling others
- Ask for help when needed
- Master challenges from within and without
- Apply values for making judgments and choices
- Care for something or someone beyond oneself

These qualities are not unfamiliar. They encompass many personal characteristics long considered desirable in all cultures throughout history. Whether we describe them as virtues, strengths, will, character, grit, gravitas, and so forth, one common thread is that they all imply effort, resolve, and strength. Often they are described as something people are born either possessing or lacking. Usually they are not expected to appear until later in life. As the above examples show, however, we see that emotional muscle can be fostered from birth on, and we continue to have opportunities to develop and exercise it until the end of life.

Why do we think it's useful to generate a new term, such as "emotional muscle," when there are many writings, research, and knowledge already established about the important qualities listed above? The first reason comes from our sense that parents in many modern societies struggle to find coherent ways to raise their children to become the kind of adults they hope them to be. The second is the ubiquitous research finding that cutting-edge knowledge does not find its way into common awareness and isn't applied in ordinary life to the benefit of families and children. And the third is that the idea of "emotional muscle" makes immediate intuitive sense to adults and children when we talk about it in ordinary settings and to patients in therapy.

In our book on emotional muscle (Novick, K.K. and Novick, J. 2010) we describe practical techniques for parents and teachers in everyday situations of living that help them as grownups raising children and that help children develop optimally. These techniques spring from a long intellectual and scientific tradition of studying how people learn to live their lives, making use of their built-in genetic and physiological endowment and adapting to the family, community, and cultural environment they live in. Here we want to offer a sketch map of that context of knowledge, locating the idea of emotional muscle within the landscape that includes concepts of ego strength, ego control, self-regulation, resilience, and development.

Psychoanalysts, since Freud, have focused on basic inner conflicts and how they are resolved for better or worse by the agencies of the mind. The concept of ego strength developed out of their understanding that conflict resolution and dealing with feelings takes energy and effort. Some have described ego strength as the defining difference between health and pathology, the best predictor of therapeutic outcomes and the goal of psychotherapy (Balint 1942). The concept of emotional muscle grew first for us out of our clinical work, as we grappled with the limitations of insight alone to effect lasting change. Our first published use of the term “emotional muscle” was in a 2001 paper on the two systems of self-regulation where we described it as a criterion for termination (Novick and Novick 2001a). Our current writing on emotional muscle applies what we have learned from clinical work to child-rearing and education.

The end of the twentieth century saw a growing multidisciplinary focus on the scientific study of resilience. Experts in that field describe resilience as “the individual’s capacity for adapting successfully and functioning competently, despite experiencing chronic stress or adversity following exposure to prolonged or severe trauma” (Cicchetti and Rogosch 2007, p. 788). The critical question is what makes a resilient response to trauma possible. Cicchetti refers to “personal strengths,” and “ego resiliency and ego control” as examples of the qualities needed (ibid., p.789). Other experts note that all developmental research over the past 30 years has converged on the conclusion that the “growth of self-regulation is a cornerstone of early childhood development that cuts across all domains of behavior” (Shonkoff and Phillips 2000, p.3).

Over the past 40 years, we have come to think about the process of development in terms of two systems of self-regulation, whether the method found is healthy and constructive, or pathological and self-defeating. Everyone needs to find a way to feel good and safe, to feel



that the world is predictable, that experience is manageable, that obstacles can be overcome, problems can be solved, and conflicts can be resolved. If the method they find is based on competent, effective interactions with the world, in the context of mutually respectful, pleasurable relationships formed through realistic perceptions of the self and others, they will be able to remain open to inner and outer experience and cope creatively with life's challenges. In sum, they will be resilient, show ego strength, be capable of realistic self-regulation. We call that "open-system" self-regulation.

People at any age, faced with being overwhelmed by helplessness, pain, despair, abandonment, violence, or any other terrible circumstance, may turn away from reality, feeling that safety resides in a magical world of omnipotent solutions, in which the individual has a conscious or unconscious belief in real power to control others, to hurt them, to force them to submit to one's desires. Such a learned response can come to feel like the most dependable safeguard, and may even take on an addictive quality, further restricting the person's attempts to try other solutions and pathways to problem solving and conflict resolution (Rathbone 2001). In this situation, resilience is not available and various pathologies are the outcome. We call this "closed-system" self-regulation.

With these ideas in mind we have suggested a model of development that describes two distinct kinds of solutions to conflicts as the person faces the internal and external challenges of each phase in life. Our two-system model of development describes different ways of responding to feelings of helplessness. One system of self-regulation, the "open system," is attuned to inner and outer reality, has access to the full range of feelings, and is characterized by competence, love, and creativity. The other, which we call the "closed system," avoids reality and is characterized by sadomasochistic power dynamics, magical thinking, and stagnation. These ideas are paralleled in various independent formulations by resilience biologists (Cicchetti and Rogosch 1996) and eminent general systems theorists (Mayr 1988; vonBertalanffy 1968). Such an idea appears even early on in Freud's description of his work with the "Rat Man" (Novick and Novick 2009).

From the 1980s to the present there has been an exciting explosion of research into the built-in physical foundations of human behavior. Unfortunately, one early response to such initial breakthrough findings showing genetic and brain underpinnings to behavioral and social problems was, in some quarters, a helpless fatalism. "If it's all in the genes or hardwired in the brain, there's nothing we can do about it" characterized some reactions. This has become a fallback position for

people who cannot commit to healthy diets, or parents who blame a child's makeup for her difficulties, or drug companies who are eager to claim more and more aspects of life as neurobiologically determined and therefore amenable to a profitable wonder drug, or government policy-makers eager to cut services to children and families. With persistence and rigorous research design, however, scientists have begun to demonstrate that matters are not so simple.

This is an important point of intersection between the hard science of genes and brain function on the one hand, and knowledge from other fields of experience, relationships, and feelings on the other. The open-system hope for the possibility of growth and change is what underpins the efforts of parents, teachers, therapists, research scientists and all those who work for a better world. Experience over centuries poses the puzzle of resilience and rebound after terrible times. There is clearly more to the story than predetermined outcomes. Change, hope, optimism, joy, pleasure, and choice, even after traumatic experiences, are major defining aspects of open-system functioning and self-regulation.

Very early, Freud talked about the "pleasure principle" as the basic regulator and organizer of life (1915). He later described pleasure in mastery, which White (1959) characterized as a basic need for competence and effectance. But pleasure has come to be an undervalued dimension of all experience and functioning. Panksepp, one of the most eminent affective neuroscientists, noted, "the amount of evidence for negative stress/fear factors is enormous, but studies on the influence of positive factors . . . remain modest" (2001, p. 136). In our two-system model, we have differentiated love and pleasure in the open system from love and pleasure in the closed system. Open-system pleasure is the motive and result of building emotional muscle. When open-system pleasure is not available or is closed off by pathology or circumstance, it is hard to build emotional muscle.

Evidence for the importance of open-system positive emotions appears from many quarters. Panksepp said, "Positive emotional systems appear to operate as attractors that capture cognitive spaces, leading to their broadening, cultivation, and development" (*ibid.*, p. 132). Fredrickson and her colleagues (1998, 2001, 2004) have demonstrated the essential role of "positive emotionality" in resilience (2004, p. 320). In Haglund and others' (2007) list of factors that buffer against adversity and stress, he puts positive emotions first. Martin Seligman, who trained with Aaron Beck, a psychoanalyst who developed cognitive behavior therapy, has created a field of psychology that emphasizes positive experiences and feelings. He subdivided the idea of happiness into components of positive emotion, engagement, and meaning. He and his

colleagues have evolved training programs for enhancing psychological well-being in these three areas. This field also uses concepts such as strength and mastery in relation to pleasure and satisfaction.

Fredrickson (1998, 2001) has developed a “broaden and build” theory of positive emotions and resilience. As early as 1965, Anna Freud emphasized the importance of positive emotions with her distinction between flexible/balanced defenses and rigid defense systems. She further distinguished between progressive forces and regressive tendencies: her colleague M. Laufer elaborated on the importance of “The ability to cope with regression—to permit it—but at the same time to have the *means* [our emphasis] of reestablishing its more mature level of functioning” (1977 [1965], p. 76). Our idea of emotional muscle follows from these earlier ideas and gains support from Seligman’s extensive research findings that demonstrate the effectiveness of “positive psychotherapy” on major adult pathologies, such as depression (2002, 2005).

Support for open-system optimism comes from many quarters, very powerfully from those neuroscientists who are discovering neurological, hormonal, and genetic underpinnings to resilience. It is now recognized that genes and neurobiological factors interact with the environment so that genetic risk or protective factors are expressed in the context of environmental risk or protection. To put this succinctly, the environment turns genes “on” or “off.”

This is true even for IQ, which, for over one hundred years, has been considered to be one of our main inherited characteristics. Recent research overturns this idea. Turkheimer and his associates (2005) found that the impact of growing up impoverished overwhelms children’s in-born genetic capacities. Home life is the critical factor for youngsters. “If you have a chaotic environment, kids’ genetic potential doesn’t have a chance to be expressed,” Turkheimer noted (quoted in the *New York Times*, July 23, 2006). When the experiences of children from different economic family backgrounds are compared, children growing up in poor families have typically heard by the age of 4 a total of 32 million fewer spoken words than those whose parents are professionals (Hart and Risley 1995). Equipping families to offer their children the best chance of realizing their potential, whatever their background, takes on new urgency in light of such findings. Hence our effort to suggest some practical ways for families to build their strengths.

Another arena in which this conclusion is underscored is research on hemispheric EEG asymmetry. It has been found that the left prefrontal cortex of the brain mediates positive emotions, whereas the right prefrontal cortex is associated with the experience and expression of negative feelings and withdrawal (Curtis and Cicchetti 2007). Current

research with non-maltreated and maltreated children demonstrates that resilient children show greater left-hemisphere activity than non-resilient children. It would seem that here is solid scientific evidence of a neurological basis for ego strength or resilience. Why bother doing anything when, as early as infancy and toddlerhood, children of depressed mothers showed reduced left frontal activation? However, these same researchers, as do many other current neuroscientists, emphasize the role of experience in shaping such basic neurological features as prefrontal brain cortex hemispherical asymmetry, measured by EEGs. The prefrontal cortex has a long period of development into adolescence and early adulthood. The asymmetry can be shaped and changed by experience at any point in development.

Walter Mischel (Mischel et al. 1989; Mischel and Ayduk 2004) conducted a classic experiment with 4-year-olds. He left them sitting alone at a table with a marshmallow and a bell. If they rang the bell, he would come back and they could eat the marshmallow; if they waited until he came back on his own, then they could have two marshmallows. Some rang the bell right away; others waited up to 15 minutes. What is important is the long-term follow-up: the children who were able to wait at 4 went on to get higher SAT scores, got into better colleges, and were generally more successful in all adult spheres. The children who could wait had strategies to help themselves. Those who rang the bell most quickly were more likely to become bullies, received worse teacher and parental evaluations ten years later, and were more likely to have drug problems at age 32.

Developmental neuroscientists speak of a wide window of opportunity for social forces to affect the prefrontal region of the brain toward left hemisphere (positive) or right hemisphere (negative) dominance (Romer and Walker 2007). Thus recent research supports the central position of years of clinical work and research which emphasize that the parent-child relationship is the single most important factor in the growth of the child. As summarized in a recent report of the National Scientific Council on the Developing Child, “Stated simply, relationships are the ‘active ingredients’ of the environment’s influence on healthy human development. They incorporate the qualities that best promote competence and well-being—individualized responsiveness, mutual action-and-interaction, and an emotional connection to another human being.” (cited in Luthar and Brown 2004, p. 943).

Given these convergent conclusions from domains of genetics and neuroscience at one end of the spectrum and clinical and socio-cultural research at the other, two significant questions emerge. One is how to convey this knowledge to those who work daily with children—teachers,

daycare providers, therapists, probation officers, pediatricians, judges, police and social agency workers, and so forth, but most especially parents? We hear much about “family values,” but very little is actually done in our country to teach and help parents from all strata of society how to be competent parents, to get the satisfaction of doing the job from a position of strength. Studies have demonstrated a long lag time for research findings to make their way into schools, programs, and homes.

This is where emotional muscle comes in. The analogy is to physical muscle. Both emotional muscle and physical muscle demand work, exercise, practice, endurance, optimism, and persistence. This idea makes immediate intuitive sense to both grownups and children. All parents want to do their best for their children, and parents want to feel strong and capable doing it. Similarly, other adults who care for children seek ideas that they can implement in practice, that they know to be effective. Children love the idea of getting strong. This holds equally for boys and girls. We are now seeing young children in the third generation since the passage of Title IX, which gave equal access to sports for girls. It is an assumption and expectation of both mothers and fathers currently that their girls will be strong and active. So we have found no gender differences in either parents or children in the reception of the metaphor of emotional muscle.

The second significant question is about how to translate the accumulated research and clinical developmental knowledge into approaches, techniques, tools, and ways of being with children that are relevant to daily life. Parents and others need something to draw on that bridges from the abstract research findings to the specifics of bedtime, meals, fights between siblings, management of feelings, manners, schoolwork, and so forth, in all the day-to-day situations that repeat over a family’s lifetime. Emotional muscle is a bridge from the abstract concepts necessary for scientific discourse to the practical everyday matters of family life.

How are parents to understand how to help their children develop resilience, ego strength, mentalization, frustration tolerance, competence, or self-control? The challenge is increased when we include recent findings by social scientists that the very characteristics, such as persistence, patience, and willpower, that we are seeking to encourage in children are also very difficult for adults to maintain. Most people have a limited supply of energy for willpower; if they are persistent in one task they have less self-control available for the second (Baumeister et al. 2007). Similarly, given the choice, adults are more likely to do nothing, even if doing something would be fairly easy and reap substantial benefit. Most magazine publishers, for instance, are well aware of

this and automatically renew subscriptions, knowing that the majority of people won't take the few minutes to cancel even if they don't read the magazine. Television companies focus so much attention on which shows follow each other because they realize that most people won't make the effort to change the channel (Thaler and Sunstein 2008).

The idea of emotional muscle can counter this natural tendency, even in adults, to be lazy, unfocused, and uncontrolled. Adults can overcome this by conscious practice. We suggest that building and maintaining emotional muscle is even more effective when it is begun in childhood. Again using the analogy with physical muscle, the concept of emotional muscle allows us to break down a task into segments. This is essential for teaching at any level, but especially for children. Parents often leap to a goal, like reading or toilet mastery, without breaking down the ultimate accomplishment into steps that can be successfully and pleurably mastered by a child and praised by parents and teachers. We need what we call a "break-down step-wise approach" to competence and emotional muscle to help name and reinforce each step.

In summary, then, the idea of emotional muscle has several important characteristics:

- a. It is a term that can be immediately understood by parents, teachers and children.
- b. Strength and muscles are positively valued by children. They are very happy to develop, manifest, be praised, and feel good about using particular emotional muscles.
- c. Emotional muscle provides a bridge from abstract scientific concepts to the practical everyday life of families.
- d. Emotional muscle fosters a break-down, step-wise approach to success, competence, and growth.

In our book on emotional muscle we detail the work with ordinary parents, children, and teachers that goes into developing emotional muscle. This work at Allen Creek over the past 16 years, in addition to our long consulting and clinical experience, has convinced us that the traditional virtues are not inborn or automatic, but that these capacities need exercise and practice to be realized. The mounting evidence of long-term plasticity of the brain (Doidge 2007) and the wide window of opportunity for positive change throughout life is confirmed by our own experience.

We have seen that parents can be taught and supported in developing the emotional muscle they need to foster its growth in their children. This can happen throughout early childhood and continues beyond. It has given us an important emotional muscle that we can

call “evidence-based hope,” an essential ingredient for doing therapy with patients of all ages and types. The term “emotional muscle” came to us from clinical work and we then applied it to a school setting. We can now bring it full circle back into the clinical arena and offer an illustration drawn from our book on termination, *Good Goodbyes* (Novick and Novick 2006).

A supervisee brought material from the case of a very intelligent graduate student. A peer group presentation of the case had discouraged the therapist, because the discussion centered on all the ways she was not adequately empathizing with the patient’s early deprivation. This once-weekly treatment had gone on for a number of years; the patient kept bringing yet another instance of trauma and severe deprivation, which made the therapist feel she had to redouble her efforts to be sensitive and understanding. In supervision, I agreed that this young man had been traumatized and deprived as an infant, but then pointed out that, at some point, he had transformed these passive experiences of being victimized into a justification for actively and sadistically victimizing others, including the therapist.

Unless the treatment could move beyond the first understanding of his being the passive victim of traumatic events to his active externalization of this experience on to others, it was clear that this patient would never change. The therapist understood that the maintenance of the passive, victimized position was the closed-system solution the patient had arrived at, and she planned to communicate her understanding that this was a powerful, effective solution to the patient’s experience of helplessness. The cost, however, was very high; the patient would move forward in treatment and in life only as he began to experience the responsibility for finding alternative means to protect himself.

The patient responded aggressively to these comments; he yelled at the therapist, which made her end the session early and then call me in tears. She felt like a failure and a bad mother who had abandoned her child. I took the opportunity to introduce the idea of “emotional muscle,” which includes the capacity to tolerate and master feelings. Optimally, parents support children in dealing with the ordinary frustrations and obstacles of life. Then they develop the emotional muscles to handle ordinary levels of psychic discomfort. The good-enough mother does not, and in fact cannot, remove all obstacles, anticipate all frustrations and conflicts, and protect her child from all uncomfortable feelings. If she tries to do that, she undermines the growth of the child’s emotional strength. Emotional muscle leads to resiliency, the quality that differentiates outcomes to trauma.

The next day the therapist apologized to her patient for ending the session early. She told him that she had done some thinking and felt certain that she had the emotional muscle to withstand his verbal assaults. He was intrigued; he wondered what she meant by “emotional muscle.” He was a man with a great investment in his body, who spent much time in the gym. The therapist said that she knew how he valued his physical strength, but that she had been able to see the previous day that his mind was “flabby” in some ways, that he lacked “emotional muscle” to handle his feelings. He could lift heavy weights at the gym but struggled to have mental strength to master and contain his feelings. She said that she could help him build this other kind of strength, so that his feelings could be a useful signal of emotions to be talked about, explored, and shared.

In subsequent sessions, the patient described a painful, potentially humiliating experience but said that he had stopped himself from “exploding and acting like an asshole.” He felt his anger but decided to bring it to therapy rather than use it as an excuse to destroy everything. The patient was surprised and pleased at this burgeoning strength and he said, “I go to the gym to exercise 6 days a week; why aren’t I coming here more often to build my emotional muscles?” Soon, he and his therapist changed to 5 times per week analysis.

This is an example of what philosophers call “dynamic nominalism” (Hacking 2002), where giving a name to something generates meaning and impact. Psychoanalysts have talked about the power of verbalization in development and treatment (Katan 1961; Novick 1986). Here just using the idea of emotional muscle affected both patient and therapist.

Another man, who struggled to maintain the idea that he was special, an exception to the rules that applied to others, had been in analysis for many years. His hostile omnipotent defense against feeling helpless had been worked on and interpreted in relation to multiple early traumas. This work freed him sufficiently to use his brilliance and talents. However, in small and large ways, he clung to his omnipotent view of himself, resulting in continuing interference in his daily life. He was unable to go to the supermarket, except in the middle of the night, as he could not tolerate waiting at the checkout. He would become enraged if there were a line, leave the store without buying his groceries, and have no food in the house. His anxiety over anything that would confirm that he was just like everyone else was unbearable to him, and he had organized his life to avoid feeling it.

I began to focus on how living out his omnipotent view of himself denied him the opportunity to build up the emotional muscles of bearing



ordinary tension, waiting his turn, and finding ways of helping himself live through such moments. He was intrigued by the term, so much so that he spontaneously made a plan to approach this problem in the same way he had trained to run a marathon. He thought of ways to break it down into manageable steps, pace himself, and build strength gradually. His report of his progress became a feature of his sessions, as he talked about being able to buy supplies for a dinner party without getting anxious or enraged. His pleasure in these accomplishments was self-reinforcing and provided an important alternative to his old, omnipotent defenses, which of course would always be available to him. As he worked on his emotional muscles, the difficulties he encountered generated new insights about the roots of his omnipotence, but it was clear that the efforts to practice were essential to putting the insights into action and achieving genuine change.

It is well known that referrals for psychoanalysis have become very difficult to come by. This cuts across all ages, all areas of the country, all levels of fees, and all levels of experience. The reasons have been discussed at length and various solutions have been suggested but still the fact remains that referrals are down. We have found that an initial focus on "emotional muscle" assessment and then on building emotional muscle makes immediate sense to clients of all ages, but especially to parents of children in need of help. We, and others, have focused on working with parents and building an alliance with parents before assessing the child and making a recommendation (Furman 1957, 1969, 1995; Novick and Novick 2001b, 2005; Rosenbaum 1994). But there remains a lack of clarity about the nature of this work, the legitimacy of parent work as an analytic endeavor, and the theoretical model to support and elucidate the range of techniques needed for successful parent work. We find that many child analysts still rush too quickly to make a recommendation for analysis and then, sooner or later, lose the case.

The approach of working with parents to help them start the process of building emotional muscle with their children has proven very effective. Parents easily understand the child's ability to wait, to put feelings into words, to use anger as a signal rather than a weapon, to anticipate and plan ahead or to think about consequences before action, and so forth. Most parents feel more competent and more supported by the therapist if they engage in the shared task of building emotional muscle. Usually some change takes place fairly quickly and this helps establish a positive therapeutic alliance with parents. At times work with parents alone will be sufficient, but the alliance will remain should the child be unable to deal with subsequent developmental challenges in an adaptive manner.

Lily was a bright, active 4-year-old referred for assessment by her preschool teacher because of wild, uncontrollable behavior and inability to play with others without attacking and threatening them. Other parents had complained and the school had told Lily's parents that they might not be able to keep her in school. The psychoanalytic consultant to the school referred the desperate and devastated parents to a child candidate as a possible training case. The child candidate was eager for a case and wanted to start immediately. She had talked to the parents on the phone and they were eager to find an immediate solution.

At the same time, even on the phone, they were finding excuses for their child's behavior and blaming the other parents and teachers for treating Lily unfairly. The candidate realized that she was in a bind and was being set up for failure. Her solution was to use the idea of "emotional muscle" to engage the parents in an initial assessment. She offered them concrete steps to help themselves and the child. It gave her a plan and a way to approach these parents. She said, "Emotional muscle is user friendly, concrete and alleviates some of the initial helplessness and panic parents feel. It has the positive virtues of CBT (Cognitive Behavior Therapy), but unlike CBT it is individualized and allows for further and deeper work if necessary." With a laugh she said, "It's CBT for analysts."

The analyst responded to Lily's parents' concern and urgency by setting up three parent meetings each week for two weeks. She obtained a report from Lily's teacher and a description from the parents. She talked to them about "emotional muscle" and then, together with the parents, assessed the child's weaknesses and strengths.

In the first meeting it emerged clearly that Lily never verbalized her feelings. The teacher confirmed this and the parents talked about their goal of "getting it out of her." The analyst suggested that this approach might turn this important goal into a demand, which might then lead to a fight. She suggested they could model the muscle needed to put feelings into words. The father then said that, in his family of origin, no one ever talked about feelings, whereas his wife was always gushing. This was a difference between them. Using the idea of emotional muscle as the entrée, the analyst could immediately identify something to do with and for their child, that is, model putting feelings into words. This led to understanding more about the parents' own childhood experiences which interfered with their use of this muscle.

The change was rapid and dramatic. By the end of the first week the parents were talking to Lily about their own sadness at the end of school term and how they would miss the teachers and other families. Lily, for the first time, talked about her feelings, including anger. The

teachers remarked at how changed Lily was at school and that other children now wanted to play with her. At the end of these intensive two weeks of parent work, the parents expressed their enormous gratitude to the analyst. Looking ahead, they wondered how Lily would deal with the next challenges of leaving preschool and starting a new school in the fall.

We may wonder about the rapidity of this shift in what seems like entrenched parental stances. However, we have found that this describes a typical sequence, which underscores the value of starting with this stepwise approach that includes the idea of emotional muscle. We think that there are several reasons for the experience of rapid, positive change. The metaphor itself removes the issue initially from the realm of pathology and places it in the realm of growth, learning, and practice. It offers parents something active they can do for their child, without guilt and with the gratification of competence.

Six months later, the parents called the analyst, saying that Lily had settled in very well to her new school, had friends, and liked to learn. However, she seemed very sad at home, could talk about her feelings, but this seemed to be having no effect on her unremitting sadness. The sadness seemed to come from something deep inside her. At this point the analyst was able to use the strong alliance from the earlier parent work on building emotional muscle with the parents to do an evaluation of the child, continue the work with the parents, and then arrive together at the recommendation for analysis.

Work on emotional muscle with children and parents is a first step, sometimes all that is needed, but often a critical introduction to further steps. In the course of Lily's analysis, which included regular, concurrent parent work (Novick and Novick 2005), the analyst could engage with the parents' own longstanding conflicts with each other and their own parents over experiencing and expressing feelings.

We recognize that "emotional muscle" is a metaphor and has the power and limitations of all metaphors. Lakoff and Johnson (1981) present an important discussion on this larger topic, but, for us, all new metaphors should be part of what we have called "pragmatic psychoanalysis" (Novick and Novick 2005, p.167) and Renik has called "practical psychoanalysis" (2006). Does the metaphor help the patient enter, work at, and finish analysis well? Does the metaphor of "emotional muscle" help in our translation of psychoanalytic developmental concepts to parents, teachers, and all who work with children? Does using the term "emotional muscle" lead to growth in the professionals and in the target populations they serve? It is inevitable that some will quarrel with our choice of metaphor. The reader's engagement with our pragmatic

stance of choosing clear, vivid, evocative, accessible language, as Freud did in the original German (Novick and Novick 2002; Bettelheim 1983), is more important than the particular trope. The concept of emotional muscle is part of our step-wise approach to assessment, treatment, and applications of psychoanalysis.

A mother from Allen Creek Preschool captured the meaning of emotional muscle to her and her family when she wrote a comment in the anonymous end-of-year parent survey:

I think of the many Wednesday evenings when I felt understood in my struggles as a parent. The things I learned in these Wednesday evenings I brought home to my children. I felt resourceful and compassionate towards them (and towards myself). I also love the community that has developed in my daughter's classroom. She is learning the rules under which communities thrive and learning the joy of being a part of a community. Supported by her teacher and classmates, she is growing emotional muscle. Her joy, mastery, confidence, and self esteem shine from her face. Unfortunately, many schools do not provide families with opportunities to grow emotional muscle. Children can easily grow up without developing their emotional muscles which can result in lives led in sadness and anger and a kind of emotional isolation. Kids who grow these emotional muscles, besides having a more satisfying family life and being better parents, are better learners and grow up to be better citizens.

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