# WINNERS BEYOND POST-TRAUMATIC STRESS SURVIVAL

# You Are a Winner

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The below text is based on the book by S. Masgutova & P. Curlee – You are A Winner, Trauma Recovery: A New Choice Through Natural Developmental Movement (2004, 2006). Dr. Masgutova's work in this catastrophe and its resulting analysis became the basis for the MNRI<sup>®</sup> Program and PTSD Protocol. The year 1989 can be considered as the birthdate of the MNRI<sup>®</sup> method and system. Here is presented Dr. S. Masgutova's early experience working with children.



Svetlana Masgutova



# Madness and Despair

 he moment I walked into the first room at the children's ward and saw the depth of despair before me, I realized that everything I had ever learned was now being turned upside down.

Pamela Curlee

Madness. That is all there was. I was surrounded by madness, by a situation bigger and more drastic than anything I had ever seen or imagined.

How could I reach these tormented boys and girls? No one should have to endure such suffering. The children desperately needed my help, and I certainly had knowledge, yet I could not think of anything that could reach them in their present state.

Despite all my years of training, teaching, and experience, I had no guidance for a situation such as this. How could this be? I frantically scanned my memory banks, reviewing my logical and systematic training, and found nothing that would help these children. But then, this situation wasn't logical, so why should I expect to find a logical solution? I needed to do something new and different – something I'd never done before. What was it? Where was it? All I wanted to do was reach out with compassion and assist the children in finding ways to be released from their bonds of suffering and pain.

I remember thinking to myself: Sh-h-h-h! Be quiet, mind. Just listen. I will learn what to do. The children will help teach me. We must teach one another how to move through and beyond this catastrophe. I will teach them, they will teach me, and together we'll find a way for them to move beyond survival.

So come, children, join me now and help me share this tale, so that others may learn what you have to teach us. Come, children, and help me find the words to let others know how to face a tragedy, how to inspect the shattered pieces of a life and find the hero who was always there.

You, my children, are *winners*. We must tell others how to discover this truth that lies within them, as well.

There are natural, simple, proven methods that make all the difference for survival and eventually for the growth and development of who we can become. The secret lies within us, and it involves awakening our natural intelligence. The time has come to tell our story.

# The Children on the Train

Many children were invited on a journey on a train because they had excelled in school and had won a vacation as an award for outstanding creativity, talent, and success in their studies. They had put in hours of schoolwork that had finally paid off and were filled with excitement and enthusiasm for this trip to their favorite retreat. With all the necessary preparations made, many had boarded at the train station in Novosibirsk. Their anticipation had built as they eagerly awaited the arrival of the train that would carry them from the forests of Siberia to the holiday camp at Artek on the Crimea, where they would be able to enjoy the warm sun on the shores of the Black Sea.

The train had finally arrived, and the children eagerly boarded, some waving to family members who were seeing them off, others boarded with parents, grandparents, and siblings who had elected to join in this journey of celebration. The train, consisting of twenty cars, also carried other families heading to the city of Adler near Sochi on coast of the Black Sea.

Returning from the Black Sea was another train. Its seventeen cars were filled with families returning from their vacations. These travelers had enjoyed their restful times, and were sharing memories of days at the beach: the food, the sun, the play, and the friendships made. The passengers talked and shared stories as the train gently swayed along the tracks in rhythmic movement, en-route to taking everyone back home.

One train was running behind schedule. Because it had left the station late, the two trains were destined to pass one another as they traveled through the forest 750 miles southeast of Moscow. Both trains traveled swiftly toward a picturesque valley near the town of Asha, nestled in the Ural Mountains of the Bashkir region of Russia. Most of the passengers on both trains had settled in for the night, feeling relaxed and content, and sleeping as best one can on a train.

A Soviet army officer was standing at the window of one train when he noticed an acrid smell. He later reported, "I sensed that something must be wrong, but before I could do anything, there was a glow and then a thunderous explosion."

It would be days before the actual cause of the catastrophe became known.

### June 4, 1989

Disasters are always unexpected. I initially heard reports of a railway catastrophe while getting ready to go to work on the morning of June 4, 1989. President Mikhail Gorbachev announced the news of a monumental train accident involving several hundred people. Details were very limited, but he was deeply concerned by the number of lives impacted by such a tragedy. The calamity occurred around 1:10 am., local Bashkir time. President Gorbachev soon followed his announcement with the additional news that the government had suspended plans to have an inauguration of the new Soviet government and legislature that day. The official celebration of the new National Congress of the People's Deputies would be indefinitely postponed. Gorbachev explained that the citizens of the nation must now stop everything to mourn and honor the hundreds of dead and dying people involved in this terrible event.

The entire Soviet press reported the disaster. The political protestors bowed their heads in sorrowful disbelief. As further details came in, the government reported the truth immediately and in an honest way.

It was touching to see such authentic human responses from government leaders. All the people of Russia were feeling a deep grief and sorrow that only tears could speak. There was a feeling of total and unconditional love. Also, a great deal of love and sympathy immediately started pouring in to the Russian people from around the world.

Upon hearing the news of this terrible accident, I knew I must go to the site immediately. Many people would be in need of support for the mind and emotions as well as the body.

Psychology was my deep passion, and my experience as Dean of the Department of Applied Psychology at the University had given me a firm foundation in working with emotions and the mind. As reports started circulating that hundreds of children involved in the accident were being transported to a central location in the nearby city of Ufa, capital of the Bashkir Republic, I called my university and informed them that I would

leave the next day to go to Ufa and volunteer my assistance.

The news would have spread quickly throughout the city. There would be students from the university, many of whom had been in my classes and lectures, who would be able to come to the hospital to help.

Throughout the day, I made personal and professional preparations in order to leave the next morning on the first available flight. Along with the rest of the world, I listened to the news, wanting to learn what had caused such a horrible accident.

As it turned out, June 4 was a monumentally tragic day. News agencies were bombarded with stories of crisis as numerous catastrophic events happened simultaneously, creating worldwide chaos and grief.

In Russia, the announcements about the train tragedy alternated with news of the conflicts in the Uzbek Republic, where thousands of soldiers were sent to the area to uphold curfews imposed in the numerous cities where violence and rioting were causing increased deaths and hardships.

Announcements of the train disaster also continued, stating that hundreds of passengers had perished in the fires and that it would go Train wreck at Ufa. on record as one of the world's most tragic rail accidents.



The information was interspersed with stories from other countries. News footage from Tehran showed scenes of millions of people who had assembled on June 4 in 90-degree heat to bewail the death of their national leader, the Ayatollah. While these multitudes gathered to pay tribute, eight of the mourners were crushed to death and hundreds of others were injured.

A brief announcement told about dangerous heavy rains falling in Kegalle, Sri Lanka. Wind and storm clouds had dropped more than eight inches of rain in a record period of time. Because of the inability of the land to absorb the moisture, the outcome of this June 4 storm was a raging flood and mud-slide that killed two hundred and fifty people, injuring over one thousand others, and leaving one hundred thousand people homeless.

Continuous pictures and reportage depicting the horrible condition of the train passengers flooded the airways as well as the hearts and minds of the people of Russia. Rumors began to emerge about the possible cause of such a tragedy as authorities continued their search.

The news was again temporarily interrupted to show coverage of military tanks shooting at college students in Beijing's Tiananmen Square. Students had been assembling in this square for two weeks to stage a protest for change. They had been expressing, through song, speeches, and dance, a new vision for the future. Rallying around a collective new thought of political expression, they had camped out together to give voice to their ideas. The military had been outside the Square for the entire two weeks, performing drills and exercises on a daily basis. It was later reported in the Denver Post that "their throaty cadence thundered off the walls of the Great Hall of the People at Mao Tse-tung's mausoleum as they jogged in formation."

At about the same time as the train accident, and also without warning, the military moved in on the collected students in Tiananmen Square. Infantrymen and armored trucks scythed a bloody swathe through hundreds of young men and women. As their voices were brought to silence, the lives of mothers, fathers, sisters, brothers, friends, teachers, and acquaintances were forever changed. The impact of all this simultaneous tragedy was being deeply felt in my country. Had the whole world gone mad?

Finally more news of the trains was broadcast. The cause of the accident was now clear. I will always remember the touching scene on television of Nikolai Ryshkov, chairman of the USSR Soviet Ministry, standing helplessly at the accident site and shedding tears of true compassion. The image of this strong man empathetically weeping served as inspiration to me for weeks.

As the two trains had entered opposite ends of a ravine on their separate tracks, wheel friction had created a spark that ignited liquefied natural gas that had been leaking from thirty-inch pipes nearby. The pipeline carrying liquefied petroleum gas from oil fields in Nizhnevartovsk to refineries in Ufa had ruptured. The leaking fuel contained a mixture of propane, butane, and benzene that partially evaporated, creating a highly combustible formula as it mixed with air.

Rather than investigate a drop in pressure, the operators had turned up the pumps, thus adding to a vast, growing pool of heavy methane vapor that had filled the ravine for three hours prior to the approach of the two trains. The resulting explosion of liquefied gas demolished part of the trans-Siberian railway and killed hundreds of passengers and railroad employees. Many rail cars were crushed and blackened. A shock wave equal to ten thousand tons of TNT threw eleven cars into the air, and twenty-six other cars were burned within ten minutes – seven of them incinerated beyond recognition by the blast of heat that rose to between 1500° and 1800° Fahrenheit. The exploding cloud of gas rose more than 1,600 cubic yards above the earth.

President Gorbachev flew to witness this 'major catastrophe.' More than 250 acres of trees within a threemile radius were charred to the ground. Windows were shattered in homes and villages up to seven miles away. Approximately 780 of the 1,284 passengers on the two trains died. Many perished immediately, and others eventually died in hospitals. A total of 383 children were known to be on the trains; however, since tickets were not sold to children under the age of eight, the smallest ones were not initially included in the official count.

At the explosion site, Officer Andrej Doncov was the first to start rescuing the surviving passengers.

An engineer on one of the trains, Victor Bezverchij, was thrown from his locomotive and had his skin burned and some of his limbs broken in the explosion, yet he crawled several kilometers to the nearest village to seek help for the passengers. He reported that, before the explosion, even at his train's high speed, he could smell gas hovering like fog at the level of the train windows.

The driver of the second train, Sergej Stoliarov, along with a co-worker, Marat Ganeev, managed to save more than three hundred people by organizing their immediate rescue from the burning train. A nearby villager later wrote, "The air itself caught on fire, and the people of the village breathed the flames while they looked at the fire. Many villagers lost their eyesight. Others died from burns in their breathing passages. If we were two kilometers away from the epicenter and we were literally deafened by the explosion, then what did the unfortunate train passengers endure?"

One boy lying on a stretcher in an ambulance at the Chelyabinsk airport was so severely injured that a news correspondent simply told the viewers, "He's living."

# Joining the Team in Ufa

The next day, June 5, I noticed a picture on the news of a young Chinese man standing alone in front of a long row of tanks. He appeared to be demanding that there be a stop to the madness of destruction and chaos. On this day, I was on my way to Ufa to help the children of this disaster face their pain and loss. We too would have to call a halt to the continuing destruction set into motion by our national tragedy.

I knew I had to go. I had to do what I could to help them. It was terrible to hear all the stories on television and the radio. Someone had to go help the victims stop their internal chaos. My heart spontaneously reached out to these children, and I felt sure that my knowledge of psychology (the subject I was teaching in Moscow) would be beneficial.

During the entire flight from Moscow, I reviewed strategies and considered various plans for dealing with this crisis situation. Besides teaching psychology, I had previously organized, trained, and assisted with the psychological recovery teams for Chernobyl and the postwar area of Baku. My ideas were based on my training in psychology and on those prior experiences in dealing with catastrophes.

I found myself thinking over and over again about the various ways to organize people, teams, methods, and procedures to deal with this new challenge. Fluent in the concepts and methods of Carl Rogers, Carl Jung, gestalt therapy, psychoanalysis, and art therapy, to name only a few, I assumed that these psychological tools would be all I would need.

I was willing to face the catastrophe head on, confident that my past experience and knowledge would help me do what was needed. Most importantly, I was coming with a pure intention to just be present for these children as they began their journey back to mental health.

I had also packed up my five-year-old son, Denis. He would stay in Ufa with my parents, who were coming there to give help in this way. None of us realized that this was only the beginning of nearly four months of

sixteen-hour days.

Ufa, the capital of Bashkortostan, is an industrial city of almost a million people, built near the western Ural Mountains. It was founded in the 16th century by Ivan the Terrible, as a fort from which to fight off nomads. In the 1940s it became active with industries such as oil refining and the manufacture of petrochemicals, processed foods, synthetic rubber, and electrical and mining equipment.

In the early 1980s I had lived in Ufa for several years, and had found it to be a city of excellent universities, offering training in medicine, aviation, mining, and general education. It was here that I had begun my training in pre-medicine, psychology, and foreign languages.

On the day I arrived in Ufa the airport was swarming with people. All flights were being reserved for volunteers coming into the area, while pleasure and business flights had been cancelled. It was a frightening, surreal scene. The sky was filled with helicopters that were to hover like flies for three days solid.

Because of the endless movement of trucks, cars, and helicopters transporting the patients and medical personnel, some of the dazed people who had survived the train accident thought an atomic war had begun. The frenzied presence of air traffic only reinforced this perception.

The majority of the children in the disaster had been brought to a central children's ward for focused care. Those in charge had assigned the children four floors of the building. I came in, explaining that I had a Ph.D. in psychology, and shared my experiences of helping people in psychological trauma. I offered my assistance freely and emphatically. The organizers were extremely happy to see me because they didn't know how to get so many children and parents out of the state of shock.

The organizers immediately assigned me the task of arranging psychological assistance for the children and their parents. Initially our team consisted of twelve psychologists, but every once in a while I would arrive in the morning to discover that a colleague had returned home. The number of professionals on staff continued to diminish, and by the end of our time with the children only three psychologists had been able to withstand the emotional rigor of working in such an environment.

# The Thousands Who Came to Help

Help poured in from everywhere. Statistics later documented the scope of the actions of thousands of people who shared their compassion and love in the aftermath of the railway disaster.

Within the first hours following the tragedy:

• All 938 of the initial survivors of the train wreck were evacuated to nearby hospitals, despite the challenges of reaching them in the ravine where the accident had occurred.

• About 800 people from the Ministry of Internal Affairs came to help, along with 500 soldiers. Also, 3,827 people and 545 vehicles arrived from the Civil Defense Service.

• Hundreds of local citizens donated blood, time, and anything else they could give that would help. Within only the first few hours, 425 liters of blood had been donated.

• Britain's Prime Minister, Margaret Thatcher, sent special waterbeds to support the healing of skin transplants for the burn victims.

• Three dozen restaurants supplied food for the workers. In addition, 4,903 individuals and 269 trucks brought in more food.

• For transportation, 550 vehicles and 1,645 buses were brought in.

• A thousand railroad tracks were brought in for the reconstruction, as repair work began on the 350 meters of railway that had been destroyed.

• Repair work began on the 3,000 meters of electric lines and 1,700 meters of telephone and other communication lines that had been destroyed.

The rescue work that began so immediately was highly organized, calling initially on the skills of fire fighters, military people, and medical personnel. Teams came from all over Russia, and support medical personnel came in from the United States, England, Ireland, Australia, Germany, and Israel.

At the site of the accident, a team of 100 doctors and medical personnel set up tent hospitals in order to provide immediate critical care. Thanks to this service, hundreds of people were later stabilized enough to be moved to nearby hospitals. Among them were 196 children. Depending on the severity of their burns, some patients were sent to Moscow, St. Petersburg, Ufa, and other cities.

Doctors, medical students, medical personnel, and psychologists, as well as countless caring townspeople, worked day and night with the children and adults to support their survival, while the transportation of food and medicine continued around the clock.

The true number of volunteers was beyond calculation. In the first two days, 1,600 people from the army and nearly that many civilians came to offer assistance. Fifteen helicopters from the city of Ufa made 276 flights, airlifting 938 victims and transporting 419 doctors to the site of the accident and to hospitals. Overall, well over 7,000 people came to offer their help.

Free telephone service was set up to handle more than 7,000 calls between cities, and 700 telegrams were sent out. Hundreds of relatives of the people on the trains poured into the area to seek their loved ones. For many of these bereaved family members there was no available information, because the remains of 220 of the passengers were so completely incinerated that they could never be found.

# An Unprecedented Situation

Nothing could have prepared me for what I saw when I stepped into the children's ward. As I have described, when I first walked down the corridor, I saw hell. It was like walking into Dante's Inferno. Everyone seemed filled with madness. Children ranging from two to nineteen years of age were screaming, crying, shouting in hysteria, or running about frantically because of their pain and difficulty in breathing. Some were just terribly silent as they sat in deep shock. Several children had no limbs, no ears, no fingers, no nose or lips. Many had damaged respiratory systems from the intense heat. All of the children had endured the physical trauma of massive broken bones and burns that covered 40 to 85 percent of their bodies.

The children needed immediate emergency medical assistance as well as psychological assistance. In order to survive, most of these victims had to recover from shock and coma. Due to the extent of their trauma, many of them gave up. During those first few days, one out of every six children died in our arms.

When I first arrived, three of the hospital walls were covered with the names of those who had perished, and each day the list of names grew. Whenever I walked past these walls, my eyes would flood with tears. By the fourth or fifth day, the walls were rapidly being covered with information about children who were in critical states or dying. Passing this area of the hospital became a walk of despair, and I hated the fact that the walls carried only information of death and near-death.

I had no idea how to work with these children who had no perspective on how to survive. I had been determined to come and help others, yet as I walked through the hospital I realized that everything I had learned was now being turned upside-down. My training had not provided me with any tools to help so many children stuck in the depths of physical and emotional trauma. My prior knowledge was based on cognitive skills, yet these children were unable to access the linguistic level of the brain. They were stuck in the brain stem's flight/ freeze response.

I felt stunned by my own lack of tools to help me reach into the inner world of these children. When I saw so many children in coma, in shock, or exhibiting symptoms of deep phobia, I began to feel helpless. I was astonished to realize that none of the methods I had learned in my prior psychological and paramedical training could be of assistance in bringing these children to the beginning stages of recovery.

Even though I had extensive academic training and professional experience, my knowledge was primarily for people who had already recovered from the shock stage of Post-Traumatic Stress. My professional approaches relied on words, and here before me were a multitude of children who could not even speak. How could I ever reach this many children? In desperation, I decided to follow my own instincts. I made a decision to use what serves for survival – reflex response regulation and techniques that work with unconscious parts of the brain. Both areas of knowledge – of a reflex and its impact on survival and A. Uznadze's work were familiar to me, as I had used them in my MA paper at the university, "Unconditioned Reflexes, Unconscious Processes and Human Attitude." I also had a little orange book called *Brain Gym®: Simple Activities for Whole-Brain Learning*, by Dr. Paul E. Dennison and Gail E. Dennison, presenting a program on enhancement of brain functions and learning through motor activity.

I became acquainted with Brain Gym<sup>®</sup> in 1988 through Prof. Irina Dubrovina. Dr. Irina, scientific director of the Psychological Research Institute of the Russian Academy of Education in Moscow, had invited the neurobiologist Dr. Carla Hannaford to give a presentation on the successful use of Brain Gym<sup>®</sup>. Following her dynamic

scientific presentation in Moscow, Dr. Hannaford had thoughtfully left a handful of Brain Gym<sup>®</sup> books as reference for her Russian colleagues.

Dr. Hannaford's research had indeed indicated remarkable results through the use of the Dennisons' movement activities, but it just didn't seem logical that something so simple would have that profound an impact. Due to our lack of understanding of the effectiveness and power of simplicity, most of the books had sat around the institute relatively untouched.

Before I left Moscow to go to the hospital in Ufa, Dr. Natalia Tolstych, director of my psychological research program, suggested that I take along the little orange book, since Dr. Hannaford had reported such remarkable success with the material it contained. I just threw it into my suitcase at the last minute. Upon my eventual return with new respect for the book, Dr. Tolstych fully supported my idea of undertaking scientific research on the use of the Brain Gym<sup>®</sup> program.

In order to find some way to make a connection with the children in Ufa, I just briefly looked at the pictures in this Brain Gym<sup>®</sup> book. Because these children's injuries and Post-Traumatic stress were severe, I knew that it would be extremely difficult for them to release the patterns of their unbearable stress and emotional pain and corresponding physiological patterns in order to move into the present moment. I decided to begin with three different exercises: Lazy 8s, the Cross Crawl, and Hook-ups.

When I reached the hospital, I approached a child who had been standing and yelling the same sentence for hours, day after day. He cried repeatedly, "We were riding with my grandparents and an explosion happened and my grandmother had fire in her hair."

I looked into the child's frantic eyes, took his hand, and started tracing Lazy 8s. As I did this, with his hand in mine, I repeated his phrases to acknowledge that I had heard his agonized story.

"You were riding with your grandparents and an explosion happened," I said with him, continuing to trace Lazy 8s.

The mutual movement of our hands and arms seemed to stir a sense of surprise and curiosity within the boy. He became distracted from his repetition of hysterical thoughts. I began saying parts of his sentence with him and then broke away from the repeated phrase by adding in other thoughts.

"Yes," I would say, continuing the Lazy 8s, "you were riding with your grandfather and grandmother, and now, look, you are here in this room with me."

He eventually stopped speaking, looked at me, and said, "Yes, now I am here." A nurse standing nearby gave me an understandably grateful look, for she had been hearing the same anguished statement over and over again for hours.

As I turned to see who should receive my attention next, some of the children were running around the ward screaming, "Fire! Fire!" One twelve-year-old boy was lying down, staring off into space, and whispering, "I must go. If I don't, I won't be in time." How I wanted to find a doorway into his mind so I could let him know he was now safe!

I spoke with the children one at a time. With each of them I incorporated the Lazy 8s movement, letting my words honor who they were and the fact that they had experienced the fire. I used movement and words simultaneously, to invite them to step into a new awareness of being present in a reality that was now safe. Time and again I saw how movement was proving to be the means for allowing them to take a step into the present moment, for letting them discover for themselves that they were no longer in danger.

As the children watched or imitated the Brain Gym<sup>®</sup> movements (www.braingym.org), I continued to explain that I had come to support them and to let them know that they were now in a different time and place that was safe. Even though they were correct about having been in danger in the past, they began to feel that it was safe 'here' because 'here' rested in the present moment of 'now.'

I was always honest with the children. Often people think that if we can forget about a childhood trauma we will 'get over it' as an adult. I do not agree. I learned that it was crucial to accept the children's perception of reality from the past while adding the gift of natural movement. This process invited them to move themselves into the new reality of the present moment. And I found that the Brain Gym<sup>®</sup> movements I was trying out with them allowed the children to experience the past in their own unique way.

I implemented this process with a whole ward of children. I saw that, if I used Lazy 8s with the children, they stopped repeating their mournful statements. The first day, I only used Lazy 8s as I listened, repeating their

words and then changing the last half of the sentence, thus inviting the children to shift their focus from their emotional afflictions and bring themselves into the present moment. I would ask questions, such as:

- "What is your favorite color?"
- "I am here to offer help to you, do you understand that?"
- "What is your favorite food?"
- "You are safe now, do you know that?"
- "Do you like to draw?"
- "What did you eat for breakfast?"

Using Lazy 8s seemed to draw the children safely out of being stuck in the survival and protection functions of the brain stem. They were activating and moving into the higher areas of the brain, areas that allowed them to be logical and to see the present reality of being in another time and space.

The next day I introduced the Cross Crawl to a few boys, but only one could copy the movement. Many of the children were unable to move at all due to their burns, so I would demonstrate the activity and just invite them to imagine or pretend they were doing it with me.

I was reminded of the work of the Russian psychologists and researchers V. V. Lebedinsky and S. Y. Rubinstein in the area of child development, and of the discoveries of these two regarding the use of ideomotoric movement to create changes in a person's experience. These respected Russian researchers originally coined the word 'ideomotoric,' referring to the human ability to create microscopic motor-planning skills, activated in the center of the interbrain (basal ganglia), by watching a motion several times. This creates a mental rehearsal that eventually leads to actual movement. This imitation of movement is based on visualization and imagination and is the same sequence that a child carries out in watching and learning the processes of walking and talking. With time, the mental rehearsal becomes reality. Thus, the initial problem that the children's burns prohibited them from physically participating in the movements was overcome by their mentally experiencing the benefits.

Dr. Nikolaj V. Jermoluk, chief physician at the Ufa clinic, liked the results produced by use of the Brain Gym<sup>®</sup> movements and reflex 'rerouting' techniques because the children were returning to current reality and releasing their fixation on the accident. Momentary relief would come even to children who were still crying and in shock, even if they were able only to watch or imagine these simple movements and techniques. In addition to working with the children at the hospital, I was soon called to the emergency ward to assist children and staff members there, so that everyone could learn and use these movements. For many of the children, the Brain Gym<sup>®</sup> movements, along with reflex and tactile integration exercises and words of encouragement, literally made the difference between life and death.

The children were initially stuck in the brain stem response of protection. Their minds had reacted to the horrors of the accident by freezing in shock or frantically running away from any further perceived danger. I understood that the memory and the shock were so intense that the children had become deeply anchored in a state of hypervigilance and overprotection. Yet everyone now noticed that the use of the Brain Gym<sup>®</sup> movements and tactile and reflex integration techniques were creating a new perspective of safety. As I shared these movements, I spoke clearly to each of the children about being a winner, about finding the inner courage to triumph despite all the odds.

It became clear that, as the children began to watch or do activities we proposed, they began to regulate their time-space perception (between 'tragedy past and safe now'), relax, and manage their pain. This became an important piece of data. Because large amounts of medication had been needed to control the severity of the children's pain, the doctors were concerned about potential side effects. The medical staff members were relieved to see that less medication was necessary when the children were doing reflex activation and Brain Gym<sup>®</sup> movements.

The doctors started referring to the movements as 'Miracle 8s' and 'the Miracle Cross Crawl.' Within the first three weeks, they asked me to teach the Brain Gym<sup>®</sup> activities to all the medical students and nursing staff and to the one or two full-time personnel assigned as an aide for each child. Once I had taught the different Brain Gym<sup>®</sup> movements to the entire staff, I asked them to model these movements each time they approached a child's bed. If the children were able to move, they would follow along doing these developmental movements. If they could not move, we found benefit from just having the child imagine doing the movements

while they watched the model. As for the reflex rerouting techniques (the old name of these exercises) I was doing them myself as they were more complicated and demanded more knowledge

The hospital's medical statistics later showed that, in less than three weeks, the death rate decreased in the wards where the Brain Gym<sup>®</sup> program was implemented. It was further documented that the rate of healing was much faster than in the wards that did not use these movements.

# "Nikolay, You Are a Winner!"

Because shock can be lethal, it was important to release certain children from their immobile state as soon as possible. I found that children who did the Brain Gym<sup>®</sup> movements were releasing their shock state in two to four days, whereas those who did not do the movements remained in a prolonged state of shock. I also saw that when children who were provided 'reflex re-routing' techniques with use of psychotherapy, were releasing the shock stage of the stress much faster, coming to 'here and now' and normal activities of children, drawling and play.

One twelve-year-old boy, whom I shall call Nikolay, was always hiding his face and body. He would lie in bed and stare at a wall for days, frozen in fear. So great was his need for isolation, that no therapists had been able to get a response from him.

I said to Nikolay, "If you don't want to look at me, that's okay. I'm here to support you and to let you know that I care about you. My heart is open to you."

He started to cry, and told me that it would be better if he were dead.

Thanks to the Brain Gym® exercises Lazy 8s and the Cross Crawl, Nikolay eventually responded to com-

munication. These activities seemed to add considerably to his feeling of safety. In time, I was able to coax Nikolay to draw. He drew a picture of a face covered with lines, with one eye, no nose, big ears, and fangs at the mouth. He gave me the drawing and told me that it was a picture of himself. All mirrors had been removed from the hospital so that Nikolay and the other children couldn't see how they looked. Nikolay had indeed endured many lacerations, including several facial disfigurations. He explained that the drawing was a picture of himself and that the fangs were symbols of anger, calling the picture "the devil with one eye."

It turned out, however, that Nikolay's depression was caused not only by his injuries, but also by his parents, who when they came to see him were horrified by the thought of their son going back out to face the world. I quickly began to work with the parents. They had put a healthy child on a train, and now that child was dealing with his own shocking physical condition. No wonder the parents required a lot of psychological help and support, as well.



Nikolay's self portrait.

I used art therapy with Nikolay on a daily basis and also had him do the Double Doodle movement from Brain Gym<sup>®</sup>, which quickly became his favorite. As he worked, I told him that he was young and that his skin would heal. We discussed how it doesn't matter what others think; it only matters what we think of ourselves. "You must know that you are very strong," I said. "You have survived against the odds. As a matter of fact, three times, before today, you have proven to me and the world that you are a *Winner*."

I explained these ideas to Nikolay in words similar to the following:

"First: In order to come and play on Planet Earth, one must 'catch a ride' on a thought. Now, there are actually trillions and trillions of thoughts, and catching the attention of just one takes a lot of wisdom, speed, and courage. Only one very special thought could become the little boy with your name on it. You beat all the odds and connected with that one thought! You were victorious! Only a *Winner* could do such a thing.

Second: A race was held, and millions of 'racers' were running to cross the finish line in the greatest marathon of all time. Only one racer could beat the odds and win and have his name announced. And look who won. You won! You were triumphant. You were conceived.

Third: Then, you once again proved that you are a *Winner* when you bravely faced and victoriously found your way through the process called birth. No matter how many times barriers were presented, you met and

overcame each obstacle and made your entrance into the world. You had won a third time. And now, here you sit, victorious. You have again triumphed over impossible odds, and you are still here. Do you see, you are a *Winner* again and again! You may be afraid that you will not be accepted in this world, but because you're a *Winner*, maybe it means you have come to teach your parents and others how to have understanding and love in the face of all situations. All I know is that you are a *Winner*, and a *Winner* must teach others how to be the same." With this invitation to remember his innate wisdom and courage, and from reflex rerouting, Brain Gym<sup>®</sup> movements, and art-therapy, this young fellow began to move out of his state of shock and depression and find the courage to create a new future. I knew he would be a courageous person and would stand above his traumatic past.

# Touch as a Tool to Inner Peace

The work at this catastrophe allowed us to discover that the role of touch is immense and it can serve as an independent therapy. We discovered several essential key techniques that were highly effective to reduce shock and negative overprotection, thus regulate post-traumatic stress. These particularly were 1) the depth of touch, 2) length and direction of skin stroke, 3) activation of proprioception, and etc. The year 1989 is the year of initiation of the program we now call MNRI® Tactile Integration. Since then this program has been used with great results for thousands of children and adults to release their overprotection and traumatic stress, and to establish their inner peace and strength. Soon, because of the rapid improvements in their ability to move and to be present in the moment, more and more children in the ward started drawing. As their desire to communicate became stronger, they asked for paper, paints, crayons, and anything else that they could use to give them the freedom to express their feelings on paper. The first drawings were full of darkness and pain, reflecting the depths of fear and despair that they were experiencing. The most common picture the children drew was of people running with their hair burning. Within seven to ten days, the pictures changed as the children emerged from their emotional and physical shock.

During the first two weeks, most of the children's drawings had to do with fire, explosions, and train crashes. The Calf Pump movement from Brain Gym<sup>®</sup> was particularly useful because it helped to release the Tendon Guard Reflex, which tightens in response to fear. This movement looks similar to the warm-up exercise that runners use. Some children were lying in bed and couldn't move, so we needed to work with this reflex and created the specific exercise now called Foot Tendon Guard. We use it widely today as one of the basic reflexes to reduce stress and tension. Because this reflex helps to relax the fight-or-flight response, it helped to release feelings of anxiety and fears. Through use of the sensory-motor techniques and movements, they were able to swiftly transition from alarm into purposeful, and eventually playful, movements. Although the stages of shock and stress came step by step, I was astonished by the remarkable speed of the progress.

In the initial stages of his recovery, a young boy whom I shall call Kris drew an abstract picture. He drew the scene of the train accident as if he had viewed it from above the wreckage, showing the center of the explosion and the destruction of the railway.

This particular boy had been driven to the hospital, not flown in a helicopter



Left, an aerial view of the accident site. Right, Kris' abstract drawing of it.

(which would have given him opportunity to see the sight he drew). A pilot later commented that the boy's picture was a remarkable representation of the view from above.

Kris' second drawing seemed to be more representative of his own physical experience. It was of a burning horse running in the fire. Kris said he was feeling sad not only for the people who had been killed and injured but also for "the thousands of animals that died." As this thought was distressing to him, I used tactile and reflex integration, art-therapy techniques, and also Brain Gym® movements to help Kris let go of these images.

Many of the children's drawings reflected the same physical trauma that they had themselves experienced.

For example, one young girl with widespread burns drew animals in dark brown colors with widely opened eyes. She said this was a picture of bears in a fireball. The bears were frightened and wanted to see the daylight instead of the smoke and darkness of the night.

These bears went to the "forest hospital," where other animals tried to help them, but the child initially insisted that they were still afraid of fire.

Naturally the children had a fire phobia. The sight of a worker lighting a cigarette would easily trigger this phobia, and some of the children would run off screaming. Tactile techniques were most sufficient to bring children to inner peace on a non-verbal level. I also had the children sit or stand in the Brain Gym<sup>®</sup> Hook-ups position or just imagine doing this simple activity.

Over time, the children drew the fire in their pictures smaller and smaller. And as they discussed new ways of looking at the fire, the children would move with reflex rerouting and Brain Gym<sup>®</sup> movements. When they felt safe to look at fire in a new way, we would draw pictures showing constructive uses of fire. While doing a Brain Gym<sup>®</sup> movement like Hookups, we imagined sitting around a fire with friends and singing songs about being a winner. At the end we would all do the Cross Crawl.



Bears in the fire.

The children's desire for survival was being drawn out of them through the use of art, Brain Gym<sup>®</sup> movements, psychotherapy, and reflex pattern activation.

Because the explosion had happened at night, other common fears among the children were those of death and darkness. Also, many of the children were afraid of any kind of train or transport.

I offered the children therapy for all of their senses. They had to relearn that it was safe to see, touch, taste, smell, and hear in a normal way again. Because their orientation to the sense of smell was fixated on burning skin, bones, and metal, the slightest scents were often irritating or led to emotional outbursts. The children needed to have their sensory channels experience a re-education to pleasant associations. We explored the contrasts of chocolate, lemon, ice cream, salt, and spices, because nothing was tasty to the children at first.

Our work continued with all of their fears: the fear of fire, of burning people, and of dead people, trains, and treatments. It was obvious that sensory integration work was much more sufficient within reflex rerouting work. I was again astonished at the rapid rate of improvement that occurred daily, and I decided to incorporate Brain Gym<sup>®</sup> movements into every one of my psychotherapy and reflex rerouting sessions. Later I was able to make a correlation between the Brain Gym<sup>®</sup> movements and natural developmental reflexes, and to understand why the effects were so profound.

Being a scientist, I promised myself that I would set up indepth studies of the phenomena resulting from these exercises because I knew of nothing else that could take children so quickly from a past tragedy into present reality. Not only did I eventually get Russian universities and scientists to study why reflex integration and Brain Gym<sup>®</sup> works so well, but I later also had occasion to experience the material first-hand when my personal life was struck by tragedy and loss. Using all of the skills that the children had co-created with me, I later moved beyond the murder of my beloved twenty-year-old sister, Helen, and eventually rediscovered and even deepened my sense of reverence and joy for the gift of life.

### **Two-Handed Rainbows**

As nature has programmed us to survive, then the power of natural survival methods can be used to awaken hope in people who are under stress. In Ufa, I discovered that adding the sensorimotor integration of reflex patterns and developmental movements speeds up and enriches the process of remediation. These techniques and movements to draw out the activity from the brain stem to the cortex, are are the foundation for awareness and conscious control. Only then can we be ready to interpret trauma fully and objectively.

I used the wisdom of natural body movement to give the children a new perspective from which to recall the fires. Homologous movements were exceptionally useful in helping them to move from the memories of the past to the current reality of 'now.'

The children used these movements to release their fear of fire by pretending to stomp on a fire with both feet or pound it out with both hands. The experience of clapping both hands to smother the fire also allowed the children to revisit the strength of homologous movement.

For the same reason, I engaged the children in art therapy, drawing pictures of fire with two hands at the same time, making use of the Brain Gym<sup>®</sup> Double Doodle activity. For the children, expressing their thoughts and feelings as they drew created a bridge between the past and the present moment. While moving in this way, they told imaginary stories with anger, then with a seriousness, and then with laughter.

The children drew every day with both hands simultaneously, or if they had only one hand, they would draw with that single hand, imagining it was 'made of two hands.' If they drew portraits of favorite people, they were encouraged to stay away from thoughts of loved ones who had died in the crash. Dealing with these memories could only come later, when they could view these truths from a place of inner safety. Creating a goal for the future was a priority.

These young patients loved homologous movements and referred to them as the "rainbow journey." They created rainbows in the air, first starting with their two hands above them and meeting in the center; then they would move their hands in opposite directions, creating an arch. Some children had to imagine this movement, since they could not move due to the severity of their burns. Repeating this activity over and over, they imagined and talked about different colors of the rainbow. I would suggest the color red, which the children associated with fire, last of all, and only if the children seemed ready to handle it. All the other colors were used to bring safety to the color red.

The children often repeated the rainbow movements at different speeds and with various colors and sounds, as well as with stories about strength and wisdom and being a winner. Often, when I would walk into a room to work with a group of children, I would find them telling one another rainbow stories and creating the rainbows in the best form that they could. They seemed to instinctively know that this basic developmented are accurate they made.

tal movement was a key to their recovery, because they made repeated, spontaneous use of the movements.

They formed the rainbows with both hands moving outward from the middle; then they would move from the outside and come back to the middle. Instead of being stuck in an extended mode of protection and guard, they would shift their peripheral vision to the experience of relaxed centralization. If one has suffered a trauma, the peripheral vision may become set in hypervigilance as a form of protection. When the visual system is overused in this way by perpetual defense, it becomes exhausted and ineffective. Creating the rainbow with both hands in a playful way allows the eyes to finally release this overprotective posture, creating a more relaxed and centralized visual acuity. In the instance of the children in Ufa, this relaxed visual state would later help them improve their reading skills when they returned to school.

Our work with movement also allowed the children to develop an expanded sense of where they were in time and space. They would move with both hands while they were standing, sitting, and lying down. These movements were physically preparing them to be able to explore different levels of balance and



A drawing by a six year old girl: "I survived."

stability with a sense of safety and play. Eventually they would 'walk' across the rainbows and tell stories to one another, which allowed them to move into more advanced developmental movements of a crosslateral nature. Some would cross-crawl over the rainbow, telling funny stories as they moved. I then presented combinations of movements, offering new challenges to some and comic relief to others as I made 'silly mistakes.' Doing the Moro Reflex rerouting and Brain Gym<sup>®</sup> Cross Crawl with a variety of songs brought both challenge and laughter. Some children actually regained their ability to laugh within five days, while others took a month to rediscover it. Often laughter became a relief valve through which crying and screaming could follow. All this experience allowed us to later create MNRI<sup>®</sup> 'Visual and Auditory Reflexes Integration', 'Art-Therapy and Reflex

Integration', and 'Proprioceptive and Cognitive Intergration' programs for children and adults.

The reflex rerouting and Brain Gym<sup>®</sup> exercises also created rapid self-education of the mind and body. The children's eyes relearned to feel safe looking in all directions. Later, the children used Alphabet 8s when writing. They started by practicing individual letters in the Lazy 8s on their paper, and then they would write a message like "I love myself" while using this Brain Gym<sup>®</sup> movement. They became so excited about this achievement that they would follow this exercise by giving themselves a hug. Eventually they used the same process to write each letter of their message sentences, saying, "I am a *winner*" or "I am strong/healing/recovering/developing."

# **Regaining Self-Worth**

I found it important to understand and accept the stages of traumatic stress-grief-loss without making shallow promises, like "time is a doctor," or just "forget this tragedy." The children were teaching themselves, through movement and drawing, that they were winners. Experience must come first, and encoding the experience with words ideally comes second. Otherwise the words are empty and hollow, and carry only the meaning perceived by the person speaking. When the experience naturally draws out the words from within, the meaning is deep and authentic.

I followed the needs of the children by using empathetic listening skills that allowed me to hear, be congru-

ent, and share open and honest feelings from both sides, while doing the reflex exercises and Brain Gym<sup>®</sup> movements. The important thing was to feel the feelings, follow the children's emotional experience step by step.

Once the sense of survival was experienced and then stabilized by the children, we began preparation for their future, exploring self-image, self-value, and self-worth. The children learned that they must be ready to teach others that they were winners for yet a fourth time, because they had gained strength through their victories. I encouraged them to go out and teach others about this wisdom. The children would have to learn to notice their own behaviors of manipulation and compensation that could put them back in the victim role, thereby causing them to cry out for attention and protection again. They had experienced what it was like to move out of the need for protection and into the place of development. They would have to be ready to explain this to the friends, teachers, parents, and neighbors who might offer them overprotection or go into survival reactions themselves when confronted with these children.

Most of the children had gone through a phase of hating their damaged bodies and faces. I often shared fairy tales, metaphors, and stories of high moral values, in order to help them experience a perspective of self-respect. The following story is one I told to one girl who spoke of her concern about the reactions of others regarding her face:



Drawing by a six year old girl, a picture with Lazy 8s (a Brain Gym<sup>®</sup> technique).

"A young woman and a young man were falling in love. The girl's face was not very pretty, so she didn't believe her sweetheart when he said he loved her. She felt it was impossible for anyone to truly love her because of the way she looked. The two of them had become very good friends, and yet she continued to feel bad about herself. One day she decided to leave the city and find someone who could change her face. She lived in a remote village in the mountains, but she had heard of a man who had some herbs that could possibly change her looks. She found the man and put on a mask of herbs, waiting to become beautiful. When she returned with the mask on, the boy was frantically running around looking for the girl he loved. As she stood in front of him, he cried because he had lost his best friend and could find her nowhere. The next day she decided to remove the mask and return to him as she was. He saw her and took her into his arms with joy! The face didn't matter. It was the person inside that he loved, and now she understood the true meaning of beauty."

Before leaving the hospital, the girl with the ravaged face came up to me and said, "I am the happiest person in the world, and I am the strongest, as well, because I have survived. I am a *Winner* inside, and I know how to take the *Winner* into my future."

# A Resource for Happiness

The strength of the *winner* within is the source of survival and a resource for being happy in any physical, intellectual, or emotional state. The human response to a trauma is characterized by four basic stages: (1) protection for survival (freeze or flight), (2) reaction for survival (fight or flight), (3) growth (stopping to think and learn), and (4) development (implementation and modeling of the new learning).

Accessing the wisdom of primary reflexes and natural movements in the body supports the completion of all four of these stages. Inviting both the physical and the emotional strength of nature to awaken within creates a space where it is safe to let go of any repetitive story of mistakes, failures, and blame.

The children I knew in Ufa met the challenge, gathered their natural internal resources, and moved through the entire experience of survival showing how negative survival and phobias can be transitioned into positive survival, and reflex rerouting, arts, play and Brain Gym<sup>®</sup> were tools or means for this pathway. The catastrophe taught them that they were heroes. They were brave and strong ones who fought emotional and physical battles against all odds until, eventually, they brought themselves successfully into the new reality and life in front of them. They met fear face to face, released it, and replaced it with the wisdom of the *Winner* inside. From this place of wisdom, the children prepared themselves and others for a new future. Like the boy in Tiananmen Square, they created a picture of courage to show to the world. They also bravely stood in the face of fear and demanded that it stop.

Yet they chose to move into an inner place of simple truth. From the depth of the winner within them, they created a manifestation of the real 'me.' Their self-discovery was based on the experience of facing endless challenges, big and small. Their bravery, wisdom, strength, and inner knowing, which allowed them to overcome countless daily obstacles, remain present to assist themselves through the aftermath of the catastrophe. They showed us all how purposeful movement and touch can simply reconnect us with inner intelligence, which allows us to move forward. We thank them for reminding us of the natural wisdom within the body. Their extraordinary story will long continue to serve as an inspiration to us all.

They did so well! How easy it would have been for these children to choose to continue running away and hide from this fearful event! Now, in 2014, I thank them for the unparalleled lesson they taught me. It is a lesson that went on to help thousands of other children and adults. These children are mature adults now and I hope that they are living with good health and joy in their lives!

# The Epilogue

After I returned to Moscow, I initiated extensive research into why work with reflex patterns and the Brain Gym<sup>®</sup> movements could produce such profound results. The little orange book, *Brain Gym<sup>®</sup>: Simple Activities for Whole-Brain Learning* by Dr. Paul Dennison and Gail Dennison used in Ufa had shown a deep and lasting impact, just as Dr. Hannaford had reported. The implementation of the Brain Gym<sup>®</sup> activities had brought remarkable and significant results, and those activities deserved research and investigation so I shared my findings with many of my colleagues, and the research began.

Further investigation of the effect of the sensory-motor patterns had shown that those exercises were sufficient in that they were resembling the reflex patterns in working with post-traumatic protection and survival. This allowed us to create a procedure to work with Post-Traumatic Stress which is presented in the MNRI<sup>®</sup> manual, *MNRI<sup>®</sup>: Reflex Integration and PTSD Recovery. Advancement for Children and Adults Experiencing Post-Traumatic Stress.* (2013) by S. Masgutova, D. Masgutov, E. Akhmatov.