Chapter 3 - Playgrounds, Overcoming Sensory Integration Dysfunction

Children with Asperger's Syndrome often have sensory integration dysfunction. If I remember correctly, in every 10 children in Hong Kong, there is one having a certain degree of this dysfunction.

What is sensory integration? The best way to explain this is perhaps by giving an example. A person throws you a softball and you want to catch it. Observing and judging its speed, direction, attitude, you move, make a big step, raise your arm, reach out, then you catch the ball. Actually, from your very first sight of the ball, your brain is transmitting commands to your body, your limbs, your hand and fingers. Every part of your body works together and you catch the ball. This needs an organized and integrated body sensory system. Human beings sense in several ways, seeing, listening, tasting touching and smelling. These sensing abilities are well known. Sensory integration experts will tell you more, i.e. proprioceptive sense and balance sense. Kids run and jump. They do not fall easily. It is because they can balance. When going up and down stairs, we don't need to watch our steps, but we manage. When a boy rides on a bicycle, his feet rest on the pedals, but the boy does not need to watch. These are all controlled by proprioceptive sense. If this sensing system misjudges, we shall fail to align our body, our limbs and fail to balance ourselves. Kids with an under developed sensory integration capability will have difficulty in body balancing and other body motion control. They may even kick themselves without any reason, slip or fall.

Sensory integration dysfunction impacts a lot more than one can imagine. Children who do not have good control of their fingers cannot write neatly. In kindergarten, they don't sit up straight. They often rest their bodies on the desks or sit with strange postures, behaving as if inattentive. They are hesitant to play with other kids. They don't mix with other children and form group. They don't hop or dance, don't know how to throw or catch a ball. They are afraid of height. If you hold them up, they will be scared and may even cry. When stacking small blocks, they are unable to position the pieces properly. They need help to button up, to zip and unzip and to tie shoe lace. From a teacher's perspective, these kids are inattentive, behind in development and need help all the time. From time to time, they even exhibit weird behavior.



I first found Ag a bit unusual when he was about 2 years old. I took Ag to a community center for group activity. The instructor led the kids to warm up by stretching their legs and arms. Every kid was happy to follow, except Ag. He stayed in my arms. No matter how much I encouraged him, Ag declined. After warming up, other children participated in activities and enjoyed, but Ag never joined. If I pushed him, he was scared. There was fear on his face. He shrieked. When I took Ag to a playground, he never enjoyed. He was afraid of going to the merry-go-round, or swing, or slide. He yelled and struggled if I took him up. By that time, I did not know sensory integration. I thought that Ag was afraid of height, and was a bit behind in development. There was nothing to worry.

Unfortunately, I was wrong. There were more and more issues.

- At age 3.5, Ag still had never hopped. He could not control the pedals when riding on a tricycle. He did not know how to throw a ball because he could not swing his arm. He grabbed it, pushed and then released. When asked to walk along a straight line marked on the ground, he swayed and went out of the line. When stacking small blocks, he could not stack one on top of another precisely.
- At the age of 4.5, Ag could not balance when standing on one foot. He had difficulty to catch a ball of 8-inches in diameter. When practicing this at home on in the center, he failed often. He would never move his body or his steps. Working with both hands simultaneously was a problem for Ag. Lastly, he could not bend his thumb.
- When I taught Ag to put on socks, he could repeat my instruction precisely. However, he could never got his sock up his foot in the right position.
- At age 5, it happened a few times that when Ag put on his underpants, he took the front to the back, but he did not know. He did not feel any difference!
- He was unable to follow what I was pointing to even if the object was within ten feet.
- When washing hands, Ag just let water running through his hands. He could not rub his hands. We demonstrated repeatedly but Ag just did not get it.
- He could not spit. He could not blow his nose.
- He was very afraid of showering on his head. He resisted vigorously, yelled or pushed me away.
- He had difficulty to button up. He needed help.



I was unable to judge if these problems were caused by sensory integration dysfunction, yet beyond doubt, Ag was way behind other children of the same age. He was not confident. He did not want to join other children for activity.

If parents do not know sensory integration dysfunction, they may misjudge their children as stupid, stubborn, slow learner, inattentive.... These comments hurt the children. Once the children look down on themselves, it is very difficult to rebuild self-esteem. In special education center, Ag attended two training sessions per week, taking part in a variety of activities and exercise. Furthermore, the therapist recommended Ag to do 'home work'.

Initially, Sue guided Ag to do 'home work'. It helped but just a little bit. At home, there was very limited exercise or activity that Ag could do. For example, Sue and Ag practiced to catch a ball. They did this in our sitting room and repeated the same game daily, at the same place. This was actually very boring for a young child. Even worse, Ag failed to catch the ball in most of the time. Ag was made to practice again and again but he did not like it at all. This was no good. This actually undercut his confidence. Both Sue and I understood that we should encourage Ag, but no matter what we said, Ag knew that he could not do it. Gradually Ag became incorporative. He evaded, resisted or escaped. Sue started to lose her morale. During weekend, I took over but it did not help. Ag still refused to co-operate. He was 5 years old. There was not much time left to catch up, because in around 1.5 year, Ag would start primary school. It was also critical to catch up and close the gap between Ag and Gi. If not, this gap would be a long nightmare for the family. Finally, I decided to take no pay leave, and helped Ag personally. I brought him to playgrounds for exercise and activity as a daily routine.

The mission was to change the very boring 'home work' to interesting activities, which Ag enjoyed and had fun.

All therapists recommended Ag to go to the swing in children playground as this would help a lot. Merry-go-round was also good. I turned the merry-go-round as fast as Ag could balance on it. I took Ag to the top of the slide and let him down. Therapist told me that if Ag was not afraid, it would be even better to slide down with head first. Of course safety was the first priority. Parents should seek advice from therapist. I was very surprised that it was not easy to find



swing in playgrounds. There were just a few and they were short. It was not easy to swing high up. It was never comparable to those swings in special education center which was made to swing in all directions as well as to turn simultaneously. It was also not easy to find merry-goround in public children playgrounds. Surprisingly I found it in the children playground of two government housing estates i.e. Choi Wan and Choi Ha respectively.

It became my daily routine to bring Ag to playgrounds, to play and to have activities. I ignored 'home work'. I did not set any target for Ag. I never pushed him to go to the highest slide in the playground. I allowed him to do whatever he liked. No matter what we did, it was absolutely just for fun. Otherwise, Ag would not go and it became a failure. From time to time, I asked my Filipino helper to join us too. It was because I hurt my back some years ago. I could not do very vigorous exercise. My helper played with Ag, so that I could rest. During weekdays, there were not many children in playgrounds. Sometimes, it was very quiet. With my helper there, Ag had a playmate and was happy.

This turned Ag around all together. At home, he resisted training. However, he would never refuse going to playgrounds. He enjoyed the activity, which from my perspective was training. Relative to two hours of training weekly, ten hours weekly in playgrounds were 5 times as much. I knew that Ag improved quickly.

Going to the same playground day after day would not be interesting. So I brought Ag to different playgrounds within eastern and central Kowloon such as Tseung Kwan O, Hang Hau, Kowloon Bay, Kowloon City, Lok Fu, Morse Park, Ping Shek, Lok Wah and Sau Mau Ping. I had a car. I drove to a playground even it was a bit far away from home, such as Shatin, Tai Po and Sai Kung. Actually, we had been to all playgrounds within 20 minutes by driving. What's more, since Ag attended special training in Wanchai, I even brought him to Victoria Park. Other than public playground in large parks, I also brought Ag to children playground of governmental housing estates. The one in Sau Mau Ping was large. We had been there several times. Both Ag and I enjoyed our time there.

I found slide in almost all playgrounds, but they were short. Hardly there were any slide tall. In Ping Shek Children Playground, I found a slide with two levels. When Ag was there for the first time, he was afraid to go up to the higher level. Since Ping Shek Playground was close to our



home, we went there very often. In just 3 months, Ag changed a lot. He overcame his fear and insisted to go up to level two. I also found a two levels slide in Shatin New Town Plaza Playground. These slides were tall. When coming down, the momentum generated good stimulation for Ag. Therapist also suggested to bring Ag to children rope courses. However, it was surprisingly difficult to find any, except in Victoria Park, Shatin New Town Plaza and Choi Ha Children Playground. I started my leave in Jan 2008. We went to Choy Ha every week. At first, Ag was afraid to go up the rope course. I did not force him. However, every a few weeks, I encouraged him to try. With lots of exercise day after day, he improved very quickly. In around Sep 2008, i.e. 9 months after, he overcame his fear. He climbed to the top and waved to me with a big laugh. This was an important milestone. Not only he became energetic, aerobatic and confident, he also wanted compliments. He had never exhibited this behavior before. In the past, he just played himself and had never asked for company or compliments. This was a good sign.

If it was a rainy day or was too cold for outdoor activities, I brought Ag to indoor children playgrounds. We went to Lee Yu Mun, Shek Kip Mei, Tai Kok Tsui, Sham Shui Po, Ho Man Tin and even those on Hong Kong Island, such as Java Road and Lei King Wan indoor playground. These indoor playgrounds were all run by Hong Kong Government Leisure and Recreation Department. In these indoor playgrounds, there was no slide, no rope course and no climbing rack for children. It was not an ideal place for exercise. However, when weather was not good, I could only bring Ag to these indoor playgrounds to stretch his limbs, to run around or just to enjoy. This also provided him with opportunity to meet other kids and socialized.

No matter in any playground, I never sat down in a corner. I worked out some activities for him. In any indoor playground, there were usually many exercise mattresses. I asked Ag to pile up the mattresses as a way to exercise his arms. I also asked him to place these mattresses apart, then jump from one to another. If he could manage, I pushed the mattresses further apart and encouraged Ag to try again. I put candy or small toy under a mattress and asked Ag to search. This was interesting. What's more, I wanted to teach Ag "Do not give up easily". If he could not find the candy and intended to give up, I gave him a little bit of help, then encouraged him until he found it.

I never stopped proposing new games to Ag and encouraged him. I never limited Ag to do exercise within parks or playgrounds. In country side, I asked Ag to climb up trees. When strolling along pedestrian walkway, I asked him to climb up lamp posts. At hill slope, I told him



to run uphill then come down. To encourage Ag, we competed, to go up and come down. I suggested him to jump from a piece of big boulder to another, as long as I considered it safe. As far as Ag was concerned, these were all for fun. He enjoyed and laughed, and so did I. To me, it was a success to make him exercise. I knew that his sensory integration capability was improving quickly.

In Shatin Central Park, there was an unusual slide. It was built on a natural slope of boulders, reinforced by concrete. There was no staircase or handrail. Children stepped on the boulders to go up. We went there first time in April 2008. This caught all of Ag's attention. Ag could step freely on any boulder to go up. In other words, Ag chose his route, any. He was very excited. He dashed to the slope and went up straight. I worried that he might slip so I followed him very closely. In an hour, Ag just kept going up, sliding down again and again. He never missed any step. He was agile and energetic. He was totally differently from what he was 6 months ago. He went up swiftly and decisively. His sense of body balancing was very good. I never needed to give him a hand. One hour was over. He sweated a lot, more than ever I brought him for exercise. His T-shirt was wet, probably his underpants too. He was tired. He stopped yet he had a big smile.

That night I spoke to Su. "It is no longer necessary to bring Ag to playgrounds for sensory integration training". I did not mean that Ag caught up all together and had overcome this dysfunction. There was still further room for improvement. However, bringing Ag to playgrounds for exercise would not help a lot any more. He needed other stimulations. After a few months, I arranged him to practice in-door rock climbing and roller-skating. These were very good activities. Unexpectedly they helped to build up Ag's confidence.

In my opinion, two hours of training weekly in a special education center was not enough for Ag. Exercising in a playground helped tremendously. All therapists and professionals recommended me to bring Ag to swing, to climb rope courses, to enjoy merry-go-round. We did. We went daily and exercised for two hours. It increased training hours by 5 times. Ag had great fun, instead of doing 'home work' which was boring. I brought Ag to different playgrounds. We played different games. We did all these for fun. These joyful activities had turned Ag around within just six months.



Timing is important. Bring kids to exercise, to have fun when they are still studying kindergarten. They can spare time. Once in primary school, they attend full day education. There are a lot more homework. It becomes much more difficult for children to spare time. Most importantly, if the children still have problem in sensory integration, they will have difficulties at school. They may look down on themselves. Then, it becomes an issue.

At the age of 5 years and 8 months, suddenly Ag managed to blow his nose, first time ever. Although he could not do it each and every time, it was still a big progress. When Ag was 4 years old, Sue and I knew for the first time that his inability to blow his nose was a matter of sensory integration dysfunction. From then on, we had never complained. I just brought him for activities as frequently as possible. Then he made it one day!

I did not mean that Ag had fully overcome sensory integration dysfunction. I would only say that he had improved significantly. He had caught up a lot. He was no longer very behind other children of the same age. He still did not co-ordinate very well in certain body movement. Nevertheless, he was willing to participate in the activities at kindergarten. This was a big change. Relative to what he was at age 2, a kid resisting any group activity, he was totally different.

No matter a child is gifted or with Asperger's, please bring him/her to playgrounds and enjoy. Let the child do whatever he likes and have fun. This helps their development tremendously.

