

INTO A CHILD'S WORLD – A fantastic way of learning resilience.

There is an irrefutable truth and that is that we are going to die. The children of today are the adults of tomorrow. The future they will have to face is controlled by the choices we make in the present. But, with the everyday news and difficulties, sometimes seems very difficult to survey the future the world it needs. Questions like how can we be resilient in a technological world that changes every single second are common. Internet seems to have the answer for all possible questions, but when the hard times come and it becomes necessary to bounce back and find a way throughout, it can still bring doubts.

At the beginning of this year I started to work with children at church. I was always kind of scared of dealing with the little ones, since they can be extremely chaotic sometimes, but somehow I still accepted the quest. From all of the experiences from this, one in particular marked me. From time to time, my church holds events we held for children from the community. In one of those, there was this little boy. He was around six to seven years old and very cheerful. In the first event, he got a balloon – which he held very closely and would play alone with it many times. When it got punctured, he cried and cried for hours. Next event he was back and again held onto another inanimate object. At that point it was already a bit off to me, but I thought it was a normal act around children of his age. After the second event, he started to come around more often. In one of these, he talked about his home situation. His parents were divorced and his mother was already waiting for another child. His parents were not in a bad economic position, but the way he stated about them was very clear that he was far from their attention. In that moment every action he had done became extremely clear to me. Child negligence unfortunately is very common and one signal that gives away the existence of it in a child's life is emotionally holding onto an inanimate object. Suddenly, all the times that boy held onto an object as if it was his own blood made sense to me. Since that moment I started to try to make him feel loved at least when he was there. One day he asked me why he should keep coming if he was not important, not even in his family. To which I answered "Well you are important to me! Every time you come around I get really happy." He immediately changed the subject, but at the time I saw that little happy boy trying to hold his tears.

That situation changed me. It made me realize that this small boy had so much resilience inside of him, to somehow keep coming time after time and still find a way to be this sweet and lovely child. It made me realize how every time I thought I could not be resilient was small compared to this kid. A child deserves to live in a world full of joy, but unfortunately most of the times they have to face bad if not worse situations that many adults. And they still find a way throughout with a resilient smile and imagination. They still find a way to see the world with hope and look for beauty. It made me realize how much of resilience we can learn from children. But for that, we need to understand all the process of resilience.

Science behind the brain

The year is 1543, Renaissance, in Greece. A man, Belgic doctor and surgeon, called Andreas Versalius had just published a book named “De Humanis Corporis Fabrica”. Being considered sinful and wrong, the study contained chapters related to diseases and images of human anatomy – which amongst was a special attention to the most important organ for a developing society: the brain. That was going to be the first time such archive would be shown to public eyes, although it was far from being the first time this part of the human body was studied. Around 2500 BC, oriental tribes already had done head surgeries. 387 BC, in Greece, Plato had cultivated the idea of the existence of a central organ that could control the whole body. All those conceptions were precursors of our science today. Science that still knows too little compared to the brain’s grandeur - the most complex organ of Earth. With its beginning at the third week of pregnancy, it is the main organ of Nervous System, composed of more than 100 billion neurons (brain cells) and synapses (areas of contact between neurons).

My mother grew up loving superheroes and this love was passed to me. We knew, though, that inventions like Time Travel Machines were not real. Studying more of the brain, I found that our own time travel machine is inside our heads. Memories can take us back in time, with scents or sounds being able to bring feelings and even thoughts from the original moment. These types of memories, known as explicit memories, are created in a specific region of the brain – same region responsible for behavioural and emotional responses – called the Limbic System. Composed of few sections, this part of the brain is related to survival. For this, it is essential to focus on two particular parts: hippocampus and amygdala.

Hippocampus is essentially the memory and learning centre of the brain. Mental diseases such as Alzheimer affect specifically it. The amygdala is responsible for the process of feelings and emotions. It is also where life situations are analysed for learning.

Viewing resilience through neuroscience.

Human brain is malleable. The little we know about neuroscience behind resilience has already confirmed that it changes its structure, gene expression and function to respond to stress. Every stressful situation, every trauma has some sort of result inside our brain, even if we can't sense it. One great example is anxiety. Anxiety alone is not a danger or an illness; it is a natural emotion, similar to fear. But, when amygdala, section where anxiety and fear begin, can no longer establish communication with other parts of the brain, it starts sending mixed signals to the rest of the body. Reacting to its confusing, the body sets a kind of anxiety attack - sudden heartbeat, trouble to breathe, tremor, irritability, etc. These anxiety attacks are not equal to an already established mental disease, but if frequent, it can end stimulating a type of Anxiety Disorder – known as the most common mental disorders in the world, affecting 30% of adults at some point. The hyperactivity of amygdala occurs because of trauma and, mainly, because of stress; and it is a clear way to understand how easily a stressful situation can affect our insides.

Resilience is composed of many factors. It involves all aspects of life of a human – such as social, physical, emotional and psychological areas. In the brain the major regions related to it are hippocampus, prefrontal cortex – which strongly correlates to decision making and planning behaviour - and amygdala. Therefore any actions that strengthen these parts help on developing resilience; in the same way that whatever cause damage to them might weaken resilience. The brain can be damaged either by strokes and traumatic injuries or by mental disorders – which I believe it is where the danger hides. Even though awareness has been spread around internet, there is still much stigma, prejudice and incomprehension about the deep of mental diseases. Furthermore many disorders happen to have a quiet beginning, causing slow realization of the situation. There are, although, some actions that have showed to be useful and effective for developing a mentally resilient brain.

Researches have proved that exercising has great outcomes not only for the body, but also for mental health. It causes the brain to send neurotransmissions to the rest of the organism. When the Endocrine System receives these orders, it chemically provides the body with reducing the overwhelming feeling of stress and easing the difficulty of facing problems of life. Humour has a similar process inside the brain, causing hormones to minimize the stress while allowing the brain to rest, and as a consequence to develop resilience.

For children, the major aspect that helps to sustain coping mechanism is having a stable relationship in life – being either with parents or care givers. However, this does not only apply for kids, neuroscience has already proved that having someone who you can rely on lowers the difficulty of resilience, just as much as improve self-esteem and mental strength. Long before, Peter Drucker had already stated that teamwork is a fact. Even if his original meaning was not directly about resilience inside the mind, the truth is that Drucker had already understood that alone, humanity cannot survive. Historians and archaeologists proved that humans only survived the Ice Age because they stayed in groups, which allowed the possibility of hunting bigger animals and protecting each other. Meanwhile, nowadays health organizations and centres of research, such as American Psychology Association or World Health Organization, advert about the growing feeling of loneliness, mostly after the pandemic. Even though technology theoretically brought us closer, it is still possible to understand what the Beatles meant when said “look at all the lonely people”. With stable relationship being one of the major factors for a successful resilience system, the lack of empathy and the grown of detachment are truly threats for the future of humankind and mental health as a whole.

Fortunately, despite the worrisome situation of increscent loneliness, there is another major factor that can increase resilience in mind: having something to believe and rest on. Researches show that religion is a great example of this aspect. Developing the custom of praying can reduce stress and put in mind good events that happened during the day. As someone who developed, over the years, the habit of talking about stressful occurrences while praying, it is easy for me to confirm that praying does help decrease stress. But to not only rely on my words, science has already confirmed the benefits from praying or meditating. There are times when, even with someone trustful, the situations are too private to share. So talking or

thinking it out truly helps with organizing the thoughts and making decisions. Whether religious or not, this specific type of action of relaxing the brain in order to allow it to think about difficulties is helpful. It is a fact that the brain connects different activities with different feelings, so hobbies that are usually related to relaxing feelings can have a similar affection of believing on something. Whether it is practicing a sport, reading a book, working with art or even watching a movie, if it relaxes the mind and it allows it to organize its thoughts it's useful.

Resilience in children.

According to researches, brain is only fully developed in mid-to-late 20s – the prefrontal cortex (extremely important for resilience as already said) is one of the last parts to mature. Therefore, for children any trauma can have strong affections on their future. When studying mental disorders there is a pattern possible to be seen: most of them can be caused by traumatic events in childhood. Anxiety disorders, such as PTSD (post-traumatic stress disorder) or GAD (generalized anxiety disorder; panic disorder or depression are some examples of illnesses that can be triggered by situations from childhood. If our adult brain is affected and, many times, changed by stress, children can suffer much more consequences from it.

Activities that help developing resilience in adults are the same for children. So, the question is “why many times it feels like we cannot be as resilient as them?” Children are much faster and louder to react. They rely on small things that make them happy. For Mother's Day I worked on making a video for mothers with the children from church. The idea was simple: ask some questions for them to respond, one being “what is a thing you love when your mother make?” In front of questions like these we tend to look for the best answer we can give, the best thing we can think of. Meanwhile, the children responded with “when she makes cake”, “when she cooks pasta with tomato sauce”, “when she reads me a book”, “when she takes me to her work”, “when she sings me a song”, and other simple answers like these.

There is a myth in Greek Mythology about spectrums - creatures that lost their selves seeking for something unreachable. Unfortunately, humanity fits the character perfectly. The blame goes to anything rather than our own selves. Yet the painful truth is that timing has become the unreachable and we, the spectrums. Hearing them, one after one in that Mother's Day video, finding happiness in simplicity, I

realized that there is where we fail. Children enjoy the life the way they can, seeking beauty in everything.

Is this a possibility for us?

When reading stories of children who have passed through war or natural disasters, we can see how they look for escapism in relationships, art or sports. So, is it really impossible for us to accomplish their resilience children?

Tove Jansson – writer, painter, sculptor and author of the famous book series Moominvalley - grew up in Finland. Her father was a sculptor, her mother an illustrator. Jansson lived through the uncertain time of Second World War. Although her first Moominvalley book was published in 1945, she was already expressing her thoughts and feelings towards the war as a whole through magazines and newspapers she worked with. The courage she had when explicitly showing that she was against both sides of the war, even though Finland's future was unknown, is memorable. Tove wrote Moominvalley for herself and for the children in need of a colourful and fantastic world in the middle of dark times. In a similar way, J. R. R. Tolkien – English writer and scholar – published his book The Hobbit in 1937, immersing him and others into this magical world. Both of these authors lived through the Second World War (Tolkien even participating as a soldier in the First World War) and found a way to resilience through their imagination and views of a prettier world – actions that we can see in children.

Ludwig Beethoven, born in 1770, was expected to follow the prodigious steps of Mozart. This belief made his father wake him up in the middle of a night to play piano for him and his friends. His life, since childhood, was exposed to cases of anxiety and fear. Later Beethoven sank into alcoholism, following the footsteps of his father and grandfather. The consequences brought by alcoholism, added to anxiety and traumas, made Ludwig develop cases of depression and bipolarity; causing him to create his own world of symphonies and sonatas. In a similar state of mind, Van-Gogh, famous Dutch painter and important artist, suffered from mental diseases his whole life. Yet he found a way to transform his suffering world into beauty and art. Historians say that as a child he was already very shy, always observing his around. He created his own world inside his lonely mind.

Conclusion

In a society full of technology and endless information, the only certainty we have is that we are going to die. Stressful situations come and go. The world keeps changing day after day. The number of things to accomplish in order to keep with the flow of humanity grows. We live in a society where timing has become the key - everything has to be now, has to be fast. Then we look at children and we can see how wrong we have been.

Peter Drucker stated that we should learn how to deal with how fast knowledge shifts. Learning comes with understanding that our brain has a time to process the shifting information. Looking at neuroscience we notice that the activities that help to increase a resilient mind do not change over time. Then we can see, looking at examples of people who used their imagination and art as perks to get through hard moments and be resilient to others, that resilience is filled with simplicity. Bouncing back in a world where timing is the key has become a challenge, but it doesn't have to be.

Knowledge is built overtime - with personality, with experiences, with information. Knowledge is the key for the future, to accomplish goals. Resilience is built with simplicity – with the capacity of stopping and understanding the situation, with the capacity of knowing you have to rest, with the capacity of being the one, others can rely on even though things seem worrisome. Living is what comes between. Being resilient is not only for ourselves, but mainly for those around us. And children, even though being at the beginning of life, have already understood it. They have already understood that in order to accomplish things, you have to know the time to stop and enjoy the beauty of the path. Children's resilience teaches us how to be stronger and live at the same time. Children's resilience shows that it is not an unreachable action. Children's resilience can be our resilience.

An innovation, to be effective, has to be simple and it has to be focused. It should do only one thing, otherwise, it confuses. If it is not simple, it won't work. (Peter Drucker, 1985)

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