

Resilience and Plasticity

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Running head: RESILIENCE AND PLASTICITY

When I first think of resilience I think of the ability to withstand opposition, or in other words finding a way to survive through adversity. Kathleen Stassen Berger in her book “Invitation to the Life Span” states, resilience as a dynamic process involving positive adaptation in very stressful situation. Berger says more middle school aged children are more resilient than younger kids. Resilient children have the ability to handle certain situations where as other children would be too overwhelmed to deal with it. Along with that, Berger said you do not always have resilience. There will be times in your life when you are resilient and other times when you are not. Berger explains that most children can handle one traumatic situation but when it comes to a lot of minor stressors, then that is when coping becomes difficult. With the help of one supportive parent the child will be most likely to be resilient.

Neuroplasticity is a very interesting concept that can essentially build new wiring patterns in your brain. It happens through new experiences and through repeated experiences. Berger gives the analogy of plastic. Plastic can be molded but it does have a certain durability just like people do. Berger wrote about a man named David. It took David a while before he knew how to chew, walk, and talk. He was severely retarded and some people would tell his parents to just put him into an institution. Instead his parents tried their best to take care of him and took him to the doctors regularly. Through plasticity David skipped a grade at age 10 and read at the 11th grade level when he was only in 5th Grade! He now works as a German translator. David still has his disabilities but through plasticity there was hope. Crucial factors that play into plasticity, Berger says, are nutrition, education, and child rearing. Berger also informs about the research linked to plasticity to prove that plasticity is recognizable in early childhood. Her example is if a mother is depressed and she has a 1 year old, then the 1 year old will most likely still be depressed at 6

Running head: RESILIENCE AND PLASTICITY

years old. However, if the mom becomes less sad then the baby will begin to be happier and not as depressed at age 6.

Human brains show neuroplasticity and resiliency over the lifespan. The human brain can be trained to incorporate new skills. In “A Learning Machine: Plasticity and Change Throughout Life” by Leah Nelson, who is an observer contributor, says older people have noisier brains due to more information and therefore slows and degrades the brain. Her study showed that brain degrading is reversible. In her study she used adaptive computer games with the elderly. From this, the auditory training recovered the cortical plasticity and was equivalent to people that were 10 to 15 years younger than they were. From the visual training they increased plasticity to be at the level of those 25 years younger. Also research from Berger, states that having a good supportive adult in children’s lives makes them more prone to be resilient.

There are ways in which resiliency can be an adaptive characteristic for humans to possess. If you have less minor stressors in life then you are most likely to be more resilient. As was said earlier, you are more resilient when you have good support from at least one adult. Another key to being more resilient is to be more adaptable. One way to do this is to expect and accept change throughout your lifetime. Accept the situation you are in and make goals to help you stay focused on what you really want in life. The main one I have found to help in my life is to stay positive. Keep your outlooks on life optimistic!

There is evidence for the genetic basis of resiliency. In The New York Times “A Question of Resilience” written by Emily Bazelon, scientists discovered that people have either two long 5-HTT alleles, one long and one short 5-HTT allele, or two short 5-HTT alleles. When researching about depression they found that the people with two short 5-HTT alleles were high at risk for depression when put under several life stresses. The ones that had one short and one

Running head: RESILIENCE AND PLASTICITY

long 5-HTT allele were moderately at risk for depression when put under hard circumstances.

The people who had two long 5-HTT alleles were most likely to bounce back after stressful situations in life. This doesn't mean that the people with at least one short 5-HTT allele will end up depressed. It just means that when extreme situations come up then they are more at risk for getting depression (they are less resilient).

It would be interesting to see what kind of 5-HTT alleles I have, even though it is just a small factor compared to the huge concept of resilience. I love to think I am a very resilient person who can handle stress in a positive way but that would be giving me too much credit. Growing up my dad sexually abused my oldest sister but we didn't find out until I was about 8 years old. I would say I was a resilient kid when this happened but a big part of it was because I did not fully understand what was going on. My mom was very supportive to all of my siblings and me, which saved us. When I entered 3rd grade my dad was put in prison and I just accepted it, still being resilient. I had not seen my dad for a year so him getting put in jail wasn't too much of a stir up. Once entering 6th grade we had therapy sessions with my dad. These would stress me out, not because I was afraid of my dad but because it had been 5 years of not seeing him. We were also in a more formal setting with a therapist observing us. I remember having a lot of anxieties this year, my mom even took me to the doctors because of it. My anxieties would especially flare up whenever I had to do an oral presentation in school or a talk in church. I don't know why I was less resilient this time but it could have been the added stress of my body going through puberty or maybe I just understood more of what my dad had done. Overall my mom's support, my dad's want to change, the support of my brothers, sisters, and best friend, and the principles I learned in church helped me to be more resilient than if I didn't have these supports. Through the optimistic outlook we had on life we were able to be reunited as a family. My mom

Running head: RESILIENCE AND PLASTICITY

never divorced my dad, which is also a stress that I never had to deal with, and we are all successful in life. I feel that once again I am resilient. My sweet grandma passed away unexpectedly 5 days ago. Although she lived a good full life it is still hard. My family is very supportive and because of my religion I have come to believe that this is not the end. This keeps me positive which helps me to be more resilient.

Running head: RESILIENCE AND PLASTICITY

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