Kelly McGonigal’s address to the Common Ground audience was perfectly timed. She spoke on January 29th, the point at which some of our seemingly-attainable New Year’s Resolutions start proving too difficult to continue. Kelly McGonigal, Ph.D., is a health psychologist and lecturer at Stanford University, and a leading expert in the new field of ‘science-help.’ Dr. McGonigal’s most recent book, The Willpower Instinct: How Self-Control Works, Why It Matters, and What You Can Do to Get More of It, explores the latest research on motivation, temptation, and procrastination as well as what it takes to transform habits, persevere at challenges and make a successful change.

Dr. McGonigal defines willpower as the ability to do what matters most, even when it is difficult or when some part of you does not want to do it. That variance begins to capture why it’s so difficult — because everything we think of as requiring willpower is usually a competition between two conflicting selves. Willpower has three components that all live in the prefrontal cortex of the brain. Some people have more of one of these components than others, and it is important to recognize and respect these individual differences. The first component is the ‘I won’t’ power — the ability that recognizes the impulse arising and fights against it. It is the ability to say no. The next component is the ‘I will’ power — the ability to find motivation and energy to say yes when every other part of you wants to say no. It is the willingness to run another lap when your legs are exhausted. The last component is the ‘I want’ power — the knowledge of and commitment to your values and goals, and the ability to remember them during times of stress or competition.

Dr. McGonigal elaborates, “During the decision-making process, there is a part of you looking to the long-term and thinking about certain goals, and then another part of you that has a completely different agenda and wants to maximize current pleasure and minimize current stress, pain and discomfort. The things that require willpower pit those competing selves against each other. Willpower is the ability to align oneself with the brain system that is thinking about long-term goals — thinking about big values rather than short-term needs or desires.”

The idea that some kids are born with willpower and some are not is a misconception – willpower is not a trait, it is a way of relating to the world. There are five contexts in which willpower is likely to emerge: Physiology, Mindset, Self-Compassion, Connection and Future Self. If willpower is cultivated in these areas, it becomes an enduring state.

**PHYSIOLOGY** - If you were sitting in a room and a grizzly bear came in, your body would release stress hormones to trigger your fight-or-flight emergency response. The biggest impact of these stress hormones is seen in your prefrontal cortex. When your prefrontal cortex is flooded, you lose the ability to control your impulses. Different scenario – instead of a bear, what if a box of donuts walks in? Some people’s physiology cause them to react to the donuts the same way they react to the bear – when needing to exhibit willpower, their body reacts with a stress response. Instead of a stress response reaction, we need to train ourselves to exhibit a ‘pause and plan’ response. Physiologically, pausing and planning has almost the opposite bodily reaction than does a fight-or-flight response – breathing and heart sync up in a certain way so that heart-rate variability is reduced. You feel more calm than frantic, and a side effect is the increased activation in the prefrontal cortex – you’re more likely to control your impulses.

The best indicator of your ability to pause and plan today is how much sleep you got the night before. Research shows that the prefrontal cortex is very sensitive to sleep deprivation. Impulse-control studies done at UCLA demonstrate that students with poor sleep quality make riskier decisions. At UC Berkeley, adults who stay awake an extra six hours, exhibit functionally-disconnected sections of their brains associated with values and goals. Researchers concluded that when sleep-deprived, environmental cues drove the adults’ decision-making much more than did their sense of morality. Bottom line, according to Dr. McGonigal, is that valuing sleep and self-care can increase your willpower.

**MINDSET** – In order to increase your willpower, you need to adopt a ‘muscle model’ of willpower. The idea is similar to Carol Dweck’s idea of a ‘growth’ mindset. Willpower is a capacity that everyone can access, the more you choose to use it and stretch it by taking on new challenges, the stronger it becomes. Moreover,
people’s beliefs about willpower can shape their future success. A 2013 Stanford study demonstrated that students who believed willpower is strengthened by use, reported eating less junk food and procrastinating less.

Developing willpower in one context can translate to others – kids who take on new challenges in one area will be helped in ALL areas of their life. However, full-out effort without recovery translates into willpower collapse. It is in the recovery phase that the growth happens. Celebrating effort, milestones, growth and accomplishments fuels motivation – praise the effort and the outcome. Because studies also show that willpower is contagious, give yourself a willpower workout. Let your children watch you work your way through things that are difficult – both you and your children will benefit.

**SELF-COMPASSION** – It turns out that the way you handle failures, disappointment and setbacks affects your willpower. Though it seems counterintuitive, studies show that the more guilt, anxiety and shame you feel about a behavior, the more likely you are to engage in that behavior again. When a lapse threatens or overrides your ability to self-regulate, you experience pre-frontal cortex impairment. The 2007 ‘Doughnut Study’ at Duke University demonstrated that experiencing shame shifts the balance of our selves. All participants in the study ate a doughnut and were subsequently put into a room with a plate of candy in the center of the table. Half of the participants were given a message of self-compassion – ‘Everyone indulges sometimes – don’t be too hard on yourself.’ Interestingly, those who received the message of compassion ate half as much candy as the participants who were not encouraged to forgive themselves.

Since the brain is hardwired to disengage from a goal when it receives worse than expected feedback, it is important to cultivate a self-compassionate point of view. Self-Compassionate language includes three aspects:

- Being mindful of your stress and suffering and your resulting feelings;
- Acknowledging common humanity and that everyone knows what it is like to have a goal and find themselves slipping back into an old pattern;
- Become a self-mentor who sees the big picture and future trajectory. Treat yourself as you would someone you care about: ‘I know it sucks that you didn’t do well – don’t give up on your goal – what is something you can do right now to get you closer to that goal?’

**CONNECTION** – Social rejection impairs willpower. In a study in which participants were told that nobody wanted to work with them, they ate twice the number of cookies as did the others who had been given partners. Additionally, reminding stigmatized groups of their status depletes the groups’ overall willpower. Neuroscientists determined that loneliness is associated with higher levels of stress hormone. Attachment - the connection between a child and his caregiver - is a significant predictor of the development of the child’s prefrontal cortex. When a child can trust their environment, they are more likely to develop willpower.

Moreover, human beings need to exist in a climate of authenticity and feel safe demonstrating how they really feel. Is your home or workplace one in which it is uncomfortable to show sadness or disappointment with each other? Members of any team need to be able to communicate with each other about their true feelings. Ask yourself if you (or your child) have at least one environment in which you can be your authentic self. If not, you need to cultivate such an environment in order to develop stronger willpower.

**FUTURE SELF** – If you do not feel close to or connected with your future self, you are less likely to exhibit willpower. This connection is difficult to develop in younger people, because they are detached from the idea of growing old. Researchers at Stanford University set up an age-progressed 3D Avatar version of your future self. They demonstrated that people who met and interviewed their future selves ended up putting aside more money for retirement. Feeling closer to your future self increases a continuity of self and increases the care you expend on your future self – whether that be in the form of staying in school, investing the time to build new relationships, making healthy lifestyle choices or cutting down on risky behaviors. To practice this concept without an Avatar, imagine a self-defining moment at least twelve months in the future and how it is going to ‘feel’ when you experience that moment. Then, verbalize that feeling and savor it. Revisit the feeling during times of stress. This exercise helps to increase intrinsic motivation.

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Dr. McGonigal is also passionate about the benefits of physical exercise. Just five minutes of movement – especially if it involves being out of doors - decreases stress, improves mood, enhances focus and boosts self-control. The prefrontal cortex is the first part of the brain to decline and physical activity can slow that decline. In order to make better decisions, Dr. McGonigal advocates shifting between being sedentary and being active throughout your day.