# **Uniquely Us Gracefully Navigating the Maze of Neurodiverse Marriage Autism Faith Marriage Chapter 8:** Navigating the Maze of Executive **Function Differences** ASD, ADHD, AuDHD

Goals for Chapter 8:

- 1. Provide a basic understanding of Executive Function (EF)
- 2. Show the varied ways EF manifests in autistic and ADHD people
- 3. Show how EF differences affect marriages
- 4. Provide strategies for couples and individuals to use their strengths to improve their relationships

What is Executive Function?

EF is a term describing the processes in the brain that we use to achieve every task we wish to complete

The more tasks we take on, the harder it is to access EF to achieve our goals

EF has been shown to be more significant determiner of life skills and success than intelligence

EF challenges are not a separate diagnosis or disorder, instead they are parts of multiple neurological, psychological, neuropsychological, and medical diagnoses

EF challenges are common in people identifying as ND

- What is Executive Function? (continued)
- EF is a basic part of everyone's neural process
- EF is vital for planning, prioritizing, initiating, problemsolving, and achieving goals
- EF varies in everyone due to factors including stress, hormones, health, cognitive load, and aging
- EF is related to self-regulation, intelligence, and creativity
- EF differs from self-regulation, and not recognizing this can result in frustration during attempts to develop EF skills (self regulation is often needed during development of EF skills)

What is Executive Function? (continued)

The pre-frontal cortex is the primary location of EF brain functions

Differences in neural networks, such as those associated with autism, can lead to EF deficit disorder

EF challenges can also be associated with low dopamine levels

EF development peaks at about 25 years of age

Adults can further develop EF skills and this requires consistent effort

Each person in a relationship has both EF strengths and challenges

Relationship of ADHD, Autism, and EF

About 50% to 70% of autistic people also meet criteria for ADHD

Most EF research is for those diagnosed with both autism and ADHD

It is possible that EF challenges experienced by either neurotype could be experience by the other

EF strengths in the Autistic and/or ADHD individuals may limit them from an appropriate diagnosis (despite cooccurring EF challenges)

Relationship of ADHD, Autism, and EF (continued) Significant EF challenges by diagnosis:

ASD—flexibility and planning

ADHD—response inhibition

AuDHD—flexibility, planning, and response inhibition

All Three groups also included challenges with attention deficit, working memory, preparatory processes, fluency, and concept formation

EF challenges may present differently between men and women

Men may show a higher level of impulsive action along with a reduced reaction time,

Women may be more avoidant of frequent punishment and have greater working memory.

Relationship of ADHD, Autism, and EF (continued)

- EF is influenced by environment (including stress, socioeconomics, health, parenting, and age)
- EF strengths and challenges can be different for all people, not just those who are ND
- Identifying EF strengths and challenges allows both parties in a relationship to work toward their desired goal
- Acknowledging that both parties have EF challenges creates safety and fosters development of common goals and shared responsibility

#### 12 Commonly Identified EF Processes Each one can be a strength or a challenge

- 1. Response Inhibition (self control)
- 2. Working Memory (verbal and non-verbal)
- 3. Self Regulation (emotional regulation)
- 4. Task Initiation
- 5. Sustained Attention (focus)
- 6. Planning/Prioritization
- 7. Organization
- 8. Time Management
- 9. Flexibility (cognitive and behavioral)
- 10. Metacognition/Self Awareness (Self Directed Attention)
- 11. Persistence/Self Motivation/Perseverance
- 12. Stress Tolerance/Resilience

#### **Couple Challenges**

Each person could be worn out and stressed from their joint and individual EF challenges, and adding children can increase the stress and fatigue

- EF skills might be insufficient to balance the self care needed to maintain resilience
- Identifying each spouse's EF strengths and challenges is a first step toward self awareness and working to grow EF skills to achieve a better relationship
- EF challenges are present for both men and women and in all neurotypes
- EF impacts each task a person does and therefore every expectation a couple may have for each other

Case Studies demonstrating strengths and challenges for the 12 processes were given

EF challenges present differently in each person and couple Improvement in EF takes time and effort and teamwork

Identifying EF challenges can increase self awareness and identify growth areas

Identifying EF strengths and challenges for both the husband and the wife supports identification of *team* strategies for working together

The foundation of growth for ND couples is compassion "Love one another as I have loved you" John 13:34