

life adversity (ELA). Previous research has shown that

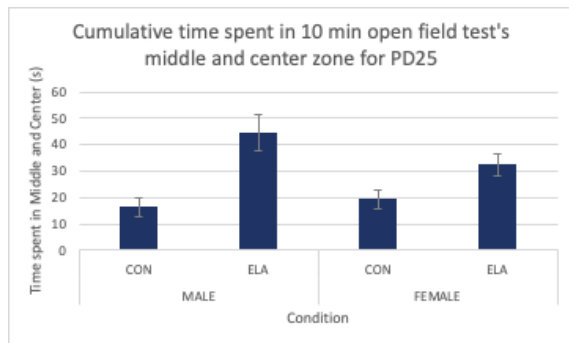
ELA changes DN *Narrangto*

the increased prevalence of anxiety and depression in women compared to men [1]. However, there is no previous research on the correlation between ELA, PV expression, methylation patterns, and anxiety-like behavior. Consequently, I will be looking at methylation as a possible mechanism for the sex- and age-dependent manner of MS's effects on PV expression and anxiety-like behavior.

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My study is a 2x2x2 design, where we are looking at rearing condition (ELA, CON), sex (male, female) and age (PD25 (post-natal day 25), PD45) as independent variables. After the birth of a litter of rats, the pups will be separated from their mother for 4 hours a day and placed into individual cups and cages, deprived of littermate and maternal stimulation during this time.

two open areas with no walls and two closed areas with high walls. Ethovision tracked four-paw entries into/time spent in open and closed areas, number of ~~anxiety-like~~ transitions from middle and center zones, and for the



10 minutes of the open field test in comparison to CON male rats. Our findings are supported by another study that showed similar results with PD35, or adolescent, male rats and also implied ELA male rats showed more anxiety-like and impulsive behavior [8]. Similarly, PD25 female ELA rats also spent significantly more time in the middle and center zone area for the 10 minute open field test in comparison to CON female rats. These results could also indicate more impulsive behavior in juvenile female rats. Some of my analyses are still ongoing, and I will continue into the fall as a part of my honors research.

