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The Effects of Age and Frontal Lobe Damage on Prospective Memory

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Poster Presentation 11

**THE EFFECTS OF AGE AND FRONTAL LOBE DAMAGE ON
PROSPECTIVE MEMORY**

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Prospective memory can be defined as remembering an intention. This type of memory relies on storage of past knowledge or events to recall an action to be performed in the future. Examples of prospective memory would be remembering to take your medication with breakfast or remembering to pick up milk on your way home. Accumulating evidence suggests that the frontal lobe plays an intimate role in the mediation of prospective memory. However, there is a paucity of studies linking damage to the frontal lobe to reduced efficacy of prospective memory. The present study examines three types of participants who differ in the level of frontal lobe functioning. The participants consist of younger adults (17-22), older adults (55 and older), and individuals with specific frontal lobe damage determined by a CAT scan or MRI. All three groups are given a computer-based general knowledge quiz that has two types of prospective memory tasks enmeshed within it: a time-based, disembedded task and an event-based, embedded task. The latter is higher in attentional processing, requiring both retrieval and that the participant break attention from a previous task. The participants are given the Stroop test and the WCST which are implicated as successful predictors of frontal lobe damage. The participants are also given subtests of the Weschler Intelligence Test and the Kaufman Brief Intelligence Test to test retrospective memory ability and to ensure that there are no significant differences in the groups based on intelligence. The results and implications will be discussed at the conference.