

## CHAPTER

# 37. Frontal Lobes and Aging: Deterioration and Compensation

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## Abstract

This chapter has three main sections. The first section focuses on evidence for age-related deterioration supporting the frontal lobe hypothesis, including executive control deficits, PFC atrophy, white matter decline, and dopamine decline. The second section describes a simple model of age-related compensation and proposes four criteria for using this term. The third section reviews consistent patterns of age-related increases in PFC activity and connectivity that have been attributed to compensation, and considers how well they fulfill the proposed criteria for compensation.

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