**Cognitive set:** Ability to discriminate a situational context and make an appropriate motor response to a given signal.

Buchwald et al. (1975) further hypothesize that the BG are involved in establishing a **cognitive set** which they define as the “ability to discriminate a situational context and make an appropriate response to a given signal” (p. 175). Graybiel (1998) has also hypothesized that the BG provide behavioral flexibility and variety in the preplanned action so that it is as appropriate as possible for the environment in which it must be performed. Each of the functions attributed to the BG, whether they are of a motor or cognitive nature, suggest that this complex set of nuclei is integral to the successful functioning of the projection system.