

THE EFFECT OF AGING ON FACE PERCEPTION ACROSS DIFFERENT VIEWPOINTS

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ABSTRACT

When processing faces, observers preferentially use the horizontal structure present in faces, and younger adults that rely most on this information tend to perform better on face identification tasks. Older adults perform worse than younger adults on a variety of face processing tasks, such as face identification and changes in lateral viewpoint. The current study tested the hypothesis that older adults are less selective for horizontal information, by using a face identification task that varied viewpoint laterally. Younger and older observers identified faces presented from either the same or different viewpoint and filtered to retain one of four orientations or unfiltered. In addition, half of the observers were presented with faces containing only the information necessary to perform the task, while the other half saw this information embedded in a full face context. This allowed us to determine the efficiency of observers' ability to extract information on their own when they are uncertain of the optimal strategy for performing the task. Compared to younger adults, older adults performed worse overall and were less selective for horizontal information. Interestingly, in the different viewpoint condition, observers performed better overall and showed more horizontal selectivity for context-present faces.

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