The categorization of perceived threat: Prototypicality of in-group and out-group

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Abstract

Social identity approach, which includes self-categorization theory, assumed that we are categorizing ourselves into a group, which triggers the depersonalization process. Therefore, we have a redefinition of the self in terms of group membership. Naturally, we have a tendency to create an in-group/out-group through the categorization process. Previous studies found that, White Caucasians' eye-gaze behavior mostly followed a T-like pattern for White Caucasian faces, and mouth for the Black race faces. However, some groups cannot be detected easily from their physical appearance. The aim of the present study is to investigate the physical appearance similarity on the eye gaze behavior around the face, depending on the saliency of the ethnic identity ($N = 34$). Results indicated that people's eye-gaze pattern mostly goes around on out-group's mouth more than the t-zone.

Introduction

Our perception is affected by our social identities which are part of our selves, but how? Previous studies showed that we have a tendency to fixate more on mouth of out-group more than in-group. Numerous of studies also showed that, not only fixating more, the eye-gaze behavior is increasing around mouth for out-group faces (Walker-Smith, Gale, & Findlay, 1977). However these studies focus on race difference which could be easily detected by physical appearance. This study focus on eye gaze behavior towards different ethnicities.

Method

Participants

Thirty-eight university student took part ($Mage = 22.07$, $SD = 1.25$). All participants have normal vision. Participants who were using contact lenses or eyeglasses and who were wearing eye makeup excluded from the study.

Materials

SMI Experiment Center version 3.4 (SensoMotoric Instruments, GmhbH.) was used to present faces to participants via a desktop computer on a 22-inch monitor. The iView X system used for data recording. A chin rest used to fixate the eye distance of the participants (60-65 cm distance from the monitor). SMI Experiment Center AOI (Area of Interest) Editor specified the T-zone (eyes and nose) and mouth areas.

Procedure

First, participants were informed about the experiment, filled Inform Consent and Demographic Form. Second, they filled the Perceived Threat Scale. For the Eye-Tracker recordings, participants saw two different sets of faces (Syrian and Turkish) with two different labeling (Syrian and Turkish). Twenty-four face pictures were shown under four different conditions. Perceived similarity/difference of all faces are determined with a pilot study ($N = 114$). It was expected from the participants to scan the faces during the 7 seconds period.

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Results

A significant main effect of mouth sequence, $F(1, 33) = p < .05$, $\eta^2 = .17$ was found.

Also a significant main effect of mouth dwell time $F(1, 33) = 4.04$, $p < .05$, $\eta^2 = .11$ was found.

Discussion

Our results indicated that, people's eye-gaze pattern mostly goes around on out-group's mouth more than the t-zone. Previous studies showed, the eye gaze pattern of the one race differentiates while looking at other race face; more eye-gaze patterns of the white people on mouth, rather than the t-zone for black race face. This study creates a new perspective by applying the results in the literature, and showed the same gaze pattern for people from different ethnicities which cannot be easily detected from physical appearance.

References

Walker-Smith, G. J., Gale, A. G., & Findlay, J. M. (1977). Eye movement strategies involved in face perception. *Perception*, 6(3), 313-326.