

Age of acquisition

Life



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Abstract

Preferences of many people are usually shaped and determined by several factors. Studies on effect on exposure of a given item cause an increase in liking to the given item or preferences, but studies using novelty preference have shown a different set of results (Barry and Johnston 2006: 123).

Repeated stimulus affect image category whether novelty or familiarity preference emerges. Faces were found to elicit familiarity preference. In the present AOA study, preference judgments evolved in all the exposures. We therefore adopted the paradigm that objective judgment or passive exposure task contexts leads to varied results. The results indicated that segregation of the given preference biases across various objects. Preference for familiar faces is also determined by the age at which they are exposed to the image of picture. The paper has thus discussed all the possible mechanisms underlying preferences.

Introduction

Our preferences are influenced by experience in several ways. Our preferences lean towards that which we have not experienced in life (Smith et al. 2006: 592). Barry and Johnston (2006: 124) reiterate that people make preferences due to their extensive experience with the given items like familiar faces and scientific research has identified and investigated these trends. Generally, familiar objects are preferred than novel or new objects. The results in the present experiment may have varied because the data was obtained from different categories of personalities, subjects and paradigms. According to Smith et al. (2012: 209) the two bases of familiarity,

novelty and preference elicit varied reaction across different categories of objects. The participants rated their preference based on the age of the acquired face and familiarity of the face. In a given sub-block one picture was shown in each of the trials thus became familiar. The other image was new in each of the trials so it was novel. The pictures of the same personality at different ages were also shown in a novel manner. The experiment tested three different types of pictures: familiar faces, early versus late acquired faces and a control tool. The respondents preferred repeated faces in the face stimuli as the experiment progressed. For the personality scenes, the new faces became preferred against the old faces. The control tool had no strong preference as bias was universal in either direction.

In the study by Moore et al. (2004: 423), the findings showed that familiarity and novelty preference between the personality faces replicated across various conditions as opposed to this study which had inconsistent results especially on the novel preference. This implies that repeated stimulus ought to have increased rather than decreased. The study thus cannot explain the cause of the inconsistency based on the type of stimulus as there is existence of a wide range of exposure on varied stimulus like words and photographs.

The effects of exposure on the desired preference may be altered by performing a desired judgment on every presentation (Moore and Valentine 1998: 490). Moore et al (2004: 422) states that explicit evaluation is possible in the performed task in the trial which may lead to a stronger habituation as compared to repeated stimuli which leads to novelty preference for the early

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acquired faces of the personalities. This therefore streams the hypothesis for the reaction time that familiarity preferences rely on automatic processing while novelty preferences demand a controlled cognitive processing (Morrison and Ellis 2000: 172). The present study was controlled by one major hypothesis: different kinds of tasks may lead to varied types of memory processing which can cause different effects on familiarity and novelty preferences. The present study relied on familiarity and novelty as its dependent variable while geometric pictures were used as the control tool in the study. The main objective of the present study was to examine the reaction time to face processing as a familiarity decision (Smith et al. 2012: 205). The independent variable of the study was to examine the extent at which segregation for novel and familiar faces can be formed due to exposure.

Methods

Participants

115 adults, who included both the graduates and undergraduate students, from London South Bank University took part in the study. All the respondents were not acquainted with knowledge about the purpose of this study. Out of 115 participants only 114 respondents turned up for the study. The study had 66.7% female respondents with 33.3% male. The participants had mean age error of .807 with a Standard Deviation of 8.658. The study comprised both UK and International students. The London South Bank University committee for protecting human subjects confirmed and approved this experiment. Later, all the participants were given an informed consent.

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Stimuli

The present AoA study used IBM Compatible computers using Superlabs (Cedius Corporation) software which helped in storing the raw data (Morrison and Ellis 2000: 169). The experiment opted to incorporate a 20-inch LaCie monitor was controlled by a Dell computer. The experiment used a similar attractiveness pre-testing data and visual stimuli like that used by Moore et al. (2004: 431). The experiment used three categories of pictures: 10 early-acquired famous people pictures, 10 late-acquired famous people pictures and 20 unfamiliar pictures like geometric figures. Geometric elicited little choice bias thus was preferred in this experiment as a control tool. The faces of the personalities were generated by use of FaceGen into four major sub-categories based on the race (Barry and Johnston 2006: 90). The software categorized the faces into African, European, Asian and Indian with two distinct gender relations that is; male and female and further into young and old categories. The pictures of the personalities were black and white photos collected from various online sources. The pictures were divided into eight subcategories: footballers, politicians, show biz, comedians, religious leaders, celebrities, actors and actresses and journalists. MathWorks Inc., a Matlab program generated the Geometric figures into Fourier descriptors which came up with four categories with properties such as simple versus complex and symmetry versus asymmetry (Morrison and Ellis 2000: 178). The AoA experiment categorized the geometric figures into eight distinct categories. In each of the subcategory of images, there were 20 pictures and the picture that had the median attractiveness rating was chosen as the 'old' picture.

The experiment used this scheme to avoid introducing unwanted bias in the familiar or novel stimuli.

Design

The present AoA study sought a within-subject design. This is due to the fact that similar subjects, such as early-acquired and late acquired pictures, were used. Furthermore, the experiment comprised two major phases: a preference judgment phase and an experience phase. The preference judgment phase consisted of 10 trials in each category and 20 trials for all the categories. Each of the preference judgment had eight subcategories while the experience phase had 20 trials with eight subcategories (Moore et al 2004: 427). The categories of pictures were run in each of the phases and blocks were assigned to each participant in the experiment. 8 subcategories were later run in each of the given blocks. Out of the 20 available subcategories of the faces assigned to each of the participants, 10 faces emerged from the participant's race. All 8 subcategories were used in the geometric figures. In the blocks, the order of each subcategory was randomized.

Procedure

The participants viewed the pictures in the experience phase with an unlimited and self-paced viewing time frame for each of the trials. The participants were encouraged to take glances on each of the shown pictures. The participants were encouraged to be serious to the given stimuli as they were provided with a questionnaire which had Yes/No answer. However, the participants were not aware of the judgment phase until after the <https://assignbuster.com/age-of-acquisition/>

experiment. The participants were requested to make a relative judgment on the given pairs of pictures. The experiment used a 7-point scale where respondents were asked made their verdict with a rating of 1-3 on the left and a rating of -1 to -3 on the right. Zero point indicated no response on the given set of picture (Barry and Johnston 2006: 203).

The participants were shown pictures sized 256? 256 randomly. Two sets of pictures, that is old versus new were shown side by side. The pictures were randomly shown on either left or right in a random manner. The central point of each picture was located at 10° of the given visual angle. Face pictures were located at 12° ? 12° with geometry pictures shown at 17° ? 12°. Later a response indicator frame of 36°? 1. 5° was located below the central point at 12. 7° in the response phase. The movement of the indicator from 1-3 in either direction indicated a relative preference rating (Moore and Valentine 1998: 507).

Results

The present study recorded a positive preference rating; the repeated ' old' picture was preferred as than the repeated ' new' picture. We analyzed the rating of the first preference rating of the sub-blocks. The mean Reaction Time to the early-acquired faces was 887. 13 and recorded a Standard Deviation (SD) of 244. 691. The present study recorded a mean Reaction Time (RT) to the late-acquired celebrities of 963. 28 and a Standard Deviation of 283. 463. More so, the present study recorded a mean RT to unfamiliar faces of 1021. 18 and SD of 276. 448. A repeated mean measure of the faces against the image category revealed a huge significant

difference among the three image categories. To evaluate if there was a significant choice bias towards the novel or familiar pictures, we tested the sign test for the two entries. The results indicated a negative z-score for the mean RT to late-acquired faces against the mean RT to early-acquired faces of -5.782. The sign test for the two categories indicated a significant value of .000. The results indicated that familiar celebrities' faces were significantly preferred with mean RT to late-acquired faces showing a negative difference of 26 which implies that mean RT to late-acquired faces is less than the mean RT to early-acquired faces. The present study indicated zero frequency between the mean RT to late-acquired faces and the mean RT to early-acquired faces.

Discussion

The above results showed preference for the familiar celebrities faces with no preference bias towards novelty or familiarity. There was no preference over control tool (geometric figures) after the 20 repetitions to each 'old' picture. Recent studies indicate that natural/control tool is inconsistent with exposure effect where repeated pictures were preferred (Moore and Valentine 1998: 510). The present study sought to explain why there was no exposure effect for the control tool/geometric figures. This can arise due to the way the stimuli were presented. The present study presented the images side-by-side while Barry Johnston (2006: 80) state that in the mere exposure effect, one picture is presented at a time.

In a study by Smith et al (2012: 209), there was no novelty preference bias in the control tool and development of a novelty preference for the control

tool requires a detailed performance of preference judgment during exposure. The present study omitted the preference task but instead used 20 trials which failed to elicit a significant preference bias (Morrison and Ellis 2000: 178). The results in the present study suggested that familiarity preference can be induced by passive perceptual exposure but for novelty preference to occur there must be some certain level of selection or processing. This implies that task-context of different experience has varied preferences which ought to be accounted for to help understand other novelty and familiarity mechanisms. From the present study, it is evident that differences between novelty preference for control tool and familiarity preference may be avoided through omitting the object categories and the task-context experience (Morrison and Ellis 2000: 171). Similar study with same variables ought to be carried out in the presence of financial or commercial relationship and measure its effect on the results.

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