

# [Subliminal mere exposure influence psychology essay](https://assignbuster.com/subliminal-mere-exposure-influence-psychology-essay/)

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It is commonly seen that humans prefer familiarity, whether it be with person, place or object. Many researchers believe that repeated exposure of certain stimuli will generally increase favourable attitudes towards it. This repeated exposure breeds a certain familiarity, subsequently enhancing liking of the stimuli (Zajonc, 1968). This process is the basis behind the mere exposure effect. This effect has also been shown to occur with subliminally presented stimuli; that is, stimuli presented for a duration in which recognition is not possible (Bornstein & D’Agostino, 1992). However, it remains unclear whether this can generalise to enhanced perceptions of attractiveness. The romantic red effect is another process which increases liking, however in the form of perceived attractiveness, due to the presence of red physically associated with stimuli (Elliot & Niesta, 2008; Elliot et al., 2010). It may be a possibility that this romantic red effect also occurs with subliminally presented stimuli, as found with the mere exposure effect.

The monograph by Zajonc (1968) popularised the idea of the mere exposure effect through its exploration into certain word-related experiments. In one such experiment, participants were shown, in different frequencies, a collection of meaningless words, however were informed these were Turkish adjectives with either positive or negative meanings. Participants were then asked to estimate the meaning of the word on a “ goodness” scale. When the words were shown in high frequencies, they were rated higher on the “ goodness” scale than when shown in low frequencies; suggesting the mere exposure effect. Alternatively, these results may have been partially influenced by the contextual setting of the laboratory, as suggested by Burgess and Sales (1971). However, a more recent meta-analysis into 20 years of research on mere exposure instead seems to validate the “ exposure-affect relationship” Bornstein (1989). Yet was the conscious recognition of the stimuli in the experiment essential for the observed mere exposure effect?

Moreland and Zajonc (1977) suggest that stimulus recognition is not a necessary condition for the mere exposure effect to occur; instead proposing that “ the observed relationship between stimulus exposure and liking could have been mediated by stimulus recognition” (Moreland & Zajonc, 1977, p. 195). Kunst-Wilson and Zajonc (1980) investigated this connection further through subliminal presentation of randomized octagons. Participants were shown randomly-generated irregular octagons for 1ms and subsequently asked to rate liking and recognition. While recognition was shown to be at levels of chance for all octagons, levels of affect were noticeably higher in subliminally pre-exposed octagons compared to new octagons. However, as the experiment was conducted with only 24 participants of unknown demographics, its validity is unknown.

Replicating and extending the aforementioned experiments, Bornstein and D’Agostino (1992) utilised 25 black-and-white photographs of women comparable in attractiveness, priming 120 undergraduates with each photograph for either 5ms or 500ms. Participants were then asked to rate liking and recognition of each woman. With increasing exposure frequency, an enhanced liking was noticed in the 5ms condition, thus suggesting the subliminal mere exposure effect is present with human stimuli.

The mere exposure effect is not the only technique to increase affect towards a stimulus. The romantic red effect is a phenomenon by which the inclusion of red with a male or female will increase perceived attractiveness by the opposite sex (Elliot & Niesta, 2008; Elliot, Tracy, Pazda, & Beall, 2013). This phenomenon was supported by Elliot et al. (2010) whereby female participants rated a photograph of a male with a red border higher in attractiveness relative to the same male with a white border. The reverse has also been demonstrated. (Elliot & Niesta, 2008; Elliot et al., 2013; Gueguen, 2012). At present, most experiments have only demonstrated this effect in Western culture. However, recent studies are starting to suggest the universality of the effect (Elliot et al., 2013)

As attractiveness perception is a form of liking (Elliot et al., 2010), it may follow that the subliminal mere exposure effect also increases a person’s perceived attractiveness. It may also follow that, in a similar way to the mere exposure effect occurring with subliminally presented stimuli, there exists a relationship between the subliminal mere exposure effect and the romantic red effect. The purpose of this report is to investigate whether subliminal pre-exposure to faces enhances ratings of perceived attractiveness, and, whether the romantic red effect occurs with subliminally presented faces; that is, whether faces subliminally presented on a red background are viewed with higher perceived attractiveness than those on a blue background.

In light of the aforementioned research, it was hypothesized that (a) subliminal pre-exposure to faces would result in increased ratings of attractiveness relative to faces with no subliminal pre-exposure and (b) subliminally presented faces on a red background would have higher ratings of attractiveness relative to those subliminally presented on a blue background.

## Method

## Participants

Participants were 1009 undergraduates (386 male, 623 female, M = 19. 5 years) from the University of New South Wales (UNSW). All participants were selected through enrolment in an introductory psychology course. The experiment was conducted during tutorials and participants were informed the experiment would later be the subject of a report.

## Design

The independent variables were background colour (red or blue) and face type (pre-exposed or new). The dependent variable was the ratings of perceived attractiveness.

## Materials

Stimuli comprised of 20 different faces divided into two sets of 10 (5 male, 5 female). The first set was subliminally presented, while the second set was not. Stimuli were presented on a computer through a specially-designed website by UNSW. A 10-point scale was used to rate the attractiveness of the faces, where 1 = ‘ not at all attractive’ and 10 = ‘ extremely attractive’.

## Procedure

Participants were brought to a computer laboratory during their tutorial and were asked if they would participate in an experiment. Participants who did not consent were provided with another relevant experiment. The main experiment consisted of two phases; the ‘ training phase’ and the ‘ test phase’.

In the ‘ training phase’, participants were asked to press the spacebar whenever an ‘ x’ was shown on the screen (to focus their attention on the screen). Trials in which the ‘ x’ was presented were not analysed. While this occurred, participants were shown a face for 17ms, after which the face was covered up by a random pattern of dots. This was repeated for 10 faces. Half the participants were shown faces on red backgrounds, while the other half were shown faces on blue backgrounds. These blue and red conditions were randomly allocated to tutorial groups.

In the ‘ test phase’, participants were asked to rate the attractiveness of 20 different faces presented on a white background, comprising of the 10 subliminally presented faces, and 10 new faces.