



**THE EFFECT OF THE SHAPE OF EYEGLASSES ON
JUDGEMENTS TOWARD WEARERS' OCCUPATIONS
-REPLICATION AND EXTENSION OF GUÉGUEN (2015)-**

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Abstract

Studies have found that eyeglasses could increase the perceived intelligence of wearers, and the shape of eyeglasses also has an influence on judgements of wearers' personalities. This study replicates Guéguen (2015), in which the influence of the presence or absence of eyeglasses on the estimation of the wearer's socio-professional group was investigated, and extends the previous research by taking eyeglass shapes into consideration. Participants looked at a photograph of the face of a man with round or square eyeglasses or no eyeglasses, and estimated his occupation. The results indicated that the face with eyeglasses is more likely to be judged as that of a high status person, especially when the eyeglasses are square rather than round. It could be explained that a metaphor-consistent link between shape and personality and perceived higher competence changes the estimation of the occupation of the target.

Keywords: *eyeglasses, perceived competence, the shape of eyeglasses, replication and extension.*

1. INTRODUCTION

Previous studies have shown that the wearing of eyeglasses has both positive and negative influences on wearers' impressions of their facial image. On the negative side, Leder, Forster, and Gerger (2011) found that eyeglasses made wearers appear less attractive. The same results have been reported in other research (Hasart & Hutchinson, 1993; Lundberg & Sheehan, 1994). On the positive side, Guéguen and Martin (2017) reported that passersby on the street agreed to be interviewed more often when the interviewers wore eyeglasses in actual field settings.

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This was because of the perceived higher conscientiousness of people wearing eyeglasses. Likewise, Thornton (1943, 1944) found that participants wearing eyeglasses were perceived as more intelligent and industrious than those without eyeglasses. Okamura and Ura (2017a, 2017b) focused on the effect of the shape of eyeglasses on the personality judgement of others. They proposed that judgements of many personality items are influenced by eyeglass shape, especially in respect of warmth and competence traits: a face wearing round eyeglasses is perceived as warmer, whereas a face wearing square eyeglasses is perceived as more competent. Moreover, Okamura and Ura (2017c) reported that the shape of eyeglasses affects our own personality judgements: imagining wearing round eyeglasses leads our self-evaluation to be warmer, whereas imagining square eyeglasses leads it to be more competent. The authors explained the mechanism in terms of metaphor. In fact, in Japanese, the words “*marui*” (round) and “*shikaku*” (square) are used to describe personality traits: “*marui*” means warm and mellow and “*shikaku*” means competent but stubborn. Since people think of abstract concepts in terms of more concrete concepts by using metaphor, the activation of round or square (concrete) concepts could influence personality (abstract) concepts in a metaphor-consistent manner (*metaphoric transfer strategy*: Landau, Meier, & Keefer, 2010).

Guéguen (2015) hypothesized that wearing eyeglasses is associated with perceived higher conscientiousness and intelligence and found that people who wear eyeglasses were more often judged as members of high-status socio-professional groups. This result is consistent with the findings of Okamura and Ura (2017a), in that a face with square eyeglasses was judged most competent, a face with round eyeglasses was judged next most competent, and a face with no eyeglasses was judged least competent. Based on the conclusion that intelligence and competence are positively correlated with socio-professional status (Firkowska-Mankiewicz, 2011; Furnham & Cheng, 2013), it is hypothesized that square eyeglasses are most frequently associated with intellectual occupation, round eyeglasses are next most frequently associated with it, and no eyeglasses are least frequently associated with it. The present study investigates the hypothesis using the same methodology as Guéguen (2015).

2. METHOD

2.1. PARTICIPANTS

Participants were 56 men and 52 women (aged between 22 and 58 years). Sample sizes were calculated using G*Power 3.1.9.2 (Faul, Erdfelder, Lang, & Buchner, 2007) and the parameters $\alpha = 0.05$ and power = 0.8. They received a questionnaire and responded to it. They were informed that they could drop out of the study at any time during the survey and their informed consent was obtained before taking part in the study.

2.2. STIMULI

Three black-and-white photographs of the face of a 36-year-old man were used. The male target was either wearing round or square eyeglasses, or not wearing eyeglasses. The eyeglasses had been added to the facial image using software for fitting simulation of eyeglasses in order to maintain exactly the same facial expressions. The photographs of the two kinds of eyeglasses that were used in the present study are shown in the appendix.

2.3. PROCEDURE

Participants were randomly divided into three conditions (no eyeglasses, round eyeglasses, square eyeglasses). Each group consisted of 36 participants. They were instructed to look carefully at the photograph and estimate the person's occupation from the seven categories that were used in Guéguen (2015): (a) farmer, (b) artisan or merchant, (c) executive or highly intellectual occupation, (d) middle executive, (e) office worker, (f) manual worker, and (g) unemployed.

3. RESULTS

The dependent variable was the number of participants who selected each category. The data are presented in Table 1.

Table 1. The number of participants who selected each category in each group

	no eyeglasses <i>N</i> = 36	round <i>N</i> = 36	square <i>N</i> = 36
Farmer	5	3	2
Artisan or merchant	4	3	1
Executive or highly intellectual occupation	5	14	22
Middle executive	8	7	5
Office worker	7	6	6
Manual worker	4	2	0
Unemployed	3	1	0

Since many of the expected frequencies were less than five (57.1%), the seven categories were classified into two categories to improve the strength of the chi-square test: executive or highly intellectual occupation (highly intellectual) and the other six categories (middle or low intellectual). An independent chi-square test was performed and revealed a significant interaction ($\chi^2(2, N = 108) = 17.06, p < .001, \phi = .40$). Further interaction revealed that significantly more participants in the square eyeglasses condition selected highly intellectual occupations (adjusted residual = 3.4, $p < .01$), and significantly fewer participants in the condition

selected middle or low intellectual occupations (adjusted residual = -2.6, $p < .01$), whereas significantly more participants in the no eyeglasses condition selected middle or low intellectual occupations (adjusted residual = 2.8, $p < .01$), and significantly fewer participants in the condition selected highly intellectual occupations (adjusted residual = -3.5, $p < .01$). No further significant interactions were found.

4. DISCUSSION

These findings are in line with Guéguen (2015) in that eyeglasses are likely to be associated with high status and intellectual occupation. Moreover, it was found that square eyeglasses are more frequently associated with executive or highly intellectual occupations, whereas no eyeglasses are less associated with occupations of this kind. These results confirmed that a face with eyeglasses is perceived as being of higher intelligence, especially in the case of square rather than round eyeglasses, and that a metaphor-consistent effect between square (shape) and competence (personality) affects the estimation of the wearer's occupation.

DECLARATION OF CONFLICTING INTERESTS

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APPENDIX



Figure 1. Round eyeglasses



Figure 2. Square eyeglasses