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How beauty works. Theoretical mechanisms and two empirical applications on students' evaluation of teaching

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ABSTRACT

Plenty of studies show that the physical appearance of a person affects a variety of outcomes in everyday life. However, due to an incomplete theoretical explication and empirical problems in disentangling different beauty effects, it is unclear which mechanisms are at work. To clarify how beauty works we present explanations from evolutionary theory and expectation states theory and show where both perspectives differ and where interlinkage appears promising. Using students' evaluations of teaching we find observational and experimental evidence for the different causal pathways of physical attractiveness. First, independent raters strongly agree over the physical attractiveness of a person. Second, attractive instructors receive better student ratings. Third, students attend classes of attractive instructors more frequently – even after controlling for teaching quality. Fourth, we find no evidence that attractiveness effects become stronger if rater and ratee are of the opposite sex. Finally, the beauty premium turns into a penalty if an attractive instructor falls short of students' expectations.

1. Introduction

Many studies investigating how beauty might affect social outcomes have accumulated over the past years. This body of research brought forward theories, derived hypotheses, and empirically tested the ways that looks influence various areas of society such as the labor market (Hamermesh, 2011; Hamermesh and Biddle, 1994; Mobius and Rosenblat, 2006), law and crime (Biddle and Hamermesh, 1998; Mocan and Tekin, 2010), trustworthiness and reciprocity (Andreoni and Petrie, 2008; Mulford et al., 1998; Solnick and Schweitzer, 1999), personal relationships and marriage (Elder, 2008; Margolin and White, 1987; Simpson et al., 1990; Townsend and Levy, 1990), public elections (Hamermesh, 2006; Rosar et al., 2008, 2012), school (Jackson et al., 1995; Ritts et al., 1992), game shows (Belot et al., 2012), and even the use of space on sidewalks as a measure of dominance and power (Dabbs and Stokes, 1975). The bottom line is that beauty is consistently relevant in shaping social relationships in all these studies, and hence it is an important dimension of social inequality. In light of cumulative *attractiveness treatment advantage* over the life course (DiPrete and Eirich, 2006; Jæger, 2011) the relevance of sociological inquiry into the "ugly stratification" of this "beautiful field" becomes abundantly clear. This is particularly relevant since looks can only be influenced by actors to a certain extent, cannot be hidden in social interactions, and are highly salient to others.

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The *beauty premium* regularly produces differences in at least the five following ways.

Beauty Consensus: Attractiveness ratings of different raters within a culture strongly correlate (Henss, 1992; Patzer, 1985, 2007). There are social aspects to current beauty standards and although attractiveness norms vary some with time and context, certain judgment criteria are remarkably stable over time and between cultures (Buss 1989; Cunningham et al., 1995; Gangestad and Scheyd, 2005; Grammer et al., 2003; Langlois et al., 2000; Langlois and Roggman, 1990; Rhodes et al., 1998, 2001).

Attractiveness attention boost: Good-looking faces draw more attention than unattractive and averagely attractive ones and they are noticed faster and more frequently (Maner et al., 2007; Mulford et al., 1998). This is also true for infants who prefer attractive faces and spend more time looking at them (Langlois et al., 1990; Samuels and Ewy, 1985).

Gender-specific attractiveness stereotypes: Attractive individuals trigger a number of general positive ascriptions. The stereotype activated may be summarized in the popular formula "what is beautiful is good" (Dion et al., 1972: 285), since people regard attractive individuals as more sociable, kind, well mannered, honest, reliable, intelligent, creative, successful, and mentally and physically healthy (Eagly et al., 1991; Feingold, 1992; Jackson et al., 1995; Langlois et al., 2000). Furthermore, individuals attribute the prevalent gender stereotypes to exceptionally good-looking females and males (Gillen, 1981; Heilman and Okimoto, 2007; Heilman and Saruwatari, 1979).[1]

Attractiveness glamour effect: Attractive people have a higher chance of others attributing their mistakes to adverse circumstances. This leads to a decreased likelihood of being personally blamed and sanctioned by relevant others (Bassili, 1981; Dion et al., 1972). Thus, even blatant misconduct of attractive individuals does not necessarily impair their "aura" of being beautiful and, therefore, good.

Beauty Penalty: Physical attractiveness is not advantageous under all circumstances. Some studies indicate that misbehavior by persons with a stunning appearance can cause stronger sanctions (Andreoni and Petri, 2008; Wilson and Eckel, 2006). Research by Sigall and Ostrove (1975) suggests that such reactions are more likely if attractiveness is a relevant characteristic for the task under study (see also Webster and Driskell, 1983: 142). Explaining this bundle of findings is the major theoretical task in research on the effects of physical attractiveness in social interactions. Although most existing research refers to at least some of these empirical regularities, the social mechanisms underlying these phenomena are, however, rarely explicated within a coherent theoretical framework. In this paper we draw on evolutionary theory and expectation states theory to address competing and complementary explanations. We propose mechanisms that could bring about the beauty premium and penalty, and empirically test them in one selected area: *students' evaluations of teaching* (SET) (Hamermesh and Parker, 2005; Klein and Rosar, 2006; Süssmuth, 2006; Wolbring, 2010a). The main finding of these previous studies is that better-looking teachers receive better evaluations than their less beautiful colleagues, all else equal. Upon closer inspection, the advantages of studying SET to research effects of physical attractiveness in general become clear. The central problem of empirical studies on the effects of physical attractiveness is causality, since the beauty effect might be confounded with a performance effect. For example, in labor market studies it is seemingly impossible to control for all aspects of productivity in order to isolate the causal effect of physical appearance. In comparison, studies on SET offer three fundamental advantages: First, using SET as a quality indicator and controlling for other potentially confounding variables (e.g., characteristics of course, student, and teacher) we can discriminate between the effects of teaching quality and the instructors' appearance. Although SET obviously do not yield perfectly objective measures of teaching quality, students' subjective ratings capture a lot about teaching quality (for broad overviews see Marsh, 2007; Spooren et al., 2013). Second, the familiarity of students with teaching, test situations, and SET facilitates the use of laboratory experiments, which help to further disentangle effects of productivity and discrimination with a high degree of internal validity. By systematically varying physical appearance while holding teaching performance constant we can validate the findings from the observational study. Third, the laboratory setting allows us to test the proposition of the beauty penalty, which is quite difficult with observational data. Due to ethical restrictions, students cannot be issued tests of varying difficulty in actual teaching situations thus we have to rely on fairly vague indicators of course difficulty in our analysis of observational SET data. We combine the strengths of both approaches: Study 1 draws on panel data of actual SET combined with exogenous measurements of the instructors' physical attractiveness. This study specifically allows us to assess the effect of the instructor's appearance on course ratings while controlling unobserved heterogeneity at the student level thanks to repeated observations of the same students across different classes. Moreover, holding course quality constant we ask whether students attend classes held by attractive teachers more frequently. Study 2 complements these observational analyses with a series of laboratory experiments, in which SET for a fictitious lecture including a test were gathered. Treatments are the instructor's physical attractiveness and sex, the difficulty of the test, and the sequential arrangement of test and SET. This setup allows us to test the hypothesis that the beauty premium turns into a penalty under certain circumstances.

2. Theoretical background

The following section consists of theoretical arguments from evolutionary theory and expectation states theory. First, we present the main arguments from evolutionary theory, especially from sexual selection theory proposing that beauty signals

[1] These gender-specific attractiveness stereotypes can have negative consequences known as the beauty-is-beastly effect (Heilman and Saruwatari, 1979). In a context demanding masculine characteristics, such as management, typically feminine attributes will usually lead to inferior treatment resulting in a negative beauty bias. Good-looking men, on the other hand, are expected to be treated worse than their less beautiful male colleagues in areas, such as jobs in kindergartens where male competitiveness is less advantageous than female empathy.