



The Relationship Between Adolescent Attractiveness and Adult Income Level in the United States

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Introduction

- Attractiveness is correlated with income level (Kukkonen, Pajunen, Sarpila & Åberg, 2024)
 - The majority of studies agree that the effect is greater for men (Roszell, Kennedy & Grabb, 1989)
 - Some studies suggest that the effects are linear for women, and concave for men (Pfeifer, 2012)
 - There is also evidence that attractiveness can be detrimental to income for women (Johnson, 2010)
- One concern is the direction of the relationship, as there are ways that money can “buy” attractiveness. By looking at adolescent attractiveness, we can more confidently define income as the dependent variable.
 - One study in Scotland determined that adolescent attractiveness is a predictor of higher income, but did not differentiate for the sexes (Benzeval, Green, & Macintyre, 2013)
- There is a gap in the existing literature about the effects of adolescent attractiveness on adult income level in the United States, as well as by sex.

Methods

- Data for this study is taken from the The U.S. National Longitudinal Survey of Adolescent Health (Add Health). It is a nationally representative sample with 20,000 participants who were adolescents (ages 12-18) during the Wave I in the 1994-95 school year. This study uses data from Wave I and Wave V, which occurred 20 years later. **However, the sample size for this study is actually only 4,125**, as many participants did not participate in wave V, and data is missing for the income level question for over a third of the respondents who did participate in wave
- Attractiveness was measured with a post-interview question filled out by the interviewer: “How physically attractive is the respondent?” on a scale of 1 (very unattractive) to 5 (very attractive).
- Income level was measured with the question “in the last calendar year, how much income did you receive from personal earnings before taxes? Include wages or salaries, tips, bonuses, overtime pay, and income from self-employment.” Responses were recorded on a scale of 1 (<\$5,000) to 13 (≥\$20,000). Responses 2-6 increase at intervals of \$5,000, responses 7-8 increase at intervals of \$10,000, 9-10 increase at intervals of \$25,000 and 11-12 increase at intervals of \$50,000.

Research Questions

- Is there a relationship between adolescent attractiveness and adult income among Americans born between 1977 and 1983?
- Is the relationship linear, and does it vary by sex?

Results

Univariate

- Mean attractiveness score given was 3.58 with standard deviation of 0.89
- Mean income was 56443.03 with standard deviation of 50345.36

Bivariate (fig. 1)

- As attractiveness increases, so does income
- An increase of 1 “level” of attractiveness is associated with a \$6,455.80 increase in income ($p < 0.001$)
- However, the effect is not totally linear: running a different regression reveals that income is associated with an “attractiveness squared” term ($\beta = 1,597.4$, $p < .05$)

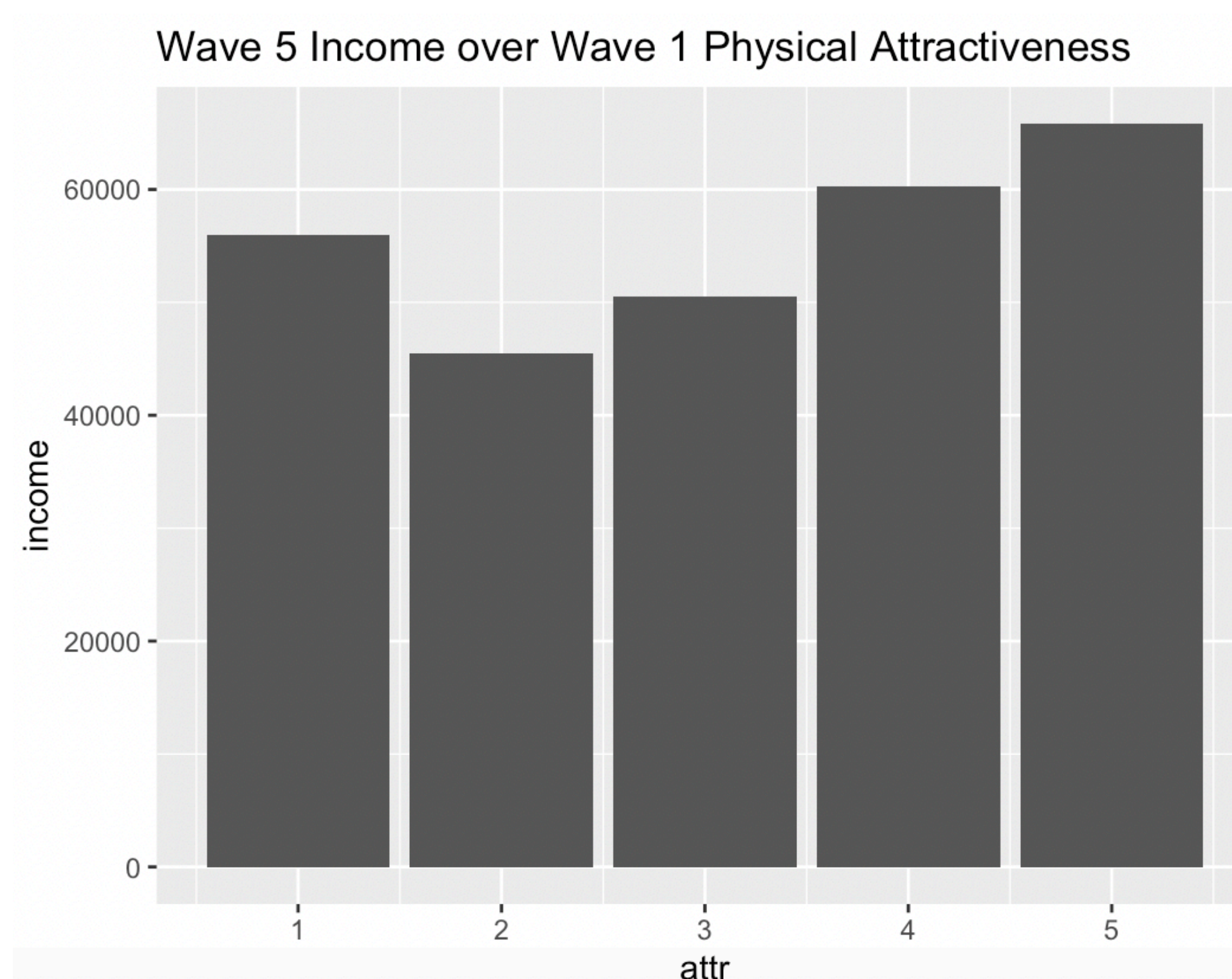
Multivariate (fig. 2)

- Sex significantly moderates the effects of attractiveness on income

$$\text{income} = \beta_0 + \beta_1 \text{attr} + \beta_2 \text{attr}^2 + \beta_3 \text{female} + \beta_4 \text{attr} * \text{female}$$

- The above model outputs significant coefficients for the intercept, the attr^2 term, and the $\text{attr} * \text{female}$ interaction term
 - $\beta_2 = 2,521.1$ ($p < 0.001$)
 - $\beta_4 = -7,103.8$ ($p < 0.001$)

Figure 1

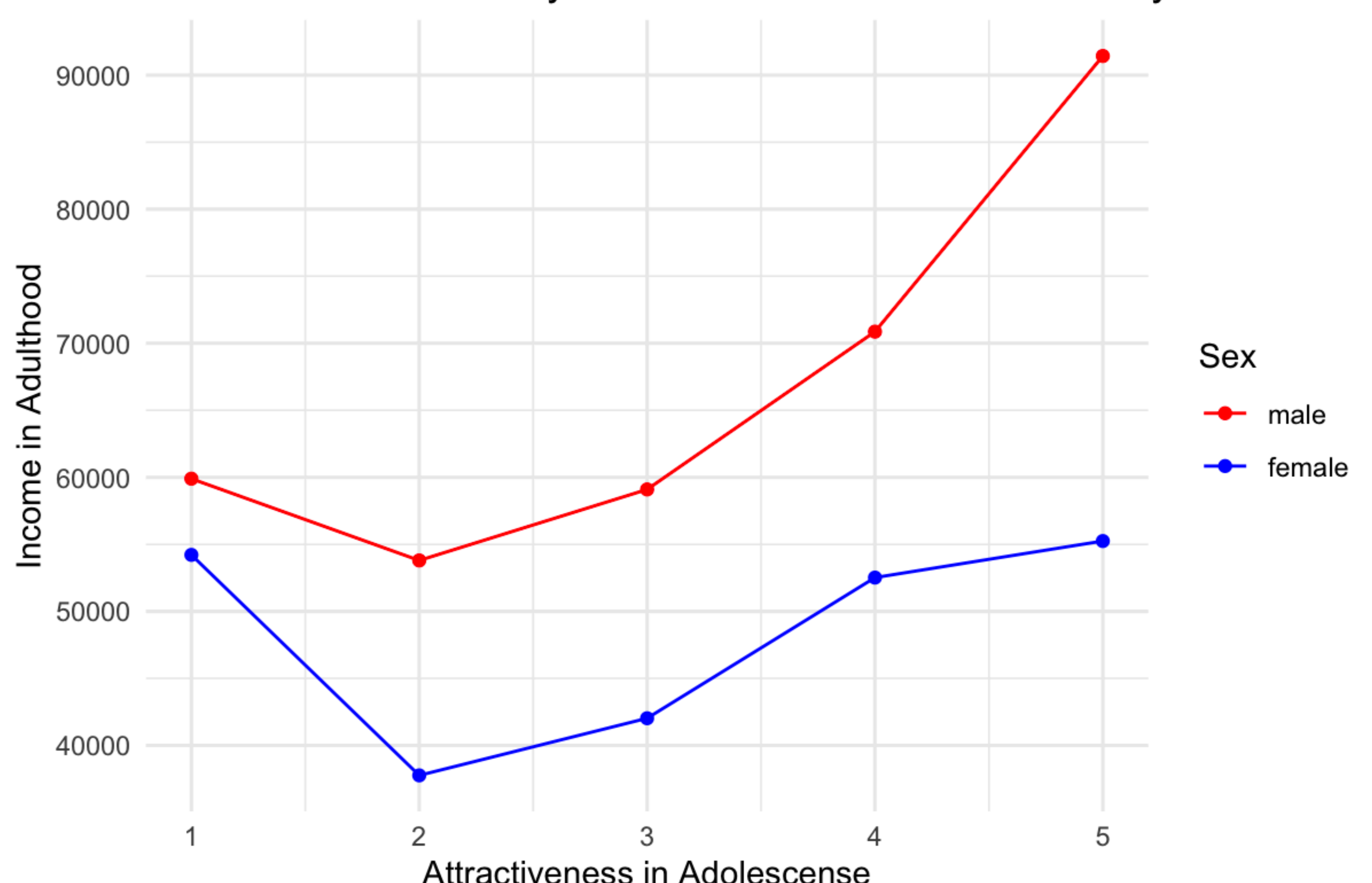


Discussion

- Attractiveness is significantly correlated with income, and the relationship is moderated by sex
- These findings confirm what the existing literature suggests about the effects of attractiveness of income
 - Because they use adolescent attractiveness, it suggests causality more than other studies that compare attractiveness with simultaneous income
- In a further study I would hope to examine parental income as a confounder, as it could be correlated with both terms

Figure 2

Income in Adulthood by Attractiveness in Adolescence by Sex



Benzeval, M., Green, M. J., & Macintyre, S. (2013). Does perceived physical attractiveness in adolescence predict better socioeconomic position in adulthood? Evidence from 20 years of follow up in a population cohort study. *PLoS one*, 8(5), e63975. <https://doi.org/10.1371/journal.pone.0063975>

Stefanie K. Johnson stefanie.johnson@ucdenver.edu, Kenneth E. Podratz, Robert L. Dipboye & Ellie Gibbons (2010) Physical Attractiveness Biases in Ratings of Employment Suitability: Tracking Down the “Beauty is Bestly” Effect, *The Journal of Social Psychology*, 150:3, 301-318, DOI: 10.1080/00224540903365414

Iida Kukkonen, Tero Pajunen, Outi Sarpila & Erica Åberg (2024) Is beauty-based inequality gendered? A systematic review of gender differences in socioeconomic outcomes of physical attractiveness in labor markets, *European Societies*, 26:1, 117-148, DOI: 10.1080/14616696.2023.2210202

Christian Pfeifer pfeifer@leuphana.de (2012) Physical attractiveness, employment and earnings, *Applied Economics Letters*, 19:6, 505-510, DOI: 10.1080/13504851.2011.587758

Patricia Roszell, David Kennedy & Edward Grabb (1989) Physical Attractiveness and Income Attainment Among Canadians, *The Journal of Psychology*, 123:6, 547-559, DOI: 10.1080/00223980.1989.10543009