# Success: Talent, Intelligence or Beauty? 

Olivier Gergaud<br>Université de Reims (Troyes Institute of Technology) and Reims Management School ${ }^{1}$<br>and<br>Victor Ginsburgh<br>ECARES, Brussels and CORE, Louvain-la-Neuve ${ }^{2}$


#### Abstract

We analyze the Celebrity 100 annual list of the world's most "powerful celebrities" compiled and published by Forbes Magazine. The lists provide an interesting collection of people, that includes their earnings, and the perception of citizens concerning the attributes that made them become celebrities. We analyze the relationship between their earnings and the perceptions on their intelligence, talent, beauty and other attributes, and show that though beauty plays a role, intelligence and talent are more important.


Keywords: Earnings, Economic success, Talent
JEL Classification: C4, J3, Z1

[^0]
## 1 Introduction

Physical beauty as an attribute that influences economic outcomes such as wages or productivity is described in many papers, starting with Hamermesh and Biddle (1994) and Biddle and Hamermesh (1998), who find that, in the United States, a good look causes a (mild) increase of earnings, both in general and in more homogeneous groups such as attorneys. This result is confirmed by Pfann et al. (2000) for another homogeneous group (advertising firms), and a different country, the Netherlands. Hamermesh and Parker (2005) go back to school and examine the productivity effects of beauty. They conclude, although with caution, that instructors who look better are also thought more productive by students. Johnston (2010) turns to blonde women and shows that their wage premium is "similar in size to the return of an extra year of schooling." This premium is positively correlated with their spouses' wages.

Mobius and Rosenblat (2006) consider the same issue in an experimental labor market. They single out that the beauty premium is due to various transmission channels, which leads them to suggest that blind interviews could reduce the premium. Preventing oral contact between employer and employee would even reduce it more, though they have to admit that this would be odd. Another experiment on fund raising led by Price (2008) shows that blondes "induce more households to contribute and elicit higher donations per contact" than others.

The idea in this paper is somewhat different, since it deals with the results of interviews concerning celebrities carried out by E-Poll Market Research (the so-called E-Score Celebrity index). Respondents are given a list of attributes that include "beauty," and are asked which ones they would use to describe a given celebrity. The attributes are used as exogenous variables in a regression in which income is the left hand-side variable. The results show that beauty has a positive effect on wages, but this effect is dwarfed by other attributes such as talent and intelligence. This is good news. There is no need to be handsome or blond(e) to become successful. Talent and intelligence are sufficient.

## 2 Data

The Forbes Celebrity 100 which lists incomes and professions was merged with data from the E-Score Celebrity index for 2006 and 2007, the only two years for which the index is publicly available. This leads to 200 celebrities, some of whom were already listed before, and some who entered the list in 2006 and were still there in 2007. To avoid E-Score's survey respondents to base their evaluations on previous lists published by Forbes, we restrict the data to newcomers only both in 2006 and 2007. This left us with 49 observations. ${ }^{3}$

E-Score's list contains 46 attributes (activist, aggressive, approachable, articulate, attractive, beautiful, boring, can identify with, charming, classy, cold, compassionate, confident, creepy, cute, distinctive voice, down-to-earth, dynamic, emotional, exciting, experienced, funny, glamorous, good energy, good listener, handsome, impartial, influential, insincere, intelligent, interesting, intriguing, kooky/wacky, mean, over-exposed, physically fit, rude, sexy, sincere, stylish, talented, trend-setter, trustworthy, unique, versatile, warm). Only 22 are evoked as most popular attributes for the 49 celebrities appearing in the database. They are aggregated into six groups: ${ }^{4}$ (1) Talent (talented); (2) Intelligence (intelligent); (3) Beauty (attractive, beautiful, cute, handsome, sexy, stylish); (4) Physical attributes (physically fit); (5) Other attributes, positive (confident, distinctive voice, experienced, funny, good energy, influential, interesting, trend-setter, trustworthy, warm) and (6) Other attributes, negative (aggressive, kooky/wacky, over-exposed). The two attributes most often cited for each celebrity are used in our regressions, and appear as Most often cited and Second often cited in Table 1. Talent is invoked 34 times, Intelligence, 11 times, and the different forms of Beauty, 18 times. These three main categories make for 64 percent of the cited attributes. Beauty is cited quite often, but less so than Talent.

Professions were also regrouped into four categories: Cinema/Television/ Broadcasting ( 25 celebrities), Music (seven celebrities), Sports (seven celebrities), and Other (10 celebrities). There are 35 males and 14 females, 42 Caucasians, three Hispanics, two Afro-americans, and two Asians. The average and median incomes are equal to $\$ 22.7$ million and $\$ 17$ million, respectively.

[^1]Note that celebrity is not exclusively connected to extreme earnings, since the lowest income is $\$ 2$ million (the highest is $\$ 83$ million). The average celebrity is 43 years old.

## 3 Estimation Results

Two estimation methods are used: Ordinary Least Squares (OLS) and Maronna and Yohai's (2000) robust method (MS) that takes into account possible outliers known to be pervasive in extreme data sets such as the one we use. It combines a S-estimator (for continuous variables) and a M-estimator (for dummy variables), and is well-known for both its high resistance to outliers and its high efficiency. ${ }^{5}$

The level of income (in logs) is regressed on dummies for aggregate attributes (Talent, Intelligence, Beauty, Other positive attributes; Other negative attributes is the control group), dummies for professions (Cinema/Television/Broadcasting, Music, Sports; Other is the control profession), age, a dummy for male, a dummy for race (Caucasians; Others as a control group) and an annual dummy for 2007. Attributes are added, whether they are Most often cited or Second often cited, with the exception of Talent in Equation (2). ${ }^{6}$

Estimation results appear in Table 2. The two equations differ since in Equation (2) talent is distinguished according to whether it is cited as most frequent and as second most frequent attribute. Note also that in both equations, two variables are included for beauty (Beauty and Beauty twice), since in four observations, the two attributes (most often and second often cited) are both concerned with beauty. ${ }^{7}$

In all cases (with the exception of Equation (1), MS), Intelligence has the largest effect on income, and Talent has roughly the same as Beauty. When a beauty attribute appears twice, Beauty has a large effect on income as well. Our results are obviously not in contradiction with previous results - beauty is important - but so are talent, intelligence, and other positive attributes.

[^2]They all pick positive signs when compared with negative attributes (normalized to zero). As expected, sports, music and cinema/tv/radio personalities have larger rewards than others (such as poor Alan Greenspan who is one of the celebrities in our sample). Age has a positive but very small effect. An aged celebrity can beat a talented one if, all other things equal, she is thirty years older! Males make more money than females, and caucasians more money than their non-caucasian colleagues.

## 4 Conclusions

Using a quite different data set than those used in most papers that examine the discriminating effect of beauty on earnings, we show that other attributes, such as talent and intelligence, have larger returns on income than beauty.

The data set is voluntarily restricted to newcomers (i.e. to celebrities listed for the first time in 2006 or 2007), since we wanted to avoid opinions on celebrities to be influenced by the availability of their earnings via the previous Forbes lists, and bias the estimated parameters. We also use an estimation method that minimizes the impact of outlying observations.

## 5 References

Biddle, Jeff and Daniel Hamermesh (1998), Beauty, productivity and discrimination: Lawyers' looks and lucre, Journal of Labor Economics 16, 172-201.

Biddle, Jeff Hamermesh, Daniel and Jeff Biddle (1994), Beauty and the labor market, American Economic Review 84, 1174-1194.

Hamermesh, Daniel and Amy Parker (2005), Beauty in the classroom: Instructors' pulchritude and the putative pedagogical productivity, Economics of Education Review 24, 369-376.

Johnston, David (2010), Physical appearance and wages: Do blondes have more fun?, Economics Letters 108, 10-12.

Maronna, Ricardo and Victor Yohai (2000), Robust regression with both continuous and categorical predictors, Journal of Statistical Planning and Inference, 89, 197-214.

Mobius, Markus and Tonya Rosenblatt (2006), Why beauty matters, American Economic Review 96, 222-235.

Pfann, Gerard, Jeff Biddle, Daniel Hamermesh and Ciska Bosman (2000), Business success and business beauty capital, Economics Letters 67, 201-207.

Price, Michael (2008), Fund-raising success and a solicitor's beauty capital: Do blondes raise more funds?, Economics Letters 100, 351-354.

Verardi, Vincenzo and Christophe Croux (2009), Robust regression in Stata, Stata Journal 9(3), 439-453.

Table 1. Number of citations of attributes

Original attribute Most often cited Second often cited Group

|  |  |  |  |
| :--- | :---: | :---: | :--- |
| Aggressive | 1 | 0 | Other negative |
| Attractive | 1 | 3 | Beauty |
| Beautiful | 2 | 1 | Beauty |
| Confident | 1 | 4 | Other positive |
| Cute | 4 | 0 | Beauty |
| Distinctive Voice | 0 | 1 | Other positive |
| Experienced | 0 | 1 | Other positive |
| Funny | 7 | 0 | Other positive |
| Good Energy | 1 | 0 | Other positive |
| Handsome | 1 | 1 | Beauty |
| Influential | 0 | 2 | Other positive |
| Intelligent | 5 | 6 | Intelligence |
| Interesting | 0 | 2 | Other positive |
| Kooky/Wacky | 0 | 2 | Other positive |
| Over-Exposed | 1 | 0 | Other negative |
| Physically Fit | 5 | 2 | Physical |
| Sexy | 0 | 2 | Beauty |
| Stylish | 0 | 3 | Beauty |
| Talented | 18 | 16 | Talent |
| Trend-Setter | 1 | 2 | Other positive |
| Trustworthy | 0 | 1 | Other positive |
| Warm | 1 | 0 | Other positive |
|  |  |  |  |

Table 2. Estimation Results

|  | Equation (1) |  | Equation (2) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | OLS | MS | OLS | MS |
| Talent | $\begin{gathered} 0.7172^{*} \\ (0.369) \end{gathered}$ | $\begin{gathered} 0.9205^{* * *} \\ (0.214) \end{gathered}$ |  |  |
| Talent most often cited |  |  | $\begin{gathered} 0.9784^{* *} \\ (0.366) \end{gathered}$ | $\begin{gathered} 1.2358^{* * *} \\ (0.049) \end{gathered}$ |
| Talent second often cited |  |  | $\begin{aligned} & 0.4586 \\ & (0.378) \end{aligned}$ | $\begin{gathered} 0.5923^{* * *} \\ (0.064) \end{gathered}$ |
| Intelligence | $\begin{gathered} 1.7062^{* * *} \\ (0.523) \end{gathered}$ | $\begin{gathered} 1.8530^{* * *} \\ (0.227) \end{gathered}$ | $\begin{gathered} 1.7933^{* * *} \\ (0.514) \end{gathered}$ | $\begin{gathered} 2.1244^{* * *} \\ (0.060) \end{gathered}$ |
| Beauty | $\begin{aligned} & 0.7363 \\ & (0.493) \end{aligned}$ | $\begin{gathered} 0.5440^{* *} \\ (0.219) \end{gathered}$ | $\begin{gathered} 0.9814^{*} \\ (0.493) \end{gathered}$ | $\begin{gathered} 1.2628^{* * *} \\ (0.070) \end{gathered}$ |
| Beauty twice | $\begin{aligned} & 0.7062 \\ & (0.637) \end{aligned}$ | $\begin{gathered} 1.4708^{* * *} \\ (0.216) \end{gathered}$ | $\begin{aligned} & 0.6684 \\ & (0.638) \end{aligned}$ | $\begin{gathered} 1.1791^{* * *} \\ (0.047) \end{gathered}$ |
| Other positive attributes | $\begin{gathered} 1.1512^{* *} \\ (0.528) \end{gathered}$ | $\begin{gathered} 1.7653^{* * *} \\ (0.255) \end{gathered}$ | $\begin{gathered} 1.3385^{* *} \\ (0.511) \end{gathered}$ | $\begin{gathered} 1.4764^{* * *} \\ (0.080) \end{gathered}$ |
| Cinema/TV/Broadcasting | $\begin{aligned} & 1.0583^{*} \\ & (0.541) \end{aligned}$ | $\begin{gathered} 1.9131^{* * *} \\ (0.216) \end{gathered}$ | $\begin{gathered} 1.3090^{* *} \\ (0.510) \end{gathered}$ | $\begin{gathered} 1.1470^{* * *} \\ (0.094) \end{gathered}$ |
| Music | $\begin{gathered} 1.8376^{* * *} \\ (0.556) \end{gathered}$ | $\begin{gathered} 1.9929^{* * *} \\ (0.127) \end{gathered}$ | $\begin{gathered} 1.7830^{* * *} \\ (0.587) \end{gathered}$ | $\begin{gathered} 0.9327^{* * *} \\ (0.103) \end{gathered}$ |
| Sports | $\begin{gathered} 2.9466^{* * *} \\ (1.028) \end{gathered}$ | $\begin{gathered} 4.2157^{* * *} \\ (0.320) \end{gathered}$ | $\begin{gathered} 3.5433^{* * *} \\ (1.005) \end{gathered}$ | $\begin{gathered} 3.6967^{* * *} \\ (0.160) \end{gathered}$ |
| Age | $\begin{aligned} & 0.0081 \\ & (0.013) \end{aligned}$ | $\begin{gathered} 0.0336^{* * *} \\ (0.005) \end{gathered}$ | $\begin{aligned} & 0.0126 \\ & (0.013) \end{aligned}$ | $\begin{gathered} 0.0225^{* * *} \\ (0.002) \end{gathered}$ |
| Male | $\begin{aligned} & 0.3227 \\ & (0.335) \end{aligned}$ | $\begin{aligned} & 0.0181 \\ & (0.140) \end{aligned}$ | $\begin{aligned} & 0.3297 \\ & (0.349) \end{aligned}$ | $\begin{gathered} 0.6910^{* * *} \\ (0.086) \end{gathered}$ |
| Caucasian | $\begin{aligned} & 0.0310 \\ & (0.208) \end{aligned}$ | $\begin{aligned} & 0.0522 \\ & (0.093) \end{aligned}$ | $\begin{aligned} & 0.0784 \\ & (0.212) \end{aligned}$ | $\begin{gathered} 0.1641^{* *} \\ (0.065) \end{gathered}$ |
| 2007 dummy | $\begin{aligned} & 0.1858 \\ & (0.198) \end{aligned}$ | $\begin{gathered} 0.2389^{* * *} \\ (0.076) \end{gathered}$ | $\begin{aligned} & 0.2997 \\ & (0.201) \end{aligned}$ | $\begin{gathered} 0.3424^{* * *} \\ (0.056) \end{gathered}$ |
| Intercept | $\begin{aligned} & -0.9108 \\ & (1.372) \end{aligned}$ | $\begin{gathered} -2.9293^{* * *} \\ (0.528) \end{gathered}$ | $\begin{aligned} & -1.6143 \\ & (1.314) \end{aligned}$ | $\begin{gathered} -2.5044^{* * *} \\ (0.226) \end{gathered}$ |
| No. of observations R-squared | $\begin{gathered} 49 \\ 0.6109 \end{gathered}$ | 49 | $\begin{gathered} 49 \\ 0.6448 \end{gathered}$ | 49 |


[^0]:    ${ }^{1} 57$ bis, rue Pierre Taittinger, 51096 Reims Cedex, France. Tel.: +33 (0) 326.08.22.35, Fax: + 33 (0) 326.91.38.69, E-mail: olivier.gergaud@univ-reims.fr.
    ${ }^{2}$ CP 114-50, avenue F.D. Roosevelt 1050 Brussels, Belgium. Tel : +32 265038 46, Fax : + 32265040 12, E-mail: vginsbur@ulb.ac.be

[^1]:    ${ }^{3}$ We discarded three observations from the full list of 52 , to avoid an almost singular moments' matrix when "Sports" is used as control variable.
    ${ }^{4}$ The name of the group is given first, followed by the attributes used by E-Score.

[^2]:    ${ }^{5}$ See Verardi and Croux (2009) for details.
    ${ }^{6}$ Physical attributes are dropped because they are almost collinear with the Sports dummy.
    ${ }^{7}$ Hayden Panetierre is cute (cited first) and attractive (cited second), Jessica Alba and Scarlet Johansson are beautiful and sexy, Keira Knightley is attractive and beautiful.

