What It Takes To Get the Pretty Girl or Cute Guy

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Marriage and childbirth are preceded by the "matching" of men and women in the dating and relationship market. This matching process is far less studied than its sequelae of cohabitation, marriage, fertility, and divorce. This investigation examines this understudied area by analyzing one important aspect of the voluntary matching of men and women: physical attractiveness. We estimate the probability of matching with a physically attractive partner, as a function of own characteristics such as own attractiveness, body weight, education, grooming, personality, and income. We focus on partner's attractiveness as an outcome because of the reported desirability of that characteristic.

The results of our models seek to answer three demographically important questions. First, what are the characteristics that predict matching with a physically attractive partner? (In other words, what does it take to get the pretty girl or cute guy?) Second, what is the "exchange rate" between characteristics? How much extra income is required to fully offset the disadvantage of being obese? To what extent can an attractive personality compensate for physical unattractiveness? Does having a car make up for having low cognitive ability? Third, in expanded models we also determine whether actions (as opposed to qualities) can compensate for deficient characteristics; for example, does the willingness of an obese girl to have sex without a condom somewhat overcome her disadvantage in the matching market that stems from her obesity? These answers will provide new and valuable insights into the matching process that precedes marriage, sexual activity, and fertility.

We estimate models using data from wave 3 of the National Longitudinal Survey of Adolescent Health (Add Health). These Add Health data are uniquely suited to addressing this research question because they are unusually rich in measures of the characteristics of *both* partners in a romantic relationship. The data consist of approximately 500 couples who are married, 500 who are cohabiting, and 500 who are "single" (all couples are heterosexual). Table 1 reports the summary statistics for this sample of 1,304 individuals (couples with pregnant females were excluded). We estimate logit models in which the dependent variable equals 1 if the respondent's partner was rated by the Add Health interviewer as physically attractive (and 0 otherwise), and regress that outcome on a set of variables that includes respondent attractiveness, respondent personality, respondent grooming, respondent education, respondent income, and other qualities. Models are estimated separately for male and female respondents.

Table 2 reports the parameter estimates from our models. The first and fourth columns (model 1 for female respondents and male respondents, respectively) present the marginal effects of logit models of attractive partner regressed on respondent relative body weight as Body Mass Index (BMI) and several socio-economic variables. As hypothesized, we find that heavier respondents have a lower probability of matching with a physically attractive partner. We also find that respondents with higher education have a greater probability of matching with a physically attractive partner. In model 2 (columns 2 and 5), we add additional measures of respondent appearance and personality

that are assumed to affect matching. We find that respondents rated higher on own attractiveness, personality, and grooming have a greater likelihood of matching with a physically attractive partner and that, for females, these characteristics mediate (though not to a great extent) the effect of weight on matching with an attractive partner. Finally, in model 3 (columns 3 and 6) we control for a set of behaviors hypothesized to compensate for deficient characteristics. Contrary to our assumptions, we find little evidence that performing oral sex on a partner or experiencing sexual intercourse early in the relationship increases the probability of matching with a physically attractive partner. However, we find that, for males, using a condom at first sex with their partner decreases the likelihood of being matched with a physically attractive partner. Importantly, in models stratified by race (results not shown) we find that the penalty for high weight is greater for white women than for women overall and that having sex early in the relationship increases the probability of matching with a physically attractive partner. We also examine the three models above using clinically defined BMI categories of obese, overweight and underweight (results not shown) and find similar results to those already reported here.

A series of surveys by the market research firm NPD Group found that over a 20-year period, the percentage of Americans who said they find overweight people less attractive dropped steadily from 55 percent to 24 percent. We find that obesity remains a significant disadvantage to matching with a physically attractive partner. Moreover, there are relatively few ways to compensate for obesity. The positive news is that good grooming or an attractive personality offset most (but not all) of this penalty.

Table 1. Sample means and standard deviations

	Females		Males	
	Mean	SD	Mean	SD
Age	21.89	2.38	23.50	3.26
BMI	25.98	6.48	26.74	5.33
Obese	0.23	0.42	0.25	0.43
Overweight	0.22	0.42	0.32	0.47
Underweight	0.05	0.22	0.02	0.15
Height in inches	64.12	2.82	69.99	3.01
Physically attractive	0.56	0.50	0.43	0.50
Physical attractiveness (not related to BMI)	-0.03E-14	0.48	-0.03E14	0.49
Personality attractiveness	3.80	0.85	3.62	0.79
Grooming	3.61	0.77	3.41	0.72
Skin whiteness	4.40	1.08	4.29	1.20
Black	0.16	0.37	0.18	0.39
Other race	0.21	0.41	0.22	0.41
Years education	12.98	2.00	12.78	2.01
IQ (Picture Vocabulary Test percentile)	46.38	28.32	47.32	27.25
Idle (not working, not in school or military)	0.19	0.39	0.12	0.32
Log personal income	7.97	2.87	8.64	2.73
Emotionally supportive	0.10	0.29	0.19	0.39
Has car	0.75	0.43	0.84	0.37
Performs oral sex	0.82	0.38	0.82	0.39
Sex before romance	0.06	0.23	0.07	0.25
Condom use at first sex	0.60	0.49	0.55	0.50

Summary statistics calculated for sample with valid values for all weight measures; excludes pregnant females (N = 1304).

Table 2. Logit estimates (marginal effects) of the probability of matching with a physically attractive partner (linear BMI)

	Attractive Male Partner			Attractive Female Partner		
Respondent's own characteristics	Model I	Model II	Model III	Model I	Model II	Model III
Age	-0.002	0.003	0.002	-0.013 *	-0.015 **	-0.014 *
BMI	-0.007 **	-0.006 *	-0.006 *	-0.008 *	-0.008 **	-0.009 **
Height in inches	0.005	0.004	0.007	0.008E-1	-0.008E-1	-0.004
Black	-0.030	0.035	0.059	-0.061	-0.132	-0.104
Other race	0.056	0.051	0.047	0.060	0.016	0.020
Education	0.022 **	0.013	0.007	0.047 ****	0.036 ****	0.048 ****
IQ (Picture Vocabulary Test percentile)	0.001	0.004E-1	0.007E-1	0.001	0.004E-1	0.001E-1
Idle (not working, not in school or military)	-0.044	-0.018	-0.020	-0.019	0.047	0.028
Log personal income	0.006E-1	-0.003	-0.004	0.004	0.001	0.004
Physical attractiveness (not related to BMI)	--	0.091 *	0.090 *	--	0.121 *	0.130 ***
Personality attractiveness	--	0.073 ***	0.068 **	--	0.057 **	0.042
Grooming	--	0.069 **	0.066 *	--	0.076 **	0.071 **
Skin whiteness	--	0.021	0.024	--	-0.012	-0.014
Emotionally supportive	--	0.084	0.082	--	-0.033	-0.033
Has car	--	--	0.004	--	--	-0.008E-2
Performs oral sex	--	--	-0.007	--	--	0.023
Sex before romance	--	--	0.073	--	--	-0.057
Condom use at first sex	--	--	-0.012	--	--	-0.070 *
-2 Log Likelihood	1458.678	1282.916	1066.910	1384.355	1212.212	964.0758
N	1102	1027	877	1061	985	797

*p<.05; **p<.01; ***p<.001; ****p<.0001