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Anthropometry and socioeconomics among couples: Evidence in the United States☆

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ABSTRACT

We analyze the marriage-market aspects of weight and height in the United States using data from the Panel Study of Income Dynamics on anthropometric characteristics of both spouses. We find evidence of positive sorting in spouses' body mass index (BMI), weight, and height. Within couples, gender-asymmetric trade-offs arise not only between physical and socioeconomic attributes, but also between anthropometric attributes, with significant penalties for fatter women and shorter men. A wife's obesity (BMI or weight) measures are negatively correlated with her husband's income, education, and height, controlling for his weight and her height, along with spouses' demographic and socioeconomic characteristics. Conversely, heavier husbands are not penalized by matching with poorer or less educated wives, but only with shorter ones. Height is valued mainly for men, with shorter men matched with heavier and less educated wives.

1. Introduction

Spouses tend to have similar characteristics, including age, education, race, religion, and physical attributes such as height and weight (Becker, 1991; Weiss and Willis, 1997; Qian, 1998; Silventoinen et al., 2003). Specifically, assortative mating in body weights has been established in the medical and psychological literatures, which document significant and positive interspousal correlations for weight (Schafer and Keith, 1990; Allison et al., 1996; Speakman et al., 2007), and the importance of the characteristics of *both* spouses' (Fu and Goldman, 2000; Jeffrey and Rick, 2002; McNulty and Neff, 2008).

Recently, Kano (2008) investigated the joint dynamics of spousal obesity in the United States and found that the probability of an individual's being obese is positively associated with past obese status of his/her spouse. Belot and Fidrmuc (2009) and Herpin (2005) considered height as a determinant of marriage rates, the former analyzing interracial marriage rates and linking them to gender preference for height differences, the latter showing that the probability of being in a relationship is lower for shorter men.

In this study, we examine the associations among BMI,[1] weight, and height in the marriage market, using data from

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[1] Body mass index (BMI) is defined as an individual's body weight (in kilograms) divided by the square of his or her height (in meters). The pounds/inches BMI formula is: weight (in pounds) × 704.5 divided by height (in inches) × height (in inches).

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the Panel Study of Income Dynamics (PSID) on married men and women from 1999 to 2007. We investigate the spousal trade-offs among these anthropometric attributes and socioeconomic measures, such as income and education, controlling for a range of individual and spousal characteristics, to assess the extent of marital sorting along these dimensions.

Does the marriage market penalize weight and reward height (and income) by matching less physically fit individuals with partners who are less socially desirable in regard to other physical and/or socioeconomic dimensions? What is the extent of marital sorting in BMI, weight and height between spouses? Do men assess these attributes differently from the way women do? These cross-associations of BMI, weight, height, and income have not been emphasized in the literature, and male shortness and weight penalties have been often overlooked. Also, a systematic analysis of spousal sorting along anthropometric characteristics was missing in economic studies.

There are two pertinent studies using PSID data to analyze spousal weight correlations, but they do not consider anthropometric and socioeconomic confounders within a couple. Kano (2008), investigating the joint dynamics of spousal obesity, controlled only for each spouse's socioeconomic characteristics and total household income and disregarded the other spouse's variables. Similarly, Conley and Glauber (2007) do not take into account spousal anthropometric measures when examining PSID data on siblings. They found that for women BMI is negatively associated with family income, the likelihood of marriage, the spouse's occupational prestige, and spousal earnings. However, for men, BMI is positively associated with spousal earnings.

A large body of literature using National Longitudinal Survey of Youth data links women's weight to lower spousal earnings or lower likelihood of being in a relationship (Averett and Korenman, 1996; Averett et al., 2008; Mukhopadhyay, 2008; Tosini, 2009). However, since these data provide anthropometric measures of the respondent only, the weight-income trade-off is estimated without controlling for the men's physical attributes. The same can be said about the influential work by Hamermesh and Biddle (1994), which shows that physically unattractive women are matched with less educated husbands.

This paper is organized as follows. Section 2 describes the data. Section 3 presents the regression results. Section 4 concludes.

2. Data description

Estimation is carried out on the basis of data from the Panel Study of Income Dynamics (PSID).[2] The PSID is a longitudinal household survey collecting a wide range of individual and household demographic, income, and labor-market variables. In addition, in all the waves since 1999 (1999, 2001, 2003, 2005, and 2007), the PSID provides the weight (in pounds) and height (in feet and inches) of both household heads and wives, which we use to calculate the BMI of each spouse, and whether a spouse can be deemed obese. Obesity is defined with a dummy variable that takes on value of one if an individual's BMI is 30 or above (WHO, 2003). Non-response to anthropometric questions is very small in the PSID data.[3]

In each of the survey years under consideration, the PSID comprises about 4500 married households. We select households with a household head and a wife where both are actually present. In our sample years, all the married heads with spouse present are males, so we refer to each couple as husband and wife, respectively. We confine our study to those couples whose wife is between 20 and 50 years old to exclude teenagers. The upper bound 50 is chosen to focus on prime-age couples who are attached to the labor market, as our main socioeconomic characteristic is earnings and total individual income is not available in the PSID for recent years. Our main analysis comprises white spouses, with the husband working in the labor market, so that we include couples with both working and non-working wives. Although we primarily focus on white couples because in the PSID blacks are disproportionately over-represented in low-income households ("poverty/SEO sample"), we also present estimates for black spouses. Following Conley and Glauber (2007), we discard those couples whose height and weight values include any extreme ones: a weight of more than 400 or less than 70 pounds, a height above 84 or below 45 in. Our sample thus consists of approximately 7218 observations, a sample size consistent with those of previous studies using PSID data to analyze obesity and the labor market (Cawley et al., 2005; Conley and Glauber, 2007; Kano, 2008).

We run regressions of each spouse's physical attributes, controlling for their own and their spouses' physical, demographic, and economic characteristics. We use three dependent variables in our main analysis: BMI, weight, and height. The other regressors are own age and educational level (defined as the number of completed years of schooling, and top-coded at 17); number of children in the household under 18 years of age; and earnings of each spouse.[4] Non-working wives have zero earnings and are assigned 0 log earnings, while working wives have positive earnings and are assigned the log of their earnings. The health status originally recorded by the PSID is a 5-category variable (from excellent to poor health); this is the basis of our health dummy variable: 1 if excellent, very good, or good; 0 if fair or poor. State dummy variables are included to capture constant differences in labor markets and marriage markets across geographical areas in the US, such as the proportion of obese men and women and

[2] http://psidonline.isr.umich.edu.

[3] Item non-response for husband's height is below 1.4% in each year, for wife's height is below 1.4% in each year, and for husband's weight is below 2.2% in each year. Regarding wife's weight, item non-response is below 5.5% in each year.

[4] In the PSID individual earnings are defined as labor income from wages and salaries, bonuses, overtime, tips, commissions, professional practice or trade, market gardening, additional job income, and miscellaneous labor income. Farm income, asset income and labor portion of business income are not included.

Table 1
Descriptive statistics for white married couples, wife's age: 20–50. PSID 1999–2007.

	Recently married (3 years or less)			Non-recently married (more than 3 years)		
	N	Mean	SD	*N*	Mean	SD
Husband's BMI (kg/m^2)	1397	27.39	4.75	5821	27.92	4.53
Wife's BMI (kg/m^2)	1397	24.70	5.74	5821	25.21	5.66
Husband's obesity	1397	0.23	0.42	5821	0.26	0.44
Wife's obesity	1397	0.16	0.36	5821	0.17	0.38
Husband's weight (pounds)	1397	197.05	38.15	5821	199.66	36.49
Wife's weight (pounds)	1397	150.51	35.90	5821	151.91	35.33
Husband's height (in.)	1397	71.05	2.92	5821	70.84	2.83
Wife's height (in.)	1397	65.44	2.69	5821	65.08	2.76
Husband's log earnings	1397	10.50	0.56	5821	10.82	0.64
Wife's log earnings	1397	8.92	3.07	5821	7.89	4.07
Husband's age	1397	30.88	7.54	5821	40.34	7.90
Wife's age	1397	29.09	6.99	5821	38.35	7.31
Husband's good health	1396	0.96	0.19	5821	0.95	0.22
Wife's good health	1397	0.95	0.22	5821	0.93	0.25
Husband's education	1328	13.69	2.14	5821	13.72	2.28
Wife's education	1308	14.08	2.08	5448	13.74	2.15
Number of children	1397	0.75	1.00	5821	1.46	1.11

Note: Observations have been weighed using family weights. Husband's earnings are trimmed at $10,000, corresponding to the 3.5 percentile of the positive husband's earnings distribution.

cultural attitudes toward BMI, and obesity in particular. As our analysis concerns several PSID waves, year and time-state dummy variables are also used, along with clustering at the head-of-household level. Finally, observations are weighed using the PSID-family weights.

Because the PSID main files do not contain any direct question concerning the duration of the marriages, we rely on the "Marital History File: 1985–2007" Supplement of the PSID to obtain the year of marriage and number of marriages, to account for the duration of the couples' current marriage. We merge this information to our main sample using the unique household and person identifiers provided by the PSID. We stratify our sample by how recently couples got married, establishing a threshold of less than or equal to 3 years of marriage. This leaves us with a sample of 1397 observations from recently married couples and 5821 observations from non-recently married couples.[5] This partition by duration of marriage is worth analyzing because the marriage-market penalties for BMI arise through sorting at the time of the match, so that the recently married sample is particularly adequate for describing matching patterns.

In the PSID all the variables, including the information on the wife, are reported by the head of the household. Reed and Price (1998) found that family proxy-respondents tend to overestimate heights and underestimate weights of their family members, so that family proxy-respondent estimates follow the same patterns than self-reported estimates (Gorber et al., 2007).[6] Additionally, although it is well-known that self-reported anthropometric measures are likely to suffer from measurement error, in the United States self-reported heights exaggerate actual heights on average, the difference is close to constant for ages 20–50 (Thomas and Frankenberg, 2002; Ezzati et al., 2006). Cawley (2000, 2004) used the National Health and Nutrition Examination Survey III

Table 2
Cross-tabulations for recently married white couples, wife's age: 20–50. PSID 1999–2007. Marital duration ≤3 years.

Panel A	Husband's BMI	
% [number of observations]		
Wife's BMI	<50%	≥50%
<50%	30.3% [379]	20.6% [260]
≥50%	19.2% [242]	30.2% [381]
Panel B	**Husband's log (earnings)**	
% [number of observations]		
Wife's BMI	<50%	≥50%
<50%	22.6% [285]	28.1% [354]
≥50%	25.1% [317]	24.2% [306]
Panel C	**Husband's Education**	
% [number of observations]		
Wife's BMI	<50% (13 years or less)	≥50% (14 years or more)
<50%	21.5% [271]	29.2% [368]
≥50%	26.7% [337]	22.7% [286]

[5] Lower thresholds for recently married couples would make the corresponding sample size too small. In particular, using a cut-off of 1 year of marriage or less would reduce the sample size to only 556 observations or 507 observations in the most complete specification. The effective sample size would be even lower given that we are controlling for year, state and year-by-state fixed effects.

[6] The authors suggest that the best proxy-respondents are those who are in frequent contact with the target. Since we are considering married couples, the best proxy-respondents are likely to be the spouses.

Table 3
Regressions of wife's (*husband's*) BMI on husband's (*wife's*) BMI and other spouses' characteristics by marital duration. PSID: 1999–2007. Wife's age: 20–50. White couples.

	Wife's BMI				*Husband's* BMI			
	(1)		(2)		(3)		(4)	
Marital duration	≤3 years	>3 years	≤3 years	>3 years	≤3 years	>3 years	≤3 years	>3 years
Husband's (*wife's*) BMI	0.404***	0.312***	0.394***	0.261***	0.309***	0.211***	0.351***	0.181***
	(0.066)	(0.037)	(0.062)	(0.036)	(0.044)	(0.028)	(0.050)	(0.027)
Wife's (*husband's*) age	−0.029	0.010	−0.022	0.033*	0.075***	0.004	0.086***	0.009
	(0.037)	(0.020)	(0.037)	(0.019)	(0.028)	(0.014)	(0.031)	(0.015)
Wife's log earnings			−0.053	0.009			0.077	0.015
			(0.068)	(0.034)			(0.071)	(0.028)
Husband's log earnings			−1.41***	−1.17***			0.955**	0.380**
			(0.397)	(0.228)			(0.383)	(1.83)
Number of children			−0.153	0.164			−0.233	0.066
			(0.239)	(0.141)			(0.263)	(0.111)
Wife's good health			−4.27**	−2.03***			−0.106	0.685
			(1.71)	(0.786)			(1.06)	(0.443)
Husband's good health			−0.270	−1.05			0.889	−2.23***
			(1.30)	(0.750)			(1.33)	(0.554)
Wife's education			0.068	−0.178**			0.041	−0.229***
			(0.126)	(0.081)			(0.124)	(0.072)
Husband's education			−0.468***	−0.137*			−0.191	−0.128*
			(0.133)	(0.082)			(0.128)	(0.068)
N	1397	5821	1262	5324	1397	5821	1262	5324
R^2	0.28	0.14	0.40	0.20	0.30	0.14	0.35	0.17
Adjusted R^2	0.15	0.10	0.28	0.16	0.17	0.10	0.22	0.13
Number of clusters	1041	2097	954	1921	1041	2097	954	1921

Note: Heteroskedasticity robust standard errors clustered at the household head level are reported in parentheses. All regressions include state, year, and state-by-year dummies. Observations have been weighed using family weights.
* *p*-value < 0.1.
** *p*-value < 0.05.
*** *p*-value < 0.01.

(NHANES III) to estimate the relationship between measured height and weight and their self-reported counterparts. He estimated regressions of the corresponding measured variable to its self-reported counterpart by age and race. Then, assuming transportability, he used the NHANES III estimated coefficients to adjust the self-reported variables from the NLSY. His estimates of the effect of BMI on wages were very similar, accounting or not for measurement error. Relying on his findings, we are confident that our results (based on unadjusted data) are unlikely to be significantly biased.

In Table 1, we present the descriptive statistics for white married couples, by marriage duration.[7] On average, wives are younger, almost as educated as men, and their health is slightly worse than their spouses. The average BMI is 27 for husbands and 25 for wives. The prevalence of obesity among the husbands is 23% (26% for longer duration of marriage), while for wives it is 16% (17% for longer duration of marriage).[8] While BMI and weight appear to be only slightly higher for couples in longer marriages, the slightly smaller averages in height for these couples may reveal a cohort effect.

Table 2 contains three panels: A, B and C. Panel A reports that there is positive sorting in BMI: in 60% of recently married couples, both the wife and the husband have a BMI above or below the median BMI corresponding to their respective BMI distributions. Moreover, in panel B we see that almost 30% of recently married couples consist of a thin wife and a high-earnings husband, 20% of a thin wife and a low-earnings husband, while the remaining 50% consists of a heavier wife and a low- or high-earnings husband. Panel C reports that nearly 60% of recently married couples are composed of either a high-educated husband and a thin wife (29.2%), or a low-educated husband and a heavier wife (27%).[9]

3. Regression analysis

3.1. Main findings

Table 3 presents a strong correlation between husbands' and wives' BMIs, across specifications. Additionally, the husband's education and his earnings are negatively associated with his wife's BMI, and these associations are more negative for recently married couples than for the non-recently married. This evidence shows that the correlation of spouses' BMIs decreases with the duration of their marriage, which suggests that, if anything, there is

[7] In what follows we will refer to white couples unless otherwise noted.
[8] These results are in line with those of Kano (2008) and Averett et al. (2008); the fact that the obesity prevalence among our sample of wives is lower is probably due to the fact that our sample is younger.
[9] The correlation between husband's and wife's BMI is 0.37 (*p*-value = 0.00), the correlation between husband's log earnings and wife's BMI is −0.16 (*p*-value = 0.00), and the correlation between husband's education and wife's BMI is −0.21 (*p*-value = 0.00), see Tables A1.I and A1.II.

Table 4
Regressions of wife's (*husband's*) weight on husband's (*wife's*) weight and other spouses' characteristics by marital duration. PSID: 1999–2007. Wife's age: 20–50. White couples.

	Wife's weight				*Husband's* weight			
	(1)		(2)		(3)		(4)	
Marital duration	≤3 years	>3 years	≤3 years	>3 years	≤ 3 years	>3 years	≤3 years	>3 years
Husband's (*wife's*) weight	0.344***	0.266***	0.334***	0.224***	0.374***	0.255***	0.426***	0.220***
	(0.054)	(0.031)	(0.051)	(0.031)	(0.053)	(0.034)	(0.062)	(0.035)
Husband's height	−1.96***	−1.78***	−1.51***	−1.10***	5.80***	5.46***	5.48***	5.57***
	(0.540)	(0.347)	(0.532)	(0.356)	(0.595)	(0.321)	(0.680)	(0.337)
Wife's height	3.56***	3.40***	3.48***	3.45***	−1.10*	−0.171	−1.27**	0.002
	(0.592)	(0.344)	(0.597)	(0.342)	(0.590)	(0.319)	(0.604)	(0.323)
Wife's (*husband's*) age	−0.218	0.020	−0.155	0.166	0.580***	0.021	0.641***	0.059
	(0.225)	(0.121)	(0.216)	(0.117)	(0.203)	(0.102)	(0.220)	(0.107)
Wife's log earnings			−0.415	0.070			0.587	0.087
			(0.416)	(0.209)			(0.518)	(0.197)
Husband's log earnings			−8.55***	−7.26***			7.15**	2.80**
			(2.49)	(1.39)			(2.83)	(1.31)
Number of children			−1.07	1.04			−1.66	0.555
			(1.45)	(0.890)			(1.93)	(0.797)
Wife's good health			−25.08**	−11.66**			−1.76	4.79
			(10.41)	(4.71)			(7.93)	(3.08)
Husband's good health			0.482	−5.41			6.27	−16.31***
			(7.99)	(4.34)			(10.08)	(3.91)
Wife's education			0.577	−1.07**			0.131	−1.64***
			(0.804)	(0.480)			(0.916)	(0.514)
Husband's education			−2.90***	−0.745			−1.33	−0.883*
			(0.859)	(0.500)			(0.907)	(0.490)
N	1397	5821	1262	5324	1397	5821	1262	5324
R^2	0.34	0.21	0.45	0.26	0.43	0.31	0.46	0.32
Adjusted R^2	0.22	0.18	0.33	0.22	0.33	0.28	0.34	0.29
Clusters	1041	2097	954	1921	1041	2097	954	1921

Note: Heteroskedasticity robust standard errors clustered at the household head level are reported in parentheses. All regressions include state, year, and state-by-year dummies. Observations have been weighed using family weights.
* *p*-value < 0.1.
** *p*-value < 0.05.
*** *p*-value < 0.01.

divergence in BMIs.[10] The regressions of husband's BMI confirm the positive relationship between spouses' BMIs, but rule out socioeconomic penalties to heavy husbands in terms of matching with poorer or less educated women. It is important to highlight that we obtain almost identical estimates once we control for pregnancy indicators, or we add interaction terms between health and education.[11]

Our estimates from Table 3 provide evidence of spousal trade-offs among BMI, education, and income, which is consistent with the marriage market reinforcing the negative assessment of women's weight by matching heavy women with poor and less educated men.[12]

We acknowledge that the strong positive relationship in BMIs within recently married couples may arise from three different sources (Carmalt, 2009): active assortative mating (selection of a partner based on phenotypic preferences), social homogamy (selection of a partner from within one's own social setting or geographical area), and convergence (the tendency of partners to become similar in weight because they share a common environment). However, we interpret our findings as assortative mating in BMI, as the associations between the two spouses' BMIs are larger for the recently married subgroup than for the less recently married. Hence, convergence is not the driving force behind this correlation.[13] Finally, state, year, and state-by-year fixed effects may be crude measures, but they help to account for social homogamy (they account for 3% of the variation in BMI).

Our findings are in line with psychological studies (Braun and Bryan, 2006) reporting that men emphasize the importance of body shape and *physical attractiveness* in

[10] This comparison also shows that the correlation between husband's earnings and wife's BMI decreases only slightly with the duration of marriage.

[11] We do not control for the age of both spouses, since these two are strongly correlated (between 0.8 for the recently married couples and 0.9 for the non-recently ones). Moreover, we only include a linear term in individual age. Even if we add a quadratic in age, we do not find age effects.

[12] This is not necessarily evidence that the husband's income or education leads him to marry a thinner wife. Better educated or richer husbands may also be smarter and/or more sociable, or different in unobservable characteristics, which may make them more attractive in the marriage market.

[13] This lack of convergence may be reflecting compositional (selection) effects if those who remained married are the spouses less concerned about physical characteristics. This is an interesting topic that deserves further analysis which is beyond the scope of this paper.

Table 5
Regressions of wife's (*husband's*) height on husband's (*wife's*) height and other spouses' characteristics by marital duration. PSID: 1999–2007. Wife's age: 20–50. White couples.

	Wife's height				*Husband's* height			
	(1)		(2)		(3)		(4)	
Marital duration	≤3 years	>3 years	≤3 years	>3 years	≤3 years	>3 years	≤3 years	>3 years
Husband's (*wife's*) height	0.111**	0.155***	0.108**	0.148***	0.131***	0.139***	0.130***	0.127***
	(0.046)	(0.031)	(0.047)	(0.032)	(0.049)	(0.027)	(0.049)	(0.027)
Husband's weight	−0.005	−0.001	−0.006*	0.000	0.038***	0.036***	0.035***	0.036***
	(0.004)	(0.002)	(0.004)	(0.002)	(0.004)	(0.002)	(0.004)	(0.002)
Wife's weight	0.023**	0.024***	0.026***	0.025***	−0.014***	−0.011***	−0.012***	−0.007***
	(0.004)	(0.002)	(0.005)	(0.002)	(0.004)	(0.002)	(0.004)	(0.002)
Wife's (*husband's*) age	−0.030**	−0.010	−0.019	−0.009	−0.044**	−0.012	−0.070***	−0.016*
	(0.015)	(0.010)	(0.017)	(0.011)	(0.020)	(0.009)	(0.022)	(0.009)
Husband's log earnings			0.114	0.057			−0.019	0.186*
			(0.251)	(0.118)			(0.248)	(0.107)
Wife's log earnings			−0.043	0.011			0.038	−0.009
			(0.038)	(0.017)			(0.046)	(0.015)
Number of children			−0.146	0.030			0.138	−0.018
			(0.125)	(0.068)			(0.143)	(0.060)
Wife's good health			0.989*	0.652**			0.328	−0.108
			(0.573)	(0.269)			(0.625)	(0.302)
Husband's good health			1.72***	0.318			−1.80**	0.865***
			(0.590)	(0.283)			(0.829)	(0.286)
Wife's education			0.052	0.077*			0.153**	0.123***
			(0.074)	(0.043)			(0.072)	(0.040)
Husband's education			0.035	0.019			−0.015	0.089**
			(0.073)	(0.040)			(0.073)	(0.038)
N	1397	5821	1262	5324	1397	5821	1262	5324
R^2	0.27	0.17	0.31	0.19	0.40	0.26	0.41	0.30
Adjusted R^2	0.14	0.13	0.17	0.15	0.28	0.23	0.28	0.26
Clusters	1041	2097	954	1921	1041	2097	954	1921

Note: Heteroskedasticity robust standard errors clustered at the household head level are reported in parentheses. All regressions include state, year, and state-by-year dummies. Observations have been weighed using family weights.
* *p*-value < 0.1.
** *p*-value < 0.05.
*** *p*-value < 0.01.

choosing a mate, and with socioeconomic literature emphasizing the negative association between husbands' education and wives' BMI (Garn et al., 1989; Lipowicz, 2003).

Tables 4 and 5 present the results of several regressions in which the dependent variables are weight and height, respectively. We find evidence of positive sorting in both anthropometric measures: heavier men are more likely to

Table 6
Descriptive statistics for black married couples, wife's age: 20–50. PSID 1999–2007.

	Recently married (3 years or less)			Non-recently married (more than 3 years)		
	N	Mean	SD	*N*	Mean	SD
Husband's BMI (kg/m^2)	492	27.79	4.88	1777	28.38	4.94
Wife's BMI (kg/m^2)	492	27.81	6.41	1777	28.59	5.87
Husband's obesity	492	0.28	0.45	1777	0.28	0.45
Wife's obesity	492	0.30	0.46	1777	0.36	0.48
Husband's weight (pounds)	492	195.94	38.04	1777	198.40	40.24
Wife's weight (pounds)	492	168.55	40.86	1777	171.72	34.64
Husband's height (in.)	492	70.36	2.85	1777	70.02	3.46
Wife's height (in.)	492	65.24	2.65	1777	65.07	3.01
Husband's log earnings	492	9.33	2.97	1777	9.13	3.38
Wife's log earnings	492	9.21	2.57	1777	8.79	3.36
Husband's age	492	33.66	9.70	1777	43.12	8.09
Wife's age	492	31.29	7.15	1777	40.76	6.58
Husband's good health	492	0.93	0.26	1777	0.86	0.35
Wife's good health	492	0.95	0.23	1777	0.86	0.34
Husband's education	492	13.19	2.10	1777	12.77	2.15
Wife's education	492	13.63	1.93	1777	13.03	2.05
Number of children	492	1.13	1.14	1777	1.62	1.31

Note: Observations have been weighed using family weights.

be married to heavier women, and taller men to taller women. Heavier women are thrice penalized, their husbands tending to be poorer, less educated, and shorter, while heavier husbands tend to be married to shorter wives, but not to socioeconomically disadvantaged ones. As to height, we find that taller women tend to be healthier, and that women who are educationally and physical inferior (heavier) marry shorter men. This marriage-market premium of male height is consistent with evidence that women prefer taller men (Ellis, 1992).

An additional unit in husband's BMI is associated with an increase of .40 units in the BMI of the wife; an additional pound in husband's weight is associated with an increase of .35 pounds in wife's weight; finally, an additional inch in his height is associated with an increase of .12 in his wife's height. As to the estimated trade-offs among spousal anthropometric and socioeconomic characteristics, an increase of about $4200 in a husband's earnings (10% of his average earnings) is associated with his being married to a woman who weighs almost 1.2 pounds less, and whose BMI is .21 points lower (1% of her average BMI). This means that if we compare two couples, one with the husband earning $40,000 and the other with the husband earning $80,000, ceteris paribus the latter will be matched to a wife who has 2 units of BMI less, or 12 pounds less, a visible and sizable association between earnings and physical attractiveness. Additionally, the heavier a wife is, the shorter her husband tends to be; 10 pounds more on her part (7% of her average weight) is correlated with 0.14 inches less height on his (less than 1% of his average height).

3.2. Black couples

We now turn to the analysis of black couples. Looking at Table 6 one can see that the obesity prevalence for black spouses is much higher than for whites, being twice as high in the case of wives, while height is comparable across races. Average education and earnings also reflect the standard pattern of being lower for black individuals, with the higher log earnings of black wives reflecting the higher labor market participation rate of black than white married women. The estimated regression coefficients in Tables 7 and 8 show a consistent pattern of positive sorting in the spouses' BMI, weight and height, although the size of the associations is smaller for blacks than for whites. Instead, the socioeconomic penalties for female weight are not significant in black couples, may be due to different cultural norms characterizing attractiveness of black women (Cawley, 2004). However, we would like to emphasize that our estimates should be interpreted with

Table 7
Regressions of wife's BMI, height and obesity on husband's BMI, height and obesity, and other spouses' characteristics by marital duration. PSID: 1999–2007. Wife's age: 20–50. Black couples.

	Wife's BMI		Wife's height		Wife's obesity	
Marital duration	≤3 years	>3 years	≤3 years	>3 years	≤3 years	>3 years
Husband's BMI	0.285***	0.175***	–	–	–	–
	(0.094)	(0.049)				
Husband's weight	–	–	0.005	−0.008*	–	–
			(0.006)	(0.004)		
Husband's height	–	–	0.074	0.135***	–	–
			(0.082)	(0.041)		
Wife's weight	–	–	0.029***	0.018***	–	–
			(0.006)	(0.004)		
Husband's obesity	–	–	–	–	0.121	0.132**
					(0.089)	(0.057)
Wife's age	0.127**	0.031	−0.000	−0.017	0.010*	0.004
	(0.064)	(0.042)	(0.036)	(0.022)	(0.005)	(0.004)
Wife's log earnings	0.072	−0.154**	−0.092	0.021	0.014	−0.009
	(0.187)	(0.076)	(0.081)	(0.039)	(0.012)	(0.006)
Husband's log earnings	−0.114	−0.142	−0.017	−0.005	−0.010	−0.011*
	(0.181)	(0.086)	(0.060)	(0.040)	(0.012)	(0.006)
Number of children	0.553	0.704***	−0.200	−0.155	0.046	0.051***
	(0.449)	(0.238)	(0.207)	(0.124)	(0.031)	(0.020)
Wife's good health	−5.09**	−1.07	1.77**	0.123	−0.262**	0.012
	(2.03)	(0.804)	(0.688)	(0.406)	(0.129)	(0.068)
Husband's good health	−1.09	−0.516	−0.231	0.179	0.134	−0.039
	(1.51)	(0.786)	(0.868)	(0.355)	(0.085)	(0.059)
Wife's education	0.011	−0.023	0.035	0.053	0.022	−0.012
	(0.280)	(0.177)	(0.132)	(0.077)	(0.021)	(0.014)
Husband's education	0.018	−0.244	0.158	0.092	−0.003	−0.010
	(0.267)	(0.157)	(0.127)	(0.075)	(0.020)	(0.016)
N	492	1777	492	1777	492	1777
R^2	0.57	0.27	0.42	0.34	0.55	0.24
Clusters	366	645	366	645	366	645

Note: Heteroskedasticity robust standard errors clustered at the household head level are reported in parentheses. All regressions include state, year, and state-by-year dummies. Observations have been weighed using family weights.

* *p*-value < 0.1.

** *p*-value < 0.05.

*** *p*-value < 0.01.

Table 8
Regressions of husband's BMI, height and obesity on wife's BMI, height and obesity, and other spouses' characteristics by marital duration. PSID: 1999–2007. Wife's age: 20–50. Black couples.

	Husband's BMI		Husband's Height		Husband's Obesity	
Marital duration	≤3 years	>3 years	≤3 years	>3 years	≤3 years	>3 years
Wife's BMI	0.218***	0.141***	–	–	–	–
	(0.068)	(0.040)				
Wife's weight	–	–	−0.008	−0.008*	–	–
			(0.006)	(0.005)		
Wife's height	–	–	0.075	0.158***	–	–
			(0.092)	(0.049)		
Husband's weight	–	–	0.037***	0.039***	–	–
			(0.006)	(0.004)		
Wife's obesity	–	–	–	–	0.154	0.129**
					(0.105)	(0.053)
Husband's age	−0.051	0.019	0.015	−0.019	−0.001	−0.002
	(0.050)	(0.041)	(0.028)	(0.019)	(0.005)	(0.003)
Wife's log earnings	0.157	−0.017	−0.174**	0.049	0.005	−0.011*
	(0.126)	(0.069)	(0.074)	(0.042)	(0.011)	(0.006)
Husband's log earnings	−0.127	−0.187	0.166**	0.034	−0.010	−0.011
	(0.117)	(0.139)	(0.067)	(0.048)	(0.014)	(0.008)
Number of children	0.231	0.110	−0.255	0.064	0.039	−0.008
	(0.348)	(0.169)	(0.194)	(0.131)	(0.032)	(0.017)
Wife's good health	1.80	−0.332	−0.683	0.538	−0.047	−0.028
	(1.36)	(0.698)	(0.799)	(0.399)	(0.133)	(0.061)
Husband's good health	3.89**	0.459	−0.762	−0.297	0.221	−0.030
	(1.68)	(0.852)	(0.942)	(0.368)	(0.139)	(0.065)
Wife's education	0.131	−0.156	−0.167	−0.016	0.015	−0.014
	(0.265)	(0.147)	(0.141)	(0.089)	(0.025)	(0.013)
Husband's education	0.057	0.144	0.028	0.157*	−0.002	0.029*
	(0.197)	(0.232)	(0.117)	(0.083)	(0.021)	(0.015)
N	492	1777	492	1777	492	1777
R^2	0.48	0.18	0.48	0.40	0.46	0.18
Clusters	366	645	366	645	366	645

Note: Heteroskedasticity robust standard errors clustered at the household head level are reported in parentheses. All regressions include state, year, and state-by-year dummies. Observations have been weighed using family weights.
* *p*-value < 0.1.
** *p*-value < 0.05.
*** *p*-value < 0.01.

caution, as in the PSID blacks are disproportionately over-represented in low-income households ("poverty/SEO sample"), and our samples of black couples are small.

3.3. Measuring attractiveness

In our framework, anthropometric characteristics are measures of *physical attractiveness*. The validity of height as a measure of male, but not female, "beauty" has been extensively discussed in the literature (Herpin, 2005). In this subsection, we address the validity of BMI as a measure of *physical attractiveness* for both men and women.

There is a concern that our estimated gender-asymmetric role of weight may stem from female BMI being a better proxy for "beauty" of women than of men. The literature review on body shape and *physical attractiveness* by Swami (2008) seems to point to BMI being the dominant cue for female *physical attractiveness*, with WHR (the ratio of the width of the waist to the width of the hips) playing a more minor role. However, for male *physical attractiveness*, the WCR (waist-to-chest) plays a more important role than either the WHR or BMI, although the latter is correlated with the male attractiveness rating by women.

Wells et al. (2007) confirm this positive relationship between BMI and body shape, suggesting that BMI reflects information on both physique (the form or structure of a person's body, i.e., physical appearance) and fatness for both men and women. This evidence seems to suggest that BMI is a good proxy for male *physical attractiveness*. Thus, in our empirical analysis, we use BMI as our measure of *physical attractiveness*, for both men and women. This approach is also consistent with Gregory and Ruhm (2009), who suggest that BMI may serve as a proxy for socially-defined *physical attractiveness*. However, we would like to acknowledge that Wada and Tekin (2010) argue that BMI-based measures do not distinguish between body fat and fat-free body mass and that BMI does not adequately control for non-homogeneity inside human body. Instead they develop measures of body composition – body fat (BF) and fat-free mass (FFM) – using data on bioelectrical impedance analysis (BIA) that are available in the National Health and Nutrition Examination Survey III. Unfortunately, these measures are not available in the PSID.

3.4. Sensitivity analysis

The results are robust to controlling for household non-labor income (total family income minus the labor income

Table 9
Regressions of wife's (*husband's*) obesity and underweight on husband's (*wife's*) obesity and underweight and other spouses' characteristics by marital duration. PSID: 1999–2007. Wife's age: 20–50. White couples.

	Wives				Husbands			
	Wife's obesity (1 if wife's BMI $\geq$ 30, 0 otherwise)		Wife's underweight (1 if wife's BMI $<$ 18.5, 0 otherwise)		*Husband's* obesity (1 if wife's BMI $\geq$ 30, 0 otherwise)		*Husband's* underweight (1 if wife's BMI $<$ 18.5, 0 otherwise)	
Marital duration	$\leq$3 years	>3 years	$\leq$3 years	>3 years	$\leq$3 years	>3 years	$\leq$3 years	>3 years
Husband's (*wife's*) obesity	0.184***	0.118***	−0.062***	−0.012	0.276***	0.166***	−0.012	−0.002
	(0.049)	(0.023)	(0.018)	(0.010)	(0.070)	(0.032)	(0.019)	(0.002)
Wife's (*husband's*) age	−0.001	0.001	−0.003**	−0.001*	0.004	−0.001	−0.002*	−0.000
	(0.002)	(0.001)	(0.001)	(0.001)	(0.003)	(0.001)	(0.001)	(0.000)
Wife's log earnings	−0.002	−0.002	−0.001	−0.001	−0.001	0.001	−0.001	−0.000
	(0.004)	(0.002)	(0.004)	(0.001)	(0.006)	(0.003)	(0.002)	(0.000)
Husband's log earnings	−0.075***	−0.066***	−0.003	0.015*	0.063*	0.010	−0.008	−0.004*
	(0.025)	(0.013)	(0.013)	(0.008)	(0.033)	(0.017)	(0.007)	(0.002)
Number of children	−0.020	0.002	−0.003	−0.004	−0.024	0.002	−0.001	−0.002
	(0.014)	(0.009)	(0.012)	(0.004)	(0.021)	(0.010)	(0.009)	(0.001)
Wife's good health	−0.252***	−0.161***	−0.045	−0.013	−0.012	0.112***	0.018	0.003
	(0.090)	(0.048)	(0.055)	(0.017)	(0.109)	(0.036)	(0.017)	(0.002)
Husband's good health	−0.059	−0.094*	−0.009	0.004	0.010	−0.175***	−0.059	0.002
	(0.091)	(0.048)	(0.055)	(0.016)	(0.100)	(0.048)	(0.049)	(0.002)
Wife's education	0.002	−0.014***	−0.003	−0.001	0.001	−0.017**	−0.002	−0.000
	(0.009)	(0.006)	(0.004)	(0.002)	(0.011)	(0.007)	(0.003)	(0.001)
Husband's education	−0.021**	−0.004	−0.004	−0.000	−0.022**	−0.010	−0.000	0.001
	(0.010)	(0.005)	(0.004)	(0.003)	(0.011)	(0.006)	(0.003)	(0.001)
N	1262	5324	1262	5324	1262	5324	1262	5324
R^2	0.33	0.14	0.29	0.04	0.31	0.13	0.25	0.04
Clusters	954	1921	954	1921	954	1921	954	1921
% of obese wives	15%	17%	–	–	15%	17%	–	–
% of obese husbands	23%	26%	–	–	23%	26%	–	–
% of underweight wives	–	–	4.3%	3.4%	–	–	4.3%	3.4%
% of underweight husbands	–	–	0.7%	0.3%	–	–	0.7%	0.3%

Note: Heteroskedasticity robust standard errors clustered at the household head level are reported in parentheses. All regressions (linear probability models) include state, year, and state-by-year dummies. Observations have been weighed using family weights.
* p-value < 0.1.
** p-value < 0.05.
*** p-value < 0.01.

of each spouse), and to the exclusion of the few observations from the PSID "poverty/SEO sample" or "immigrant sample." We also perform our estimation restricting our sample to couples where the wife is working; here too, results yield the same pattern of associations between the BMI and socioeconomic characteristics. Including dummy variables for occupational categories (professional-managerial; service; sales; agriculture; crafts; transportation; or military) of the husband, or for each spouse when restricting the sample to dual-earner couples, to account for on-the-job physical activity, does not alter our main findings either. The same can be said when controlling for parental education of both husbands and wives to account for family background characteristics.

We also explore the determinants of the likelihood of being obese or underweight to consider the tails of the BMI distribution in Table 9. The estimated obesity correlates closely match those reported in Table 3. Using an underweight indicator that takes the value 1 if the individual's BMI is below 18.5 and 0 otherwise, we find that underweight husbands are less likely to have obese wives. At the same time, high-earnings husbands are less likely to have obese wives but more likely to have underweight ones. Hence, we cannot reject the hypothesis that for women being thinner (even underweight) is better.[14]

We address the concern that the husbands' potential reporting bias of the wives' BMI may be correlated with their husbands' income. Specifically, it may be negatively correlated, if "higher class" husbands value thin wives more than "lower class" ones, and as a result are more likely to underreport their wife's weight. Splitting our sample into two groups of couples, those with husbands' earnings above or equal to the 50% of the husbands' positive earnings distribution, and those whose husbands' earnings are below the median, we find that the positive sorting in spouses' BMIs and the heavier wives' penalty in

[14] The percentage of underweight men is extremely small. There are only 10 husbands who are underweight in recently married couples, and 17 in non-recently married couples. Hence, we do not have enough variation in the dependent variable to detect any systematic pattern, and to test the hypothesis that for men being underweight is better. Finally, to explore the potential non-monotonicity of the spousal BMI relationship over the BMI distribution, we have re-estimated our main regressions using spousal weight categories ("underweight" (BMI below 18.5), "overweight" (BMI between 25 and 29.99), and "obese" (BMI 30 and above)) rather than spousal BMI. Our findings did not show any evidence of a non-monotonic relationship.

Table 10
Sensitivity analysis of sorting: regressions of wife's (*husband's*) BMI (or log BMI) on husband's (*wife's*) BMI (or log BMI) and other spouses characteristics. PSID: 1999–2007. Wife's age: 20–50. Marital duration ≤3 years. White couples.

	Wife's BMI			Wife's log (BMI)	*Husband's* BMI			*Husband's* log (BMI)
	Husband's earnings		Husband's earnings					
	(1) <50% of the husband's earnings distribution	(2) ≥50% of the husband's earnings distribution	(3) Cohabitants	(4)	(5) <50% of the husband's earnings distribution	(6) ≥50% of the husband's earnings distribution	(7) Cohabitants	(8)
Husband's (*wife's*) BMI	0.449***	0.307***	0.524***		0.368***	0.248**	0.328***	
	(0.075)	(0.116)	(0.141)		(0.054)	(0.107)	(0.081)	
Husband's (*wife's*) log (BMI)				0.367***				0.278***
				(0.061)				(0.041)
Wife's (*husband's*) age	0.003	0.016	0.098*	0.000	0.081**	0.064	0.045	0.003**
	(0.051)	(0.057)	(0.054)	(0.001)	(0.040)	(0.046)	(0.039)	(0.001)
Wife's log earnings	−0.081	−0.251**	−0.097	−0.005*	0.041	0.153*	0.130	0.003
	(0.116)	(0.110)	(0.109)	(0.003)	(0.106)	(0.083)	(0.083)	(0.003)
Husband's log earnings	−1.73**	−2.73**	−1.71*	−0.071***	1.03	−0.163	1.49**	0.028**
	(0.720)	(1.12)	(0.888)	(0.015)	(0.704)	(1.15)	(0.673)	(0.014)
Number of children	−0.121	−0.175	0.009	0.001	−0.158	−0.106	0.196	−0.006
	(0.304)	(0.473)	(0.431)	(0.009)	(0.315)	(0.356)	(0.378)	(0.009)
Wife's good health	−4.76**	−1.08	−0.435	−0.124***	−0.231	−1.14	0.330	−0.020
	(1.93)	(2.53)	(1.92)	(0.047)	(1.09)	(1.72)	(1.58)	(0.032)
Husband's good health	1.63	−3.72**	−0.261	−0.011	−0.283	1.02	0.689	0.024
	(1.55)	(1.74)	(2.37)	(0.047)	(1.73)	(1.60)	(1.89)	(0.046)
N	953	443	604	1396	953	443	604	1396
R^2	0.44	0.41	0.55	0.32	0.39	0.52	0.53	0.29
Clusters	747	358	418	104	747	358	418	104

Note: Heteroskedasticity robust standard errors clustered at the household head level are reported in parentheses. All regressions include state, year, and state-by-year dummies. Observations have been weighed using family weights.
* *p*-value < 0.1.
** *p*-value < 0.05.
*** *p*-value < 0.01.

terms of husbands' earnings is still present in the two groups of couples, columns 1 and 2 and 5 and 6 in Table 10.

We explore the extent of sorting and trade-offs between anthropometric and socioeconomic characteristics in cohabiting couples, finding similar results to married couples, columns 3 and 7 in Table 10. In the PSID, cohabitants and their anthropometric measures are reported as couples only after their first year of cohabitation. However, in the US cohabiting couples are found to be less stable than married couples, possibly affecting the reliability of the reported partner's characteristics by the head. In particular, concerning anthropometric measures, in the US "proxy-respondents in married couples" (i.e., individuals reporting their spouses' characteristics) are more reliable than those in unmarried couples (Reither and Utz, 2009). Running our main regressions with the anthropometric variables in logs does not alter our pattern of results, as shown in columns 4 and 8 of Table 10 in the case of log BMI and recently married.

Finally, we analyze the implications of potential multicollinearity for our estimates, computing the correlations across all dependent and explanatory variables in our sample, across individual and spouses' characteristics. We report the correlation matrix among variables in Tables A1.I and A1.II, separately by duration. The correlation between log husband's earnings and log wife's earnings is −0.09 (non-recently married couples) and 0.08 (recently married couples). Thus, wife's earnings and husband's earnings are not collinear variables: the lack of significance of the estimated correlations between anthropometric measures and own income is not driven by collinearity. Instead, we observe strong assortative mating in education and age: the correlation in education is around 0.6, while the correlation in age is even stronger, around 0.9. Hence, we need to interpret our findings on education with caution.

4. Conclusions

We examine the extent of assortative mating in BMI, weight and height, and the marriage-market assessment of these attributes by estimating the trade-offs within couples among these anthropometric characteristics, education, and income. Using anthropometric, demographic, and income information derived from PSID data from 1999 to 2007, we find evidence of positive sorting in spouses' BMI, weight, and height. Moreover, we show that female *physical attractiveness* plays a larger role in the marriage market than does men's, with the result that heavier women are thrice penalized, with husbands who are poorer, less educated, and shorter. Shorter husbands, on the other hand, are penalized on both the physical and socioeconomic dimensions, in that their wives are heavier and less educated.

This evidence is in line with research in psychology and economics linking BMI, obesity, attractiveness, and the desirability of a potential mate. For instance, Braun and Bryan (2006) found that men differed from women in the greater extent to which they reported that physical features, including face, body shape, and weight, were important in their assessments of the desirability of a potential mate. Conversely, women gave much greater consideration than did men to personality, intelligence, and career choice. Rooth (2009) found that photos that were manipulated to make a person of normal weight appear to be obese caused a change in the viewer's perception, from attractive to unattractive.

Our results can also be contextualized in the economic research agenda on the effects of anthropometric measures. Many economists have been working on assessing the effects of height, BMI, and obesity on labor-market outcomes. The consensus is that BMI in the overweight or obese range has negative effects on the probability of employment and on hourly wages, particularly for women (Han et al., 2009), while height has a positive effect on hourly wages, perhaps reflecting the fact that taller people are more likely to have reached their full cognitive potential (Case and Paxson, 2008) and/or may possess superior physical capacities (Lundborg et al., 2009). On top of these labor-market effects, not to mention the well-known negative health effects of obesity, our estimates show additional associations that weight and height exhibit in the marriage market.

Appendix A

See Tables A1.I and A1.II.

Table A1.I
Correlation matrix among variables for recently married couples (3 years or less).

	Wife's BMI	Husband's BMI	Wife's log earnings	Husband's log earnings	Wife's age	Husband's age	Wife's education	Husband's education	Number of children	Wife's good health
Husband's BMI	**0.3740**									
	0.0000									
Wife's log earnings	−0.0732	0.0035								
	0.0093	*0.9014*								
Husband's log earnings	**−0.1578**	0.0014	0.0767							
	0.0000	*0.9612*	*0.0064*							
Wife's age	−0.0107	0.0699	0.0894	**0.2418**						
	0.7039	*0.0130*	*0.0015*	*0.0000*						
Husband's age	−0.0265	0.0596	0.0433	**0.3312**	**0.8019**					
	0.3463	*0.0342*	*0.1239*	*0.0000*	*0.0000*					
Wife's education	**−0.1536**	−0.0626	**0.2528**	**0.2391**	0.0520	0.0640				
	0.0000	*0.0261*	*0.0000*	*0.0000*	*0.0646*	*0.0230*				
Husband's education	**−0.2126**	−0.0859	**0.1903**	**0.3455**	0.0433	0.0846	**0.5447**			
	0.0000	*0.0023*	*0.0000*	*0.0000*	*0.1242*	*0.0026*	*0.0000*			
Number of children	0.0456	0.0583	**−0.2776**	−0.0376	0.1215	0.1193	**−0.3417**	**−0.2702**		
	0.1050	*0.0384*	*0.0000*	*0.1822*	*0.0000*	*0.0000*	*0.0000*	*0.0000*		
Wife's good health	**−0.1977**	−0.0260	0.1354	0.1076	−0.0076	0.0390	**0.1534**	0.1093	−0.0340	
	0.0000	*0.3565*	*0.0000*	*0.0001*	*0.7881*	*0.1662*	*0.0000*	*0.0001*	*0.2273*	
Husband's good health	−0.0730	−0.0423	0.0613	0.0855	−0.0618	−0.0968	**0.1638**	0.1082	−0.0633	**0.1944**
	0.0095	*0.1332*	*0.0294*	*0.0024*	*0.0281*	*0.0006*	*0.0000*	*0.0001*	*0.0245*	*0.0000*

Note: *p*-values are reported in italics. Absolute value correlations above .15 are in bold.

Table A1.II
Correlation matrix among variables for non-recently married couples (more than 3 years).

	Wife's BMI	Husband's BMI	Wife's log earnings	Husband's log earnings	Wife's age	Husband's age	Wife's education	Husband's education	Number of children	Wife's good health
Husband's BMI	**0.3079**									
	0.0000									
Wife's log earnings	−0.0316	−0.0041								
	0.0212	*0.7650*								
Husband's log earnings	**−0.2133**	−0.0676	−0.0865							
	0.0000	*0.0000*	*0.0000*							
Wife's age	0.0047	0.0111	0.0810	**0.2152**						
	0.7334	*0.4193*	*0.0000*	*0.0000*						
Husband's age	−0.0008	−0.0014	0.0816	**0.1819**	**0.8851**					
	0.9541	*0.9206*	*0.0000*	*0.0000*	*0.0000*					
Wife's education	**−0.2196**	−0.1489	0.0849	**0.3514**	0.0089	−0.0105				
	0.0000	*0.0000*	*0.0000*	*0.0000*	*0.5182*	*0.4455*				
Husband's education	−0.2256	−0.1623	0.0464	0.4289	0.0908	0.0870	**0.6013**			

Table A1.II (*Continued*)

	Wife's BMI	Husband's BMI	Wife's log earnings	Husband's log earnings	Wife's age	Husband's age	Wife's education	Husband's education	Number of children	Wife's good health
	0.0000	*0.0000*	*0.0007*	*0.0000*	*0.0000*	*0.0000*	*0.0000*			
Number of children	−0.0278	−0.0242	**−0.2260**	0.0851	**−0.2540**	**−0.2537**	0.0570	0.0197		
	0.0429	*0.0776*	*0.0000*	*0.0000*	*0.0000*	*0.0000*	*0.0000*	*0.1510*		
Wife's good health	**−0.1826**	−0.0548	0.1175	0.1171	−0.0665	−0.0439	0.1374	0.1265	0.0546	
	0.0000	*0.0001*	*0.0000*	*0.0000*	*0.0000*	*0.0014*	*0.0000*	*0.0000*	*0.0001*	
Husband's good health	−0.1121	−0.1442	0.0317	0.1259	−0.0534	−0.0571	0.1231	0.1297	0.0292	**0.2287**
	0.0000	*0.0000*	*0.0205*	*0.0000*	*0.0001*	*0.0000*	*0.0000*	*0.0000*	*0.0329*	*0.0000*

Note: *p*-values are reported in italics. Absolute value correlations above .15 are in bold.

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