Your Face is Your Fortune: Does Adolescent Attractiveness Predict Marriage and Sexual Activity Later in Life?

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Abstract (150 words)
A growing literature documents the importance of physical attractiveness in romantic, marital, and sexual relationships, but little is known about how attractiveness functions in intimate relationships in later life. We use over 50 years of data from the Wisconsin Longitudinal Study to examine the connections between adolescent physical attractiveness and intimate relationships in later life. We find that adolescent attractiveness facilitates sexual activity by increasing the probability of having access to potential sexual partners, but attractiveness is not related to sexual activity among those with partners. In addition, we find some evidence of higher payoffs to attractiveness for women than men. These findings highlight the importance of relationship context and gender for later life sexual activity and begin to explicate the social pathways through which factors across the life course influence sexual activity in later life.

Introduction

A frequently-made claim is that we live in a society that is obsessed with looks. Beyond the emphasis on beauty recurrent in popular culture, a variety of research has established that favorable physical characteristics are rewarded in a variety of ways, such as via a wage premium (e.g., Fikkan and Rothblum 2012; Hamermesh and Biddle 1994; Scholz and Sicinski 2013). The role of attractiveness generates perhaps the greatest personal consternation when we consider how it matters to our capacity to establish intimate relationships, including sexual activity and marriage. Indeed, several recent studies have examined the implications of measures of attractiveness for intimate relationships (e.g., McClintock 2014; Weitzman and Conley 2014) and document a "love premium" for beauty as well. While intriguing, these studies generate additional questions, particularly how sustained the advantages of attractiveness are. Does attractiveness early in life have an ongoing effect decades later? Or do these physical benefits erode and lose significance to our prospects for intimate relationships as we age? Is our face truly our fortune?

To address these questions, we use data from the Wisconsin Longitudinal Study. This data allows us to track if physical attractiveness at adolescence, based on ratings of high school yearbook photos, is associated with marital status and sexual activity later in life, as the cohort enter their sixties and seventies. The richness of the data allows us to control for and model many potential covariates, such as socio-economic status and health status. The results suggest that attractiveness early in the life course has a meaningful and ongoing effect on intimate relationships even decades later. Those who were rated more attractive as adolescents were more likely to have access to sexual partners later in life. These effects are at least partly conditioned by gender, with early-life attractiveness mattering more for women. We conclude by considering the implications of our findings, and further research opportunities.

Background

Attractiveness and Intimate Relationships

A large and growing literature documents the importance of physical traits in romantic, marital, and sexual heterosexual relationships, hereafter jointly referred to as intimate relationships. Dimensions of physical attractiveness such as facial attractiveness (McClintock 2014), height (Weitzman and Conley 2014), and weight (Fikkan and Rothblum 2012) are all associated with intimate relationships. Attractiveness is positively associated with dating (Cawley, Joyner, and Sobal 2006; Luo and Zhang 2009), cohabitation (Mukhopadhyay 2008), and marriage (Harper 2000; Weitzman and Conley 2014). Prior work also finds that dimensions of physical attractiveness are more directly linked to sexual behavior. For example, Brody (2004) found that slimness was associated with greater vaginal intercourse frequency. Attractiveness is also positively associated with number of sexual partners among young men (Bogaert and Fisher 1995; McClintock 2011). In addition, attractiveness appears to have an impact on relationships beyond their formation. Margolin and White (1987) found that perceptions of declining attractiveness of one's spouse was associated with declines in sexual interest, happiness in the sexual relationship, and increases in unfaithfulness, especially for husbands.

Physical attractiveness is a salient factor for intimate relationships for a number of reasons. First, the importance of attractiveness in intimate relationships is presumably at least partially attributable to the importance of sexual activity within intimate relationships, evidenced by the positive association between attractiveness and sexual activity (Bogaert and Fisher 1995; Margolin and White 1987; McClintock 2011). In addition, biological evolutionary theories argue

that traits that are traditionally considered "attractive" signal reproductive and genetic fitness as well as general good health (Buss and Schmitt 1993). Using the Wisconsin Longitudinal Study (WLS), Jokela (2009) found that men and women who were more attractive as adolescents had more children than their less attractive counterparts, though the functional form of this association varied by gender. Interestingly, the author found that this relationship was only partially accounted for by the higher probabilities of marriage of more attractive people. However, the fact that contemporary beauty standards favor extreme thinness, which is actually linked to reduced reproductive fitness (McClintock 2011), raise questions as to the relative importance of biological versus social explanations for the importance of attractiveness in intimate relationships.

A further complication of this literature is that the evidence on attractiveness and health is mixed. Using WLS data, Reither and colleagues (2009) found that a measure of adolescent facial mass was predictive of mortality in late mid-life. Another study also using WLS examined a measure of adolescent facial attractiveness independent of body mass and did not find an association with mortality (Scholz and Sicinski 2013). These mixed findings suggest variation in the relationship between attractiveness and health depending on the particular measure of attractiveness. Attractiveness ratings themselves are frequently influenced by factors such as socioeconomic background (Scholz and Sicinski 2013). Finally, as interesting as what is correlated with attractiveness is what is not. For example, attractiveness is not associated with intelligence (Feingold 1992; Scholz and Sicinski 2013), which further suggests the importance of social factors.

Besides attractiveness' association with sexual attraction and its role as a signal of reproductive fitness, attractiveness may matter in intimate relationships via social pathways. A large number of studies, for example, document a wage premium for attractiveness, a wage penalty for unattractiveness—such as obesity, or both (Fikkan and Rothblum 2012; Hamermesh and Biddle 1994; Scholz and Sicinski 2013). In addition, attractiveness also has important implications for socialization and development. Attractive children and adults are evaluated more favorably than their unattractive counterparts along a variety of measures, including interpersonal competence, adjustment, and social appeal (Langlois et al. 2000). These more favorable assessments of attractive people translate into more favorable treatment, including factors such as positive interaction and help-giving (Langlois et al. 2000). Perhaps in part because of this better treatment, attractive people are less socially-anxious and socially skilled (Feingold 1992). While these psychological/noncognitive correlates of attractiveness may also play an important role in individuals' abilities to establish intimate relationships with others, the literature has largely ignored these potential pathways. This makes it difficult to assess the degree to which personality characteristics such as extraversion predict the establishment of intimate relationships independent of attractiveness, or are themselves at least partly a function of attractiveness.

How Does Gender Matter in the Relationship between Attractiveness and Intimate Relationships across the Life Course?

While attractiveness is valued by both men and women, biological and social theories both predict that greater emphasis will be placed on women's attractiveness than men's. A variety of empirical studies document the heightened importance of dimensions of attractiveness for women in domains such as dating relationships (Alterovitz and Medelsohn 2009), marriage (Elder 1969), and labor market outcomes (Fikkan and Rothblum 2012). Evolutionary theory

posits that to the extent that attractiveness signals reproductive fitness, and women have a more limited reproductive lifespan than men, women's attractiveness will be valued more highly than men's (Buss and Schmitt 1993). Classic economic theory (Becker 1973) has also suggested that given men's traditionally-held comparative advantage in the labor market relative to women, attractiveness will be a more important commodity for women than men. Economic theories have generally assumed that attractiveness is traded for other commodities such as labor market characteristics, but the observed positive correlation between attractiveness and other desired characteristics (McClintock 2014; Scholz and Sicinski 201) questions the validity of these theories of exchange.

An additional and largely unanswered question is how the gendered relationship between attractiveness and intimate relationships varies across the life course. Some prior work has suggested that attractiveness remains important for relationships as individuals age, but is more valued by men in their potential female partner (Alterovitz and Medelsohn 2009; McWilliams and Barrett 2014). In addition, the reasons for attractiveness' continued association with intimate relationships in later life may differ from earlier in the life course. Differential male mortality combined with age hypergamy—the tendency for men to partner with women younger than themselves—leaves surviving men with many options for available female partners (England and McClintock 2010, Presser 1975). Alternatively, as women move past their reproductive lifespan, attractiveness may be less salient than factors such as health, age, and economic resources in the later life course. In addition, factors such as social skills—which have been linked to attractiveness—may be particularly salient when opportunities to (re)partner are limited compared with younger ages, and may also vary by gender, given the different marriage markets older women and men face.

Data and Methods

We use data from the Wisconsin Longitudinal Study (WLS) to explore the connections between attractiveness and intimate relationships in later life. The WLS is a one-third random sample of Wisconsin high school graduates from the class of 1957 (born in approximately 1939). Respondents were interviewed in 1957 (~age 18), 1975 (~age 35), 1992 (~age 53), 2004 (~age 65), and 2011 (~age 72).

Dependent Variables: Intimate Relationships in Later Life

We examine five outcomes that reflect dimensions of intimate relationships in later life. Our first outcome is a dichotomous measure of being sexually active (2004, 2011) for the entire sample (i.e., not conditional on marital status) to establish the overall picture and determinants of sexual activity in later life. Given the importance for partner availability for sexual activity and the central role of marriage as the primary relationship context for partnered sexual activity at older ages, our second outcome is marital status (married, divorced, widowed, and never married; 2004, 2011). Our third outcome is a dichotomous measure of sexual activity among the currently married (2004, 2011). However, nonmarital relationships are increasingly common at older ages and thus represent an additional and important context for sexual relationships in later life. As such, our fourth outcome is a dichotomous measure of unmarried people currently having a romantic partner (2004, 2011). Finally, given the importance that remarriage may play as an avenue for repartnering the formerly married, our fifth outcome is a dichotomous measure of remarriage among the formerly married (2004, 2011).

Key Independent Variable: Adolescent Facial Attractiveness

Our key independent variable is adolescent facial attractiveness, which is based on respondents' senior year yearbook photographs. Yearbook photographs were rated by six male and six female judges aged 61 to 89 years old (approximately the same cohort as WLS respondents). Judges rated photographs from one ("not at all attractive") to eleven "extremely attractive" with the aid of gender-specific anchor photos. The raw scores were then standardized in a series of steps that included an adjustment for each judge (to rule out judge-specific effects), and then averaging the scores and normalizing them to have a mean of zero and standard deviation of one (for details of this measure see Scholz and Sicinski 2013). One potential benefit of relying on facial attractiveness as opposed to height is that it may be assumed that being more beautiful is beneficial for both men and women, while the benefits of height may vary according to gender—see Harper 2000. An advantage of facial attractiveness over body weight is that while thinness is generally considered more important for attractiveness for women, there may be a higher premium placed on thinness for women than men (Fikkan and Rothblum 2012), which also may vary by cohort.

Other Covariates of Interest

We also include a variety of additional covariates that prior literature has linked to a variety of life chances that may be salient for intimate relationships across the life course. Of particular interest is gender, given that prior literature (e.g., Karraker and DeLamater 2013) suggests that gender is an important factor in sexual activity in later life. Other measures include: family background (parental socioeconomic status, city background, farm background); education (trichotomous variable: college or more education, some college, high school only (reference)); marital status (for Outcome 1: married (reference), divorced, widowed, never married); physical health (self-rated health, count of chronic conditions, indicator that health limits moderate physical activities); net worth (quintiles); religious activities; social engagement; and personality (the Big Five: extraversion, agreeableness, conscientiousness, neuroticism, and openness).

Analytic Strategy

We use logistic or multinomial logistic regression models as appropriate given the particular outcome of interest. Results are presented as odds ratios. We estimate several models. Model 1 includes only the standardized attractiveness and gender. Model 2 adds an interaction between attractiveness and female, given our interest in the role of attractiveness in the gendered sexual life course and that prior literature has suggested the attractiveness may be more important for women in intimate relationships. Model 3 adds family background measures. Model 4 adds education. For our first outcome, sexual activity not conditional on marital status we next add marital status (Model 5, Outcome 1). Next we add health conditions (Model 6, Outcome 1; Model 5 Outcomes 2-5), net worth (Model 7, Outcome 1; Model 6, Outcomes 2-5), and finally, religion, social engagement, and personality measures (Model 8, Outcome 1; Model 7, Outcomes 2-5).

We focus particularly on the attractiveness and gender coefficients, as well as how these are modified by the inclusion of additional covariates. This strategy enables a preliminary identification of potential pathways linking adolescent attractiveness and later life intimate relationships, which will later be the subject of formal mediation analysis. In future analysis, we will incorporate more careful attention to the roles of our other covariates as determinants of

intimate relationship in later life. In the interest of space, we only include selected models, but describe results for all outcomes for both 2004 and 2011 models.

Preliminary Results

We first examine odds ratios from a set of logistic regression models predicting the likelihood of being sexually active among all respondents in the wave of interest (2004, 2011). For the 2004 model, attractiveness remains positively associated with sexual activity across models and is changed little by the inclusion of additional covariates. For the 2011 model, attractiveness is positively associated with sexual activity until marital status is controlled for. In both 2004 and 2011 models, female gender is strongly and negatively associated with sexual activity, a relationship that is partially explained by the lower likelihood of women in the sample to be married. The interaction between female gender and attractiveness is not statistically significant in either 2004 or 2011.

We next examine odds ratios from a set of multinomial logistic regression models predicting marital status (2004, 2011). While adolescent attractiveness is not generally associated with being divorced or widowhood compared with being currently married in either 2004 or 2011 models, respondents who were rated as more attractive as adolescents were statistically significantly less likely to be never married compared with currently married. For both 2004 and 2011 models, women are more likely than men to be divorced or widowed compared with being currently married. Interestingly, in the 2004 model only, the female-attractiveness interaction is below 1.00 and statistically significant, indicating that more attractive women receive a higher payoff to being good-looking than their male counterparts.

We now turn to odds ratios from a set of logistic regression models predicting the log odds of sexual activity among the currently married. There is little evidence that attractiveness is related to sexual activity within marriage in either 2004 or 2011 models. In both 2004 and 2011 models, married women are less likely to be sexually active than their male counterparts. The gender-attractiveness interaction is not statistically significant in either wave.

Next we examine logistic regression models predicting the log odds of unmarried people currently having a romantic partner. In the 2004 model only, attractiveness is positively associated with having a sexual partner in the baseline model, but this association is no longer statistically significant when the gender-attractiveness is included. In both 2004 and 2011 models, unmarried women are less likely to have a sexual partner than unmarried men. The gender-attractiveness interaction is not statistically significant in either 2004 or 2011 models.

Finally, we examine results from a set of logistic regression models predicting the log odds of remarriage among those formerly married. In both 2004 and 2011 models, more attractive formerly married people are more likely to remarry than less attractive people. This relationship loses statistical significance once the gender-attractiveness interaction is included. Formerly married women are less likely to remarry than their male counterparts across 2004 and 2011 models. Interestingly, the gender-attractiveness interaction is statistically significant in some 2011 models, suggesting higher payoffs to beauty in remarriage markets for women than men. This interaction term loses statistical significance once physical health is accounted for.

Discussion and Future Analysis

Our preliminary results indicate the importance of physical attractiveness for some aspects of intimate relationships in later life. First, our findings suggest that adolescent attractiveness improves one's prospects in marriage markets earlier in the life course. For

example, when examining the outcome of marital status, we find that attractiveness is generally only associated with being never married. Given that most marriages occur relatively early in the life course, attractiveness is linked to later life sexual activity in part through the establishment of partnerships sometimes decades in the past. However, our results examining the predictors of the presence of an unmarried respondent having a sexual partner and the predictors of remarriage suggest that there is some continued payoff to adolescent attractiveness in later life, as more attractive people are more likely to have a romantic sexual partner, and if formerly married, to remarry. Further, there is some evidence (from gender-attractiveness interactions) that attractiveness has an increased payoff to women, consistent with prior studies.

Interestingly, while attractiveness seems to indeed make individuals more appealing to others as shown in the consistent relationship between attractiveness and having a spouse or partner, attractiveness is not related to sexual activity among those who are married. This may reflect the long duration of the majority of marriages in the sample. As relationship duration increases, initial sexual attraction, in which attractiveness is an important component, may be a less critical determinant of sexual activity, possibly supplanted by other factors such as health and relationship quality. Future analysis will examine the role of physical attractiveness in sexual activity among those in newer partnerships and (re)marriages.

In addition, consistent with prior research (Karraker and DeLamater 2013), we find that women are less likely to be married, less likely to be partnered, and less likely to be sexually active within a relationship. This reflects in part the differing spousal characteristics of men and women of the same age. The fact that women tend to partner with men older than themselves, and remarriage markets result in even larger age gaps between spouses yields large asymmetries in not only the chronological age, but also the health of same-aged women's and men's spouses, which prior research has identified as an important predictor of sexual activity in long-term marriages (Karrarker and DeLamater 2013).

We have several additional planned analyses in addition to those listed above. First, we will revisit the appropriateness of the gender-attractiveness interaction in at least some analysis. It is possible that the inclusion of this term may generate collinearity issues. We will also explore alternative functional forms for the attractiveness measure. As stated earlier, we will conduct formal mediation analysis for the attractiveness—intimate relationship associations to understand. In addition, subsequent work will pay closer attention to the substantive role of other covariates, such as health, social engagement, and personality as independent predictors of intimate relationships and will assess their relative magnitude compared with one another and attractiveness.

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Selected Results

Outcome 1, WLS 2004: Predictors of being sexually active NOT conditional on being married or partnered								
	O1M1_04	O1M2_04	O1M3_04	O1M4_04	O1M5_04	O1M6_04	O1M7_04	O1M8_04
	b/se	b/se	b/se	b/se	b/se	b/se	b/se	b/se
Sexually active 2004 (no ref)								
Attractiveness (std)	1.112***	1.116**	1.115**	1.133**	1.121*	1.134*	1.112*	1.166**
	(0.035)	(0.057)	(0.057)	(0.060)	(0.071)	(0.073)	(0.072)	(0.089)
Female	0.403***	0.403***	0.403***	0.398***	0.504***	0.502***	0.509***	0.457***
	(0.026)	(0.026)	(0.026)	(0.027)	(0.041)	(0.042)	(0.043)	(0.049)
Attractiveness x Female		0.993	1.003	0.992	0.934	0.893	0.898	0.865
		(0.065)	(0.066)	(0.067)	(0.077)	(0.074)	(0.075)	(0.086)
Parental SES			1.003	1.004	1.003	1.002	0.999	0.998
			(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.005)
City background			0.791**	0.791**	0.957	0.952	0.936	1.023
			(0.074)	(0.076)	(0.114)	(0.115)	(0.114)	(0.146)
Farm background			1.235**	1.271***	1.328***	1.254**	1.222*	1.165
			(0.104)	(0.111)	(0.142)	(0.136)	(0.133)	(0.148)
BA or more 04				1.078	1.147	1.048	0.971	0.947
				(0.089)	(0.115)	(0.108)	(0.102)	(0.128)
Some college 04				1.076	1.179	1.131	1.103	1.170
				(0.103)	(0.137)	(0.134)	(0.132)	(0.171)
Divorced 04					0.072***	0.071***	0.082***	0.081***
					(0.009)	(0.009)	(0.010)	(0.012)
Widowed 04					0.036***	0.035***	0.038***	0.033***
					(0.006)	(0.006)	(0.007)	(0.007)
Never married 04					0.024***	0.025***	0.028***	0.035***
					(0.006)	(0.006)	(0.007)	(0.010)
Good health 04 (phone)						1.396***	1.372***	1.275**
						(0.132)	(0.131)	(0.146)
Health conditions 04 (count)						0.888***	0.902**	0.889**
						(0.037)	(0.038)	(0.044)
Health limits moderate activities 04						0.841**	0.865*	0.900
						(0.063)	(0.066)	(0.080)
Net Worth 04 quint. 2							1.154	0.962
							(0.149)	(0.149)
Net Worth 04 quint. 3							1.343**	1.091
							(0.176)	(0.170)
Net Worth 04 quint. 4							1.464***	1.114
							(0.196)	(0.178)
Net Worth 04 quint. 5							1.783***	1.313
							(0.254)	(0.222)
Religion important 04								1.066
								(0.054)
Rel. attendence 04 (per week)								0.944
								(0.036)
HS acctivities (count)								1.002
								(0.015)
Social organizations 75 (count)								1.011
								(0.030)
Social organizations 04 (count)								1.046**
								(0.021)
Extraversion score 04								1.010
								(0.010)
Agreeableness score 04								1.004
								(0.013)
Conscientiousness score 04								1.014
								(0.013)
Neuroticism score 04								0.986
								(0.012)
Openness score 04								1.001
								(0.012)
_cons	3.022***	3.023***	2.825***	2.781***	5.098***	5.586***	4.333***	2.331
	(0.152)	(0.152)	(0.217)	(0.227)	(0.506)	(0.801)	(0.718)	(1.466)
r2								
r2_p	0.036	0.036	0.039	0.041	0.283	0.292	0.294	0.294
N	4563.000	4563.000	4563.000	4315.000	4313.000	4254.000	4221.000	3045.000
Standard errors in parentheses								
* p<0.10, ** p<0.05, *** p<0.01								

Outcome 2, WLS 2004: predictors of being married (married v. divorced v. widowed v. never married)							
	O2M1_04	O2M2_04	O2M3_04	O2M4_04	O2M6_04	O2M7_04	O2M8_04
	b/se	b/se	b/se	b/se	b/se	b/se	b/se
currently_married (baseline)							
(divorced and widowed categories omitted to save space)							
never_married							
Attractiveness (std)	0.682***	0.766***	0.764***	0.774**	0.776**	0.800*	0.745**
	(0.046)	(0.076)	(0.077)	(0.078)	(0.087)	(0.092)	(0.106)
Female	1.219	1.136	1.120	1.247	1.308*	1.208	1.202
	(0.163)	(0.160)	(0.158)	(0.179)	(0.207)	(0.196)	(0.252)
Attractiveness x Female		0.806	0.776*	0.745**	0.754*	0.754*	0.837
		(0.110)	(0.107)	(0.104)	(0.115)	(0.118)	(0.161)
Parental SES			1.006	0.991	0.992	1.004	1.014
			(0.006)	(0.007)	(0.007)	(0.008)	(0.009)
City background			2.081***	1.975***	2.047***	2.191***	1.731**
			(0.352)	(0.336)	(0.382)	(0.420)	(0.422)
Farm background			0.969	0.926	0.897	0.985	0.877
			(0.176)	(0.169)	(0.180)	(0.203)	(0.221)
BA or more 04				2.327***	2.610***	3.432***	3.140***
				(0.371)	(0.461)	(0.627)	(0.775)
Some college 04				1.327	1.263	1.328	1.073
				(0.275)	(0.296)	(0.319)	(0.331)
Good health 04 (phone)					0.526***	0.606***	0.462***
					(0.089)	(0.105)	(0.101)
Health conditions 04 (count)					0.920	0.888	0.818**
					(0.069)	(0.068)	(0.077)
Health limits moderate activities 04					1.099	1.003	1.021
					(0.143)	(0.133)	(0.167)
Net Worth 04 quint. 2						0.364***	0.429***
						(0.079)	(0.111)
Net Worth 04 quint. 3						0.274***	0.307***
						(0.062)	(0.084)
Net Worth 04 quint. 4						0.292***	0.291***
						(0.065)	(0.081)
Net Worth 04 quint. 5						0.108***	0.127***
						(0.031)	(0.044)
Religion important 04							0.919
							(0.085)
Rel. attendence 04 (per week)							1.223***
							(0.055)
HS acctivities (count)							0.949*
							(0.029)
Social organizations 75 (count)							0.707***
							(0.046)
Social organizations 04 (count)							1.086**
							(0.036)
Extraversion score 04							0.937***
							(0.019)
Agreeableness score 04							0.994
							(0.025)
Conscientiousness score 04							1.012
							(0.025)
Neuroticism score 04							0.979
							(0.023)
Openness score 04							1.060**
							(0.024)
_cons	0.041***	0.042***	0.034***	0.031***	0.044***	0.096***	0.312
	(0.004)	(0.004)	(0.006)	(0.005)	(0.011)	(0.026)	(0.371)

Outcome 3, WLS 2011, Predictors of being sexually active among those married only							
	O4M1_11	O4M2_11	O4M3_11	O4M4_11	O4M6_11	O4M7_11	O4M8_11
	b/se	b/se	b/se	b/se	b/se	b/se	b/se
Sexually active 2011 (no ref, married only)							
Attractiveness (std)	1.038	1.058	1.058	1.067	1.066	1.052	1.104
	(0.047)	(0.067)	(0.067)	(0.069)	(0.071)	(0.072)	(0.080)
Female	0.726***	0.727***	0.723***	0.711***	0.674***	0.681***	0.588***
	(0.065)	(0.065)	(0.065)	(0.065)	(0.064)	(0.066)	(0.066)
Attractiveness x Female		0.963	0.964	0.948	0.945	0.926	0.884
		(0.088)	(0.088)	(0.088)	(0.090)	(0.091)	(0.091)
Parental SES			1.006	1.002	1.001	0.997	0.994
			(0.004)	(0.005)	(0.005)	(0.005)	(0.005)
City background			1.221	1.204	1.211	1.151	1.010
			(0.178)	(0.179)	(0.182)	(0.176)	(0.165)
Farm background			1.246*	1.269**	1.256*	1.241*	1.163
			(0.146)	(0.151)	(0.153)	(0.156)	(0.154)
BA or more 11				1.337**	1.207	1.122	1.018
				(0.151)	(0.140)	(0.134)	(0.142)
Some college 11				1.251*	1.193	1.217	1.240
				(0.166)	(0.162)	(0.169)	(0.185)
Good health 11 (phone)					1.155	1.101	1.050
					(0.127)	(0.125)	(0.127)
Health conditions 11 (count)					0.874***	0.878***	0.876***
					(0.039)	(0.040)	(0.042)
Health limits moderate activities 11					0.705***	0.732***	0.734***
					(0.056)	(0.059)	(0.063)
Net Worth 04 quint. 2						1.106	1.021
						(0.193)	(0.188)
Net Worth 04 quint. 3						1.283	1.138
						(0.218)	(0.205)
Net Worth 04 quint. 4						1.503**	1.365*
						(0.260)	(0.249)
Net Worth 04 quint. 5						2.082***	1.892***
						(0.367)	(0.354)
Religion important 11							1.082
							(0.054)
Rel. attendence 11 (per week)							0.978
							(0.038)
HS acctivities (count)							1.004
							(0.016)
Social organizations 75 (count)							1.040
							(0.032)
Social organizations 11 (count)							1.061***
							(0.023)
Extraversion score 11							0.987
							(0.010)
Agreeableness score 11							1.030**
							(0.014)
Conscientiousness score 11							1.010
							(0.013)
Neuroticism score 11							0.993
							(0.013)
Openness score 11							1.018
							(0.013)
_cons	2.255***	2.254***	1.906***	1.809***	2.773***	2.158***	0.526
	(0.141)	(0.141)	(0.199)	(0.197)	(0.484)	(0.476)	(0.350)
r2							
r2_p	0.005	0.005	0.007	0.011	0.032	0.041	0.058
N	2254.000	2254.000	2254.000	2193.000	2171.000	2098.000	1939.000
Standard errors in parentheses							
* p<0.10, ** p<0.05, *** p<0.01							

Outcome 4, WLS 2004: Predictors of being sexually active among those married only							
	O4M1_04	O4M2_04	O4M3_04	O4M4_04	O4M6_04	O4M7_04	O4M8_04
	b/se	b/se	b/se	b/se	b/se	b/se	b/se
Sexually active 2004 (no ref, married only)							
Attractiveness (std)	1.033	1.065	1.065	1.080	1.094	1.084	1.156*
	(0.045)	(0.070)	(0.070)	(0.074)	(0.077)	(0.076)	(0.098)
Female	0.609***	0.610***	0.610***	0.605***	0.600***	0.601***	0.525***
	(0.053)	(0.053)	(0.054)	(0.055)	(0.056)	(0.056)	(0.064)
Attractiveness x Female		0.946	0.952	0.944	0.904	0.898	0.837
		(0.084)	(0.084)	(0.086)	(0.084)	(0.084)	(0.093)
Parental SES			1.003	1.002	1.001	0.998	0.996
			(0.004)	(0.005)	(0.005)	(0.005)	(0.006)
City background			0.944	0.922	0.914	0.898	1.037
			(0.126)	(0.125)	(0.126)	(0.125)	(0.172)
Farm background			1.223*	1.271**	1.201	1.174	1.113
			(0.143)	(0.152)	(0.146)	(0.144)	(0.161)
BA or more 04				1.186	1.084	1.009	1.042
				(0.134)	(0.126)	(0.119)	(0.161)
Some college 04				1.225	1.170	1.151	1.275
				(0.164)	(0.160)	(0.159)	(0.219)
Good health 04 (phone)					1.301**	1.273**	1.186
					(0.137)	(0.135)	(0.152)
Health conditions 04 (count)					0.841***	0.852***	0.859***
					(0.039)	(0.040)	(0.048)
Health limits moderate activities 04					0.838**	0.860*	0.888
					(0.069)	(0.071)	(0.087)
Net Worth 04 quint. 2						1.218	0.982
						(0.186)	(0.185)
Net Worth 04 quint. 3						1.403**	1.130
						(0.212)	(0.209)
Net Worth 04 quint. 4						1.610***	1.261
						(0.251)	(0.239)
Net Worth 04 quint. 5						1.760***	1.298
						(0.283)	(0.254)
Religion important 04							1.142**
							(0.067)
Rel. attendence 04 (per week)							0.998
							(0.049)
HS acctivities (count)							0.998
							(0.017)
Social organizations 75 (count)							0.982
							(0.033)
Social organizations 04 (count)							1.039
							(0.024)
Extraversion score 04							1.003
							(0.011)
Agreeableness score 04							1.001
							(0.015)
Conscientiousness score 04							1.009
							(0.015)
Neuroticism score 04							0.975*
							(0.013)
Openness score 04							0.999
							(0.014)
_cons	5.393***	5.394***	4.990***	4.629***	5.827***	4.399***	3.626*
	(0.353)	(0.354)	(0.519)	(0.504)	(0.934)	(0.825)	(2.580)
r2							
r2_p	0.010	0.010	0.011	0.014	0.029	0.034	0.041
N	3417.000	3417.000	3417.000	3258.000	3214.000	3196.000	2295.000
Standard errors in parentheses							
* p<0.10, ** p<0.05, *** p<0.01							

Outcome 5, WLS 2011: Predictors of being remarried							
	O5M1_11	O5M2_11	O5M3_11	O5M4_11	O5M6_11	O5M7_11	O5M8_11
	b/se	b/se	b/se	b/se	b/se	b/se	b/se
Remarried as of 2011							
Attractiveness (std)	1.191**	0.993	0.996	0.981	1.115	1.075	1.107
	(0.089)	(0.103)	(0.104)	(0.104)	(0.134)	(0.133)	(0.150)
Female	0.224***	0.212***	0.209***	0.210***	0.234***	0.234***	0.252***
	(0.032)	(0.032)	(0.031)	(0.032)	(0.040)	(0.041)	(0.051)
Attractiveness x Female		1.442**	1.396**	1.357**	1.209	1.181	1.170
		(0.215)	(0.210)	(0.208)	(0.204)	(0.206)	(0.217)
Parental SES			1.017**	1.014*	1.019**	1.012	1.015
			(0.007)	(0.007)	(0.008)	(0.009)	(0.009)
City background			0.793	0.753	0.721	0.728	0.561*
			(0.176)	(0.171)	(0.182)	(0.193)	(0.168)
Farm background			1.042	1.055	1.174	1.026	0.851
			(0.202)	(0.210)	(0.253)	(0.232)	(0.210)
BA or more 11				1.400*	1.345	1.195	1.382
				(0.258)	(0.272)	(0.256)	(0.347)
Some college 11				1.406*	1.423	1.391	1.632*
				(0.284)	(0.321)	(0.324)	(0.411)
Good health 11 (phone)					1.177	1.145	0.975
					(0.226)	(0.229)	(0.210)
Health conditions 11 (count)					1.092	1.084	1.083
					(0.083)	(0.086)	(0.093)
Health limits moderate activities 11					0.695**	0.802	0.812
					(0.102)	(0.122)	(0.131)
Net Worth 04 quint. 2						2.028***	1.915**
						(0.547)	(0.551)
Net Worth 04 quint. 3						2.707***	2.654***
						(0.736)	(0.767)
Net Worth 04 quint. 4						2.739***	2.652***
						(0.758)	(0.796)
Net Worth 04 quint. 5						2.959***	3.140***
						(0.833)	(0.948)
Religion important 11							1.088
							(0.091)
Rel. attendence 11 (per week)							1.033
							(0.063)
HS acctivities (count)							0.986
							(0.028)
Social organizations 75 (count)							0.951
							(0.052)
Social organizations 11 (count)							0.977
							(0.034)
Extraversion score 11							1.031*
							(0.019)
Agreeableness score 11							0.976
							(0.022)
Conscientiousness score 11							1.028
							(0.025)
Neuroticism score 11							1.040*
							(0.022)
Openness score 11							0.985
							(0.022)
_cons	0.477***	0.481***	0.374***	0.333***	0.260***	0.153***	0.052**
	(0.047)	(0.047)	(0.060)	(0.057)	(0.077)	(0.053)	(0.061)
r2							
r2_p	0.085	0.090	0.095	0.102	0.105	0.124	0.124
N	1477.000	1477.000	1477.000	1427.000	1195.000	1119.000	987.000
Standard errors in parentheses							
* p<0.10, ** p<0.05, *** p<0.01							