Original Article

Your Face is Your Fortune: Does Adolescent Attractiveness Predict Intimate Relationships Later in Life?

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Abstract

Objective: A growing literature documents the importance of physical attractiveness in young and middle adulthood for romantic, marital, and sexual relationships, but little is known about how attractiveness in adolescence matters to intimate relationships in later life. We ask: does attractiveness early in life convey ongoing benefits late in life, or do such benefits erode over time?

Methods: We use multivariate regression models and more than 50 years of data from the Wisconsin Longitudinal Study to examine the connections between adolescent physical attractiveness and intimate relationships (i.e., sexual activity and access to potential sexual partners) in later life.

Results: We find that adolescent attractiveness facilitates sexual activity in later life. This relationship is largely driven by attractiveness increasing the probability of having access to potential sexual partners. However, attractiveness is not related to sexual activity among married couples, even after controlling for marital duration. Men, those in good health, and wealthier individuals are also more likely to engage in several facets of intimate relationships.

Discussion: These findings highlight the importance of relationship context for later life sexual activity and begin to explicate the pathways through which factors across the life course—particularly attractiveness—influence sexual activity in later life.

Keywords: Family sociology—Life course analysis—Sexual behavior

A growing literature documents the importance of physical attractiveness in romantic, marital, and sexual relationships. Several recent studies have examined the implications of measures of attractiveness for intimate relationships (e.g., [McClintock, 2014](#); [Weitzman & Conley, 2014](#)) and document a “love premium” for beauty in which physically attractive people (as measured by height, weight, or facial beauty) are more likely to be in marital, dating, and sexual heterosexual relationships. While intriguing, these studies tend to focus on adolescence through middle age, and thus generate additional questions, particularly regarding how sustained the advantages of early life attractiveness are

across the life course. Does attractiveness early in life have an ongoing effect decades later, and if so, why? Or do these physical benefits erode and lose significance for our prospects of intimate relationships as we age? Is our face truly our fortune?

To address these questions, we use data from the Wisconsin Longitudinal Study (WLS), a prospective study based on a one-third sample of the Wisconsin high school graduating class of 1957. The WLS has a number of advantages over prior work, including face-based measures of attractiveness validated by multiple raters, multiple measures of intimate relationships later in life, as well

as a rich array of covariates. These data allow us to track whether physical attractiveness at adolescence, based on ratings of high school yearbook photos, is associated with sexual activity overall and among married people, as well as unmarried sexual relationships (referred to jointly in this article as “intimate relationships”) later in life, as the WLS cohort enter their 60s and 70s. The richness of the data allows us to control for and model many potential additional covariates, such as socioeconomic status, health, and personality, which may explain potential associations between attractiveness and intimate relationships, and/or be important predictors of intimate relationships in and of themselves.

Attractiveness and Intimate Relationships across the Life Course

A large and growing literature documents the importance of physical traits for intimate relationships. Dimensions of physical attractiveness such as facial attractiveness (McClintock, 2014), height (Weitzman & Conley, 2014), and weight (Fikkan & Rothblum, 2012) have been associated with a variety of intimate relationships in the reproductive stage of the life course. Dating is associated with height and weight (Cawley, Joyner, & Sobal, 2006) as well as researcher ratings of photographs (Luo & Zhang, 2009), cohabitation is linked to obesity (Mukhopadhyay, 2008), and marriage is related to height (Harper, 2000; Weitzman & Conley, 2014) and obesity (Harper, 2000). Dimensions of physical attractiveness are also linked to sexual behavior specifically. For example, Brody (2004) found that slimmer people more frequently engaged in vaginal intercourse in late adolescence through middle age. Among young men, a composite measure of attractiveness based on researcher and self-reports is also positively associated with number of sexual partners (Bogaert & Fisher, 1995; McClintock, 2011). In addition, more attractive people may enjoy lasting benefits in their relationships. Margolin and White (1987) found that as spouses—especially husbands—perceived declining spousal attractiveness, they became less interested in sex, became less happy in the sexual relationship, and were more likely to be unfaithful. Analysis of personal advertisement descriptions (Alterovitz & Mendelsohn, 2009) and qualitative interviews of older online daters (McWilliams & Barrett, 2014) also document the salience of attractiveness in internet dating among older adults.

Most studies have only looked at the relationship between attractiveness and one aspect of intimate relationships, though attractiveness may play a different role in the initial attraction of a sexual partner than in the sexual relationship between long-married people. In the present study, we advance the literature by examining the relationship between adolescent facial attractiveness and a variety of outcomes in later life including sexual activity overall and among married and unmarried people. This helps us to understand whether attractiveness functions differently

if someone is attracting a new partner (as well as how this might vary by life course stage) or engaging in sexual activity within an established relationship.

There are a number of potential reasons why physical attractiveness matters for intimate relationships. First, attractiveness facilitates sexual activity, which is important for intimate relationships (Bogaert & Fisher, 1995; Margolin & White, 1987; McClintock, 2011). In addition, biological evolutionary theories argue that “attractive” traits signal reproductive and genetic fitness as well as general good health (Buss & Schmitt, 1993). Using the WLS, Jokela (2009) found that both more attractive male and female adolescents had more children than their less attractive counterparts. However, the fact that attractiveness remains a preferred characteristic among older daters (Alterovitz & Mendelsohn, 2009; McWilliams & Barrett, 2014) points to social and cultural explanations rather than evolutionary theory in explaining the importance of attractiveness in at least some types of intimate relationships in later life.

Attractiveness may also be related to sexual activity via health, though extant evidence is mixed. Using WLS data, Reither, Hauser, and Swallen (2009) found that a measure of adolescent facial mass was predictive of mortality in late midlife, with increased risk of nonaccidental death and heart disease mortality among those who were overweight according to high school photographs. 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 & Sicinski, 2015). These mixed findings suggest that variation in the relationship between attractiveness and health depends on the particular measure of attractiveness used. Further, attractiveness ratings themselves are frequently influenced by factors such as socioeconomic background (Scholz & Sicinski, 2015).

Attractiveness may also matter in intimate relationships via social pathways. First, a large number of studies document that attractive people enjoy a wage premium (Fikkan & Rothblum, 2012; Hamermesh & Biddle, 1994; Scholz & Sicinski, 2015). Theories from social psychology propose that more attractive people benefit from advantaged social contexts because of the “halo effect” of the esteem of others (Eagly, Ashmore, Makhijani, & Longo, 1991) and because more attractive individuals internalize these favorable evaluations, fostering personality characteristics which may also encourage intimate relationships (Berscheid & Walster, 1974). Attractive children and adults are evaluated more favorably by others and are treated better (Langlois et al., 2000). Perhaps in part because of this better treatment, attractive people are less socially anxious and more socially skilled (Feingold, 1992) and are more likely to report higher levels of extraversion and lower levels of neuroticism (Scholz & Sicinski, 2015). Social skills—reflected in part via the personality trait of extraversion—may make attractive people more likely to

engage in social situations where potential romantic partners may be encountered. Low neuroticism, which entails low levels of a variety of negative emotions, may promote relationship maintenance via relationship satisfaction and intimacy (Fisher & McNulty, 2008; White, Hendrick, & Hendrick, 2004). Given these linkages between attractiveness and personality as well as the importance of early life for personality development and its relative stability across the life course (Caspi & Roberts, 2001), early life attractiveness may play an important role in shaping adult personality. In addition, favorable treatment and associated low levels of negative emotions may foster positive dimensions of well-being among attractive people such as self-acceptance, which has consequential implications for sexual outcomes (Cornwell & Laumann, 2011). Although these psychological 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 factors such as personality characteristics like extraversion predict the establishment of intimate relationships independent of attractiveness, or are themselves at least partly a function of attractiveness.

Additional Determinants of Intimate Relationships in the Later Life Course

Prior literature has identified several additional determinants of sexual activity in later life. We briefly summarize these here. First, earlier work has identified the importance of gender for intimate relationships in later life. Men are more likely to be partnered in later life, a necessary but insufficient condition for partnered sexual activity (Karraker, DeLamater, & Schwartz, 2011; Lindau, et al., 2007). Within relationships, men are also more likely to be sexually active (Karraker & DeLamater, 2013), a relationship that may reflect age hypergamy and other factors.

Intimate relationships in later life are also predicted by physical and psychological health (Lindau et al., 2007), including a variety of physical health conditions (DeLamater & Sill, 2005), as well as self-rated physical and mental health (Karraker & DeLamater, 2013; Karraker, DeLamater, & Schwartz, 2011). Further, health may also be associated with partnership to the extent that partners seek healthy mates, because of desires for sexual activity, to avoid caregiving, or other reasons (England & McClintock, 2009).

Finally, socioeconomic and other factors are also linked to intimate relationships in later life. Education and financial resources are valued by both men and women in potential partners across the life course (England & McClintock, 2009; McClintock, 2014). Education also helps shape attitudes and beliefs about sexual activity earlier in the life course (Laumann et al., 1994). Finally, wealthier people are more likely to repartner, either via remarriage or via cohabitation, in later life (Vespa, 2012).

The Present Study

Although the prior work on attractiveness and intimate relationships is intriguing, little is known about the potential enduring role of attractiveness in later life. Work that has examined the role of attractiveness in intimate relationships in later life has relied on convenience samples examining internet dating (Alterovitz & Mendelsohn, 2009; McWilliams & Barrett, 2014). Dating is an increasingly important relationship context for older adults, but the role of attractiveness may differ in dating versus marital relationships, in part because those who are dating are a select group of older adults who are more advantaged in terms of education, assets, health, and social connectedness than nondaters (Brown & Shinohara, 2013). Given that attractiveness may be a strong predictor of partnership, and partnership in turn predicts sexual activity in later life (Karraker, DeLamater, & Schwartz, 2011), early life attractiveness may facilitate continued sexual activity in later life because of its connections with partnership earlier in the life course. In addition, because more attractive people benefit from better health and socioeconomic status, as well as certain personality traits, these factors may also serve as potential mechanisms linking attractiveness and intimate relationship outcomes. Further, it is unclear whether attractiveness (and other factors) will have the same association with intimate relationship outcomes within different stages in the later life course. Using the WLS, we address these gaps by examining the association between attractiveness and a variety of intimate relationship outcomes (sexual activity, marital status, unmarried partnership status), as well as the potential explanatory role of factors such as health, socioeconomic status, and personality at older ages.

Method

We use data from the 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 years), 1975 (~age 35 years), 1992 (~age 53 years), and 2004 (~age 64 years). We also conducted additional analysis examining 2011 data (~age 71 years). We do not present these results (available upon request) as they generally do not differ from results for outcomes in 2004.

The WLS provides a unique opportunity to examine the role of adolescent attractiveness in later life intimate relationships as well as the pathways across the life course through which attractiveness impacts these outcomes. However, because the WLS is a distinctive cohort with unique racial/ethnic, socioeconomic, and cultural characteristics, it is unclear how it compares with nationally representative data. To address this, we compare our

sample with men and women from the first wave (collected 2005–2006) of the National Social Life, Health and Aging Project (NSHAP) who were born 1937–1941, were White, and had at least a high school education. We weighted NSHAP statistics with survey-provided weights that account for differential probabilities of selection, making our NSHAP statistics representative of White Americans born 1937–1941 with at least a high school education. We found that the prevalence of sexual activity, marital status, availability of a (potential) sexual partner, and sexual activity within marriage was similar between WLS and NSHAP ([Supplementary Material](#)).

Dependent Variables: Intimate Relationships at Age 64

We examine three outcomes in 2004 when respondents are 64 years old. Our first outcome is a dichotomous measure of being sexually active for the entire sample to establish a broad picture of the determinants of sexual activity in later life. In order for respondents to be asked about sexual frequency (the basis of the dichotomous “is sexually active” outcome measure), the respondent had to report being currently married or, if unmarried, also report having a sexual partner. Respondents who were neither married nor unmarried not reporting a sexual partner were assigned a value of zero sexual frequency. Given the importance of partner availability for sexual activity, and that both marital and non-marital (i.e., dating) relationships provide access to partners, our second outcome is a measure of access to (potential) sexual partnership. This is based in part on a question posed to unmarried respondents on whether they have access to a sexual partner. To examine whether adolescent attractiveness matters to access to partners among the unmarried later in life as well as in marriage, we compare the relative risk ratios of being unmarried with a sexual partner and being married compared with being unmarried without a sexual partner. Finally, as marriage is a key relationship context for sexual activity in later life, our third outcome is a dichotomous measure of sexual activity among the currently married. Sexual activity for the first and third outcomes was ascertained using the question: “During the past 12 months, about how often did you have sex with your spouse or partner?” in the mail questionnaire. Responses were then recoded as dichotomous variables in which 0 = *no sexual activity* and 1 = *any sexual activity*.

The examination of the role of adolescent attractiveness for relationships formed in early midlife (generally appearing as long-term marriages in our data) and later life (unmarried sexual partnerships), as well as sexual activity within the context of marriage enables us to examine how the relationship between adolescent attractiveness and sexual expression may vary by life course stage and relationship context. Given theoretical and empirical work that suggests the importance of attractiveness for initial partnering, we

expect that adolescent attractiveness will matter most for the formation of marriage earlier in the life course. We also examined the association between adolescent attractiveness and interviewer reports of respondent attractiveness at age 71—the only measure of attractiveness available in the WLS in later life. Adolescent attractiveness is only weakly associated with later-life attractiveness ($|r| = .13$) (authors’ calculations, available on request). Given this fact and prior work (e.g., [Karraker & DeLamater, 2013](#)) that finds that sexual expression in long-term marriages is strongly associated with health and marital quality, we expect adolescent attractiveness will have a weaker or nonrelationship with these latter two outcomes.

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 from approximately the same birth 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 see [Scholz & Siciński, 2015](#)).

The WLS use of high school yearbook photographs differs substantially from many of the measures of attractiveness used by other studies, which include weight, height, and survey interviewer ratings of respondent attractiveness. One potential benefit of relying on facial attractiveness as opposed to height or weight is that it may be assumed that being more beautiful is beneficial for both men and women, whereas the benefits of height or weight may vary according to gender ([Fikkan & Rothblum, 2012](#); [Harper, 2000](#)). Perceptions of facial attractiveness are associated with three characteristics ([Rhodes, 2006](#)). Symmetrical features are preferred to asymmetrical ones. More average faces—in terms of similarity to the traits of the relevant population—are perceived as more attractive than distinctive faces. Faces that feature classic representations of notions about masculinity or femininity (referred to as secondary sexual characteristics, or sexual dimorphism) are also more highly valued. Attractiveness is culturally and temporally specific, and the study’s use of raters from approximately the same birth cohort—the same people respondents would encounter in marriage markets—improves confidence that the measure of attractiveness used is meaningful for our outcomes of interest.

Other Covariates of Interest

One advantage of the WLS is that it includes a rich array of additional covariates that prior literature has identified

as salient for intimate relationships in the later life course. Of particular interest is gender (1 = *female*), given that prior literature indicates that men are more likely to be sexually active in and out of relationships and more likely to be partnered in later life. Other measures include family background (a factor-weighted composite parental socioeconomic status measure incorporating parental education, income, and father's educational prestige; and dichotomous indicators of city background and farm background), which may be associated with factors such as teeth straightening and good nutrition that are linked to attractiveness; education (high school only [reference], some college, college or more education); marital status (married [reference], divorced, widowed, never married); physical health (self-rated health, count of chronic conditions, indicator that health limits moderate physical activities, body mass index [BMI]); net worth; extraversion, neuroticism, and self-acceptance. We code net worth as indicators for quintiles of the distribution of the 2004 imputed variable supplied by WLS. BMI is a categorical variable based on standard cutoffs (BMI < 18.5, underweight; $18.5 \leq \text{BMI} < 25$, normal weight [reference]; $25 \leq \text{BMI} < 30$, overweight; BMI ≥ 30 , obese). Finally, when modeling sexual activity among married people, we also include indicators of marital duration in years and marital satisfaction. An examination of local linear regression models of the probability of sexual activity across marital duration revealed a nonlinear relationship between duration and sexual activity. As such, we model marital duration with splines. Based on local linear regression model results, we include spline knots at 6 years and 20 years. We measure marital satisfaction using a phone survey item asking about closeness to the current spouse, with answers ranging from "not at all close" to "very close".

Analytic Strategy

We use binary logistic or multinomial logistic regression models appropriate to the particular outcome of interest. Results are presented as odds or relative risk ratios. We focus on attractiveness coefficients, as well as how these change with the inclusion of additional covariates. We also conducted supplementary analyses in which we included interactions between attractiveness and gender. In general, these interactions were not statistically significant (available upon request).

Results

Table 1 presents descriptive statistics. At age 64, 66% of the overall sample—and 81% of married respondents—are sexually active. Approximately 20% of unmarried respondents (4% of the total sample) have a sexual partner. Levels of sexual activity and sexual partnership among the unmarried declined by age 71 (available upon request).

Table 2 displays results from logistic regression models predicting the likelihood of being sexually active among

all respondents. Adolescent attractiveness is positively associated with being sexually active and is completely explained by marital status. Across models, divorced, widowed, and never married persons are all far less likely to be sexually active compared with currently married persons. Controlling for all other covariates, good self-rated health is positively associated with sexual activity and obese or overweight persons are less likely to be sexually active compared with normal weight persons. In the full model, high net worth (top quintile and fourth quintile vs bottom quintile) is positively associated with sexual activity as is self-acceptance. Extraversion and neuroticism are not related to sexual activity. Women are far less likely to be sexually active than men across models.

As Table 2 indicates the importance of attractiveness in facilitating sexual activity via the availability of partner via marriage, Table 3 further examines how attractiveness matters to access to a (potential) sexual partner. We focus on results for unmarried persons with a sexual partner versus without, as results for the married versus unmarried without a sexual partner may reflect reverse causality (e.g., higher net worth may either select individuals into marriage and/or marriage may generate higher net worth). In the full model, we find that unmarried persons rated more attractive as adolescents are more likely to have a sexual partner. Among unmarried people, women and obese persons are less likely to have a sexual partner, whereas individuals with high net worth, greater extraversion, and greater neuroticism are more likely to have a sexual partner. Given increases in remarriage in later life, we also examined whether adolescent attractiveness predicted remarriage by age 64. In our sample, we find that 21% of those who were divorced or widowed in 1992 were remarried in 2004. However, we found that adolescent attractiveness was not related to remarriage in later life (results not shown, available upon request).

Table 4 shows results from models predicting sexual activity among married people at age 64. Attractiveness is not associated with sexual activity within marriage, whereas women are less likely to be sexually active across models. We also identify a "honeymoon effect," in which the odds of sexual activity drop rather quickly in the first few years of marriage and then decline much more slowly. At about 20 years of marriage, marital sexual activity flattens out, and even appears to rise gradually subsequently. Further, marital closeness is positively associated with sexual activity. People with worse health have lower odds of sexual activity in the full model. Compared with those who are normal weight, overweight or obese married persons are less likely to be sexually active. Net worth is strongly and positively associated with sexual activity as is self-acceptance. We also considered whether adolescent attractiveness was related to quality of sexual relationships measured as either reported physical pleasure or emotional satisfaction within marital sexual relationships. Attractiveness did not have a statistically significant

Table 1. Descriptive Statistics. Wisconsin Longitudinal Study, 1957–2004

	Mean/Proportion	SE	Range	<i>n</i>
Outcome 1: Sexually active (entire sample), age 64 years	0.66		(0, 1)	4,066
Outcome 2: Access to (potential) sexual partnership, age 64 years				
No sexual partner (not married)	0.16		(0, 1)	3,933
Has sexual partner (not married)	0.04		(0, 1)	3,933
Has sexual partner (married)	0.80		(0, 1)	3,933
Outcome 3: Sexually active (married), age 64 years	0.81		(0, 1)	3,085
Attractiveness (standardized)	0.01	0.99	(–2.78, 3.14)	
Female	0.53		(0, 1)	
Family background				
Parental SES	16.62	11.03	(1, 87)	
Grew up on farm	0.21		(0, 1)	
Grew up in city	0.13		(0, 1)	
Marital status, 2004				
Married	0.76		(0, 1)	
Divorced	0.11		(0, 1)	
Widowed	0.08		(0, 1)	
Never married	0.04		(0, 1)	
Education, 2004				
High school degree	0.54		(0, 1)	
Some college	0.16		(0, 1)	
College or more	0.30		(0, 1)	
Physical health, 2004				
Self-rated good health	0.65		(0, 1)	
Health conditions (count)	1.46	1.06	(0, 6)	
Health limits moderate activities	0.30	0.56	(0, 2)	
BMI, 2004				
Underweight (BMI < 18.5)	0.01		(0, 1)	
Normal weight (18.5 ≤ BMI < 25)	0.28		(0, 1)	
Overweight (25.0 ≤ BMI < 30)	0.42		(0, 1)	
Obese (BMI ≥ 30.0)	0.29		(0, 1)	
Personality and psychological well-being, 2004				
Extraversion (Cronbach's alpha = .76)	22.94	5.25	(6, 36)	
Neuroticism (Cronbach's alpha = .75)	14.92	4.60	(5, 30)	
Self-acceptance (Cronbach's alpha = .77)	24.69	3.73	(7, 30)	

Note: BMI = body mass index; SES = socioeconomic status.

All independent covariates are based on analytic sample for Outcome 1.

relationship with either measure at either age 64 or 71 (results available upon request).

Discussion

Even as a growing body of research provides insights into the importance of attractiveness in young and middle adulthood for intimate relationships, we know relatively little about how attractiveness earlier in life may influence intimate relationships later in life. This article offers the most comprehensive attempt to address this question. We find that attractiveness matters largely by providing access to sexual partners, for both married and unmarried individuals. We find that more attractive adolescents have greater sexual activity later in life and that this relationship is completely mediated by marital status. The results therefore point to the importance of attractiveness in facilitating

access to a sexual partner via marriage. Turning to our second outcome of (potential) sexual partner availability, we also found evidence that more attractive adolescents are also more likely to have access to sexual partners among the unmarried at older ages. We did not find, however, an association between adolescent attractiveness and remarriage in later life. This suggests that attractiveness may vary in its importance depending on whether someone is being evaluated as “marriage material” or for a more casual relationship. Given that many marriages begin relatively early in the life course (i.e., one's 20s or 30s), attractiveness is linked to later life sexual activity in part through the establishment of partnerships (mostly marriage) sometimes decades in the past. However, adolescent attractiveness also facilitates romantic relationships in later life, as evidenced by our findings for the unmarried having a sexual partner at age 64.

Table 2. Logistic Regression Models of Being Sexually Active (married or partnered sample), Wisconsin Longitudinal Study, 2004

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>
Attractiveness (standardized)	1.110*** (0.038)	1.114*** (0.039)	1.112*** (0.039)	1.070 (0.045)	1.047 (0.045)	1.034 (0.044)	1.031 (0.044)
Female	0.400*** (0.028)	0.399*** (0.028)	0.401*** (0.028)	0.497*** (0.042)	0.481*** (0.042)	0.491*** (0.043)	0.468*** (0.041)
Parental SES		1.005 (0.003)	1.004 (0.004)	1.003 (0.004)	1.002 (0.004)	0.999 (0.004)	1.000 (0.004)
City background		0.862 (0.087)	0.860 (0.087)	1.015 (0.126)	1.007 (0.126)	0.981 (0.123)	0.973 (0.123)
Farm background		1.264*** (0.114)	1.267*** (0.115)	1.291** (0.141)	1.254*** (0.138)	1.218* (0.134)	1.225* (0.136)
Education							
High school degree (reference)			—	—	—	—	—
Some college			1.107 (0.110)	1.210 (0.146)	1.168 (0.142)	1.135 (0.139)	1.132 (0.139)
BA or more			1.057 (0.089)	1.128 (0.116)	1.024 (0.107)	0.956 (0.102)	0.926 (0.099)
Marital status, 2004							
Married				—	—	—	—
Divorced				0.073*** (0.009)	0.072*** (0.009)	0.082*** (0.011)	0.082*** (0.011)
Widowed				0.037*** (0.007)	0.036*** (0.006)	0.038*** (0.007)	0.039*** (0.007)
Never married				0.025*** (0.007)	0.025*** (0.007)	0.028*** (0.007)	0.029*** (0.008)
Physical health, 2004							
Self-rated good health				1.416*** (0.138)	1.416*** (0.138)	1.393*** (0.136)	1.311*** (0.130)
Health conditions (count)				0.923* (0.040)	0.923* (0.040)	0.931 (0.041)	0.933 (0.041)
Health limits moderate activities				0.888 (0.069)	0.888 (0.069)	0.903 (0.070)	0.934 (0.073)
Body mass index, 2004							
Underweight				0.494 (0.266)	0.494 (0.266)	0.497 (0.268)	0.496 (0.268)
Normal weight (reference)				—	—	—	—
Overweight				0.813** (0.085)	0.813** (0.085)	0.818* (0.086)	0.808** (0.085)
Obese				0.770** (0.089)	0.770** (0.089)	0.797* (0.093)	0.800* (0.094)
Net worth quintile, 2004							
1 (reference)							
2				1.167 (0.154)		1.167 (0.154)	1.130 (0.150)
3				1.298* (0.174)		1.298* (0.174)	1.218 (0.164)
4				1.379** (0.189)		1.379** (0.189)	1.283* (0.178)
5				1.731*** (0.251)		1.731*** (0.251)	1.572*** (0.231)
Extraversion, 2004							1.007 (0.009)
Neuroticism, 2004							1.005 (0.010)
Self-acceptance, 2004							1.060*** (0.014)
Constant	3.204*** (0.172)	2.887*** (0.238)	2.833*** (0.239)	5.157*** (0.527)	6.191*** (1.007)	4.905*** (0.906)	1.013 (0.444)
Pseudo R ²	.037	.039	.039	.276	.285	.288	.293
N	4,066	4,066	4,066	4,066	4,066	4,066	4,066

Note: Coefficients expressed as odds ratios. Standard errors in parentheses.

* $p < .10$. ** $p < .05$. *** $p < 0.01$.

Table 3. Multinomial Logistic Regression Models of Access to Sexual Partner—Unmarried or Married—Versus Unmarried Without Sexual Partner. Wisconsin Longitudinal Study, 2004

	Has sexual partner, not married						Married					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE
Attractiveness (standardized)	1.191** (0.099)	1.213** (0.102)	1.213** (0.102)	1.197** (0.101)	1.185** (0.101)	1.176* (0.100)	1.132*** (0.046)	1.147*** (0.047)	1.150*** (0.047)	1.143*** (0.047)	1.092** (0.047)	1.089* (0.047)
Female	0.307*** (0.052)	0.306*** (0.051)	0.303*** (0.051)	0.286*** (0.050)	0.296*** (0.052)	0.272*** (0.048)	0.349*** (0.030)	0.349*** (0.030)	0.343*** (0.030)	0.350*** (0.032)	0.376*** (0.035)	0.348*** (0.033)
Parental SES		1.000 (0.008)	1.001 (0.009)	1.001 (0.009)	0.997 (0.009)	0.997 (0.009)		0.999 (0.004)	1.001 (0.004)	1.001 (0.004)	0.990** (0.004)	0.991** (0.004)
City background		0.985 (0.234)	0.986 (0.234)	0.963 (0.230)	0.932 (0.223)	0.928 (0.222)		0.793** (0.090)	0.798** (0.091)	0.777** (0.089)	0.727*** (0.087)	0.728*** (0.087)
Farm background		1.464* (0.310)	1.476* (0.313)	1.506* (0.321)	1.475* (0.315)	1.494* (0.320)		1.199* (0.129)	1.201* (0.130)	1.192 (0.129)	1.059 (0.120)	1.065 (0.121)
Education												
High school degree (reference)												
Some college			1.020 (0.238)	1.009 (0.237)	0.998 (0.235)	1.027 (0.243)			0.871 (0.100)	0.859 (0.099)	0.780** (0.095)	0.804* (0.098)
BA or more			0.929 (0.191)	0.856 (0.179)	0.803 (0.171)	0.828 (0.177)			0.880 (0.088)	0.833* (0.085)	0.636*** (0.068)	0.650*** (0.071)
Physical health, 2004												
Self-rated good health										1.498*** (0.140)	1.352*** (0.132)	1.320*** (0.132)
Health conditions (count)										1.047 (0.045)	1.062 (0.047)	1.055 (0.047)
Health limits moderate activities										0.967 (0.071)	1.069 (0.083)	1.084 (0.085)
Body mass index, 2004												
Underweight										0.481* (0.184)	0.584 (0.240)	0.561 (0.232)
Normal weight (reference)												
Overweight										1.186* (0.117)	1.270** (0.131)	1.274** (0.132)
Obese										1.049 (0.114)	1.318** (0.150)	1.360*** (0.156)

Table 3. Continued

	Has sexual partner, not married						Married					
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE	b/SE
Net worth quintile, 2004												
1 (reference)												
2						—					—	—
						0.963					2.579***	2.567***
						(0.223)					(0.295)	(0.296)
3						1.024					4.308***	4.231***
						(0.259)					(0.538)	(0.534)
4						0.932					4.917***	4.687***
						(0.251)					(0.645)	(0.620)
5						2.129***					10.910***	10.229***
						(0.595)					(1.762)	(1.664)
Extraversion, 2004												1.029***
												(0.009)
Neuroticism, 2004												1.045***
												(0.011)
Self-acceptance, 2004												1.047***
												(0.013)
Constant	0.482***	0.448***	0.449***	0.399***	0.387***	0.030***	9.424***	9.535***	9.846***	6.817***	2.582***	0.245***
	(0.059)	(0.089)	(0.092)	(0.124)	(0.126)	(0.026)	(0.692)	(0.997)	(1.054)	(1.056)	(0.439)	(0.105)
Pseudo R ²	.030	.032	.032	.039	.102	.109	.030	.032	.032	.039	.102	.109
N	4,838	4,838	4,838	4,838	4,838	4,838	4,838	4,838	4,838	4,838	4,838	4,838

Note: SES = socioeconomic status.

Coefficients expressed as relative risk ratios. Standard errors in parentheses.

* $p < .10$. ** $p < .05$. *** $p < 0.01$.

Table 4. Logistic Regression Models of Being Sexually Active (married only), Wisconsin Longitudinal Study, 2004

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>	<i>b</i> / <i>SE</i>
Attractiveness (standardized)	1.044 (0.049)	1.043 (0.049)	1.037 (0.049)	1.031 (0.049)	1.010 (0.048)	0.999 (0.048)	0.993 (0.049)
Female	0.577*** (0.054)	0.577*** (0.054)	0.553*** (0.052)	0.564*** (0.054)	0.542*** (0.053)	0.552*** (0.054)	0.548*** (0.056)
Parental SES		1.006 (0.005)	1.007 (0.005)	1.004 (0.005)	1.002 (0.005)	1.000 (0.005)	0.999 (0.005)
City background		0.963 (0.136)	0.965 (0.137)	0.960 (0.136)	0.950 (0.136)	0.927 (0.133)	0.955 (0.140)
Farm background		1.211 (0.148)	1.221 (0.150)	1.225* (0.151)	1.187 (0.147)	1.161 (0.145)	1.214 (0.155)
Married 0–6 years 2004			0.670** (0.119)	0.674** (0.119)	0.681** (0.120)	0.687** (0.122)	0.688** (0.124)
Married 7–20 years 2004			0.962 (0.026)	0.959 (0.026)	0.957 (0.026)	0.956* (0.026)	0.962 (0.026)
Married 21+ years 2004			1.019*** (0.007)	1.021*** (0.007)	1.021*** (0.007)	1.020*** (0.007)	1.020*** (0.008)
Education							
High school degree (reference)				—	—	—	—
Some college				1.301* (0.183)	1.247 (0.178)	1.214 (0.174)	1.195 (0.175)
BA or more				1.220* (0.143)	1.117 (0.133)	1.046 (0.127)	1.022 (0.127)
Physical health, 2004							
Self-rated good health					1.332*** (0.145)	1.314** (0.144)	1.144 (0.130)
Health conditions (count)					0.869*** (0.042)	0.875*** (0.043)	0.855*** (0.043)
Health limits moderate activities					0.892 (0.076)	0.905 (0.078)	0.924 (0.082)
Body mass index, 2004							
Underweight					0.434 (0.277)	0.439 (0.282)	0.464 (0.304)
Normal weight (reference)				—	—	—	—
Overweight				0.796* (0.098)	0.803* (0.099)	0.803* (0.099)	0.761** (0.096)
Obese				0.761** (0.102)	0.786* (0.106)	0.786* (0.106)	0.761** (0.105)
Net worth quintile, 2004							
1					—	—	—
2						1.194 (0.189)	1.200 (0.195)
3						1.321* (0.206)	1.242 (0.200)
4						1.443** (0.232)	1.329* (0.220)
5						1.626*** (0.270)	1.500** (0.258)
Extraversion, 2004							1.000 (0.010)
Neuroticism, 2004							0.997 (0.012)
Self-acceptance, 2004							1.047*** (0.016)
How close to spouse, 2004							2.480*** (0.252)
Constant	5.625*** (0.393)	4.936*** (0.545)	63.188*** (60.736)	58.463*** (56.069)	78.520*** (75.754)	60.692*** (59.409)	0.752 (0.854)
Pseudo R ²	.012	.013	.020	.022	.038	.041	.076
N	3,085	3,085	3,085	3,085	3,085	3,085	3,085

Note: SES = socioeconomic status.

Coefficients expressed as odds ratios. Standard errors in parentheses.

* $p < .10$. ** $p < .05$. *** $p < .01$.

Even as attractiveness facilitates the finding of partners, we found that attractiveness is not related to measures of sexual activity among married couples—being sexually active, physical pleasure, or emotional satisfaction. This finding serves to reinforce the point that the primary benefit of attractiveness in the context of intimate relationships is facilitating some form of partnership. The finding may also reflect the long duration of the majority of marriages in the sample. Though we control for duration, physical attractiveness may be most salient in the very beginning of relationships or be important in initial attraction, rather than in sustaining the relationship. 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. Given that intimate relationships are occurring in increasingly diverse forms—dating, cohabitation, living apart together, remarriage (e.g., Brown & Shinohara, 2013, De Jong Gierveld, 2004)—future research should examine variation in the determinants of sexual activity by specific relationship context.

Consistent with prior findings, we find that women are less likely to be married, less likely to be partnered if unmarried, and less likely to be sexually active within marriage. This reflects in part skewed sex ratios in which women increasingly outnumber men (Karraker, DeLamater, & Schwartz, 2011), and the differing spousal characteristics of men and women of the same age, as women tend to partner with men older than themselves, which are accentuated further in remarriage markets (England & McClintock, 2009). These patterns yield large asymmetries not only the chronological age, but also the health of same-aged women's and men's spouses, with women less likely to have a healthy spouse.

Supplementary analysis revealed that the relationship between attractiveness and intimate relationship outcomes did not generally vary by gender in our sample. Some prior studies have suggested that female facial attractiveness is more important for men in heterosexual partnered activity. However, this relationship may be age dependent. A recent study (Marcinkowska, Dixon, Kozlov, & Rantala, 2015) found that men's preference for facial femininity declines with age, which may be related to concomitant declines in testosterone. This finding may partially explain why we do not see significant gender interactions between attractiveness and sexual activity outcomes in later life. Another explanation may be the increasing salience of other factors—particularly health and economic resources—for both men and women as they age. Further, as notions of intimate relationships change over the life course (Calasanti & Slevin, 2001), both women and men may prioritize emotional intimacy over sexual intimacy (Lodge & Umberson, 2012). In addition, the relationship between gender and attractiveness may depend on life course stage (i.e., reproductive ages vs postreproductive ages), as well as how the particular historical period shapes factors such as women's economic status relative to men, which could generate

gender asymmetries in the value of beauty in marriage markets. Consistent with several other studies (e.g., DeLamater & Sill, 2005; Karraker, DeLamater, & Schwartz, 2011; Lindau et al., 2007; Vespa, 2012), we also find positive associations between health, economic resources, and intimate relationship outcomes. Health and financial resources are both sought-after attributes in a mate (England & McClintock, 2009).

We also observe associations between personality and intimate relationship outcomes. People with higher self-acceptance have greater sexual activity (overall and within marriage) and sexual partnership among the unmarried, suggesting that positive psychological well-being is beneficial for sexual relationships regardless of partner context. Extraversion is positively associated with unmarried respondents reporting a sexual partner, but is not associated with sexual activity within marriage or overall. This is not surprising given that extraversion is an advantage in meeting new people, including new potential sexual partners. In addition, neuroticism is positively associated with the unmarried having a sexual partner, which may reflect that aspects of neuroticism, especially combined with conscientiousness, are protective of health—itsself a predictor of sexual activity (Turiano, Mroczek, Moynihan, & Chapman, 2013). Neuroticism may capture some efforts to maintain attractiveness in ways not captured by health items (e.g., grooming, dressing; Flint, 2004). Collectively, these findings point to the roles that personality and other psychological factors may play in building intimate relationships later in life, inviting additional research to better understand how these factors matter.

Study Limitations

Like any study, there are some caveats to our findings. First, our findings are based on a unique sample of predominantly White individuals who graduated from Wisconsin high schools in 1957, most of whom were born in 1939. As such, our findings are specific to the experiences of this cohort and are not nationally representative. However, we do note that based on a comparison with similar individuals in NSHAP, our sample resembles White Americans born around the same time as WLS respondents with at least a high school education (see [Supplementary Material](#)). Future research should explore variation in the determinants of intimate relationships by class, race/ethnicity, sexual orientation, and other factors (Calasanti & Slevin, 2001). Further, though we generally do not find differences between results for age 64 and age 71 (results for the latter available upon request), we do note that any differences in findings between ages might also be interpreted as period effects rather than age effects. In addition, like prior studies of sexual behavior (e.g., Call, Sprecher, & Schwartz, 1995), some individuals refused questions about sexual activity. In supplementary analysis, we found that women who were widowed and never married were more likely to refuse to answer the sexual frequency question compared with men and the currently married. Adolescent attractiveness, however, was not associated with

refusals, suggesting that our sexual activity results may be biased with respect to gender and marital status but that our estimates of the association between attractiveness and outcomes suffer from little bias.

Another caveat to our study is the vague measure of “sex” used in the survey instrument. To the extent that respondents may have different conceptualizations of “sex” we may either over- or underestimate sexual activity. We also are unable to model many characteristics of spouses in the case of partnered sexual activity—including attractiveness. Future work should explore how spousal similarities (via assortative mating and/or shared environments—including those related to factors such as body weight) and differences (e.g., health mismatches) impact partnered sexual activity. Finally, we do not have good measures of attractiveness in later life, precluding an examination of the direct role of attractiveness in later life. Despite these limitations, the present study documents the importance of adolescent attractiveness in the sexual life course and also demonstrates nuanced dynamics in the predictors of intimate relationships within the later life course.

Supplementary Material

Please visit the article online at <http://psychsocgerontology.oxfordjournals.org/> to view supplementary material.

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