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Why do people disparage May–December romances? Condemnation of age-discrepant romantic relationships as strategic moralization



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ABSTRACT

Romantic relationships with a large age difference between partners are judged to be less acceptable, more disgusting, and less likely to succeed than age-similar relationships. We investigated the role of strategic moralization in condemnation of man-older age-discrepant relationships. We hypothesized that (1) this condemnation promotes self-serving interests of those who stand to lose from violation of age-based assortative mating, and (2) endorsement of prostitution mediates the association between participant's age and condemnation of man-older age-discrepant relationships because these relationships make the exchange of sex for resources explicit and acceptable. Using self-reports from 430 participants, we documented that endorsement of prostitution mediates the association between age and condemnation of man-older age-discrepant relationships for women but not men.

1. Introduction

Couples assortatively mate on variables such as age, income, and education (e.g., Watson et al., 2004), with men usually mated to women who are slightly younger than themselves (Saardchom & Lemaire, 2005)—a consequence of women's preference for a slightly older partner (e.g., Buss, 1989; Rudder, 2010). However, some relationships include partners with a relatively large age difference, hereafter referred to as age-discrepant (i.e., May-December) romantic relationships.

Existing research on age-discrepant romantic relationships is sparse and largely descriptive. Previous research has shown that age-discrepant romantic relationships are more likely to dissolve (Wu & Hart, 2001), and have higher rates of intimate partner homicide (Breitman, Shackelford, & Block, 2004; Daly & Wilson, 1988) compared to age-similar romantic relationships. Wilson and Daly (1993) speculated that people who enter age-discrepant relationships have individual characteristics (e.g., a history of violent crime) which may explain this pattern, but the only study to test this speculation found no support for it (Breitman et al., 2004). Alternatively, age-discrepancy may present a unique set of relationship challenges which increase the risks of relationship dissolution and intimate partner violence (e.g., jealousy, sexual proprietariness; Block, 2000; Campbell, 1992).

Regardless, third-party observers report negative perceptions of agediscrepant relationships compared to age-similar relationships, which may reflect sensitivity to these unique relationship challenges. Only two studies have examined third-party perceptions of age-discrepant relationships, documenting that raters judge them to be less acceptable, more disgusting, and less likely to succeed than age-similar relationships (Banks & Arnold, 2001; Cowan, 1984). Cowan (1984) compared adolescents' perceptions to adults' perceptions, and focused on differences in perceptions of male-older versus female-older relationships. Cowan did not report comparisons across the two age categories (adolescents and adults) for man-older relationships, in particular. Neither study investigated the role of participant's age, sex, their interaction, or other variables that might explain third-party's negative cognitions (e.g., unacceptability, low likelihood of relationship success) and emotions (e.g., disgust) toward age-discrepant relationships. Given the increase in age-discrepant relationships in modern times and the stigmatization of these relationships (Lehmiller & Agnew, 2011), the current research addresses a significant gap in the literature.

One theoretically informed explanation for these negative third-party evaluations may be that age discrepancy signals information about partners and their relationship that may be relevant to third-parties. Certainly, men and women engage in mate choice copying (i.e., observing and subsequently copying the mating preferences of conspecifics; Bowers, Place, Todd, Penke, & Asendorpf, 2012; Place, Todd, Penke, & Asendorpf, 2010; Waynforth, 2007) and use partnership status to assess otherwise unobservable qualities in a potential mate (Rodeheffer, Leyva, & Hill, 2016). Because large age-discrepancies are considered non-ideal (particularly for women; see Buunk, Dijkstra,

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Kenrick, & Warntjes, 2001; Kenrick & Keefe, 1992), third-parties may assume that partners are exploiting or being exploited by one another. Indeed, exploitative interpersonal relationships are perceived unfavorably relative to non-exploitative relationships, particularly when a relationship is based on explicit exchange rather than mutual concern for a partner's welfare (e.g., Clark & Mills, 2011; Clark & Waddell, 1985). To this end, individuals may perceive age-discrepant romantic relationships to be more exploitative, and thus more morally abhorrent, relative to age-matched relationships, insofar as age-discrepant relationships are perceived to be based on explicit exchange rather than mutual concern for a partner's welfare. One way to test this hypothesis is to compare attitudes toward age-discrepant relationships with attitudes toward explicitly exchange-based romantic relationships (e.g., prostitution, which involves an explicit exchange of sex for money).

Self-serving moralization may explain why certain people condemn age-discrepant relationships. Because these relationships violate agebased assortative mating, their condemnation may function to protect the interests of those who stand to lose from such violations. Many agediscrepant relationships involve an older man and a younger woman (e.g., U.S. Census Bureau, 2013) which is most likely driven by men's sexual preference for youth (e.g., Buss, 1989; Sohn, 2017). For example, men rate women in their early 20s as most attractive regardless of their own age, whereas women rate men slightly older than themselves as most attractive (e.g., Rudder, 2010). Older men have the potential to benefit from man-older age-discrepant relationships because they can act on their preference for mateship to much younger women. Older women and younger men, in contrast, stand to lose the most from manolder age-discrepant relationships. Older women (compared to younger women) are at greater risk of their similar-aged partners (and potential partners) pursuing younger, more desirable women. Younger men (compared to older men) are at greater risk of losing desirable potential mates (i.e., young women) because it would be more difficult for them to capitalize on cohort-related mating advantages such as spatial proximity and familiarity which are afforded in settings such as school and work (e.g., Reis, Maniaci, Caprariello, Eastwick, & Finkel, 2011). Thus, we hypothesize that sex and age will interact to predict condemnation of man-older age-discrepant relationships such that younger men (Hypothesis 1a), and older women (Hypothesis 1b), will condemn these relationships more than older men, and younger women, respectively.

People may also condemn man-older age-discrepant relationships because they perceive these relationships as making the explicit exchange of short-term sexual access for desirable resources socially permissible. That is, these age-discrepant relationships may be viewed as being similar to prostitution. Short-term mating lowers the price of sex, which may be especially problematic for women's sexual strategies. Women stand to gain when the price of sex is higher, because men are "paying" (Baumister & Twenge, 2002). Indeed, women often derogate female rivals' promiscuity (Vaillancourt & Sharma, 2011). Men are more supportive of prostitution - both socially and legally - than women (Basow & Campanile, 1990), and older men are more supportive of prostitution than younger men (Sawyer, Metz, Hinds, & Brucker, 2001). We hypothesized that men more than women (Hypothesis 2), and older men more than younger men (Hypothesis 3a), will endorse prostitution. Further, because younger women have higher short-term mate value than older women (e.g., Fink & Matts, 2008), and thus are less threatened by intrasexual competition in the short-term context, we hypothesized that younger women will endorse prostitution more than older women (Hypothesis 3b).

Most individuals (younger men, and women of any age) should enforce age-based assortative, long-term pair-bonding and condemn male-older age-discrepant relationships insofar as such relationships evoke the explicit, short-term exchange of resources for sex. Indeed, these relationships are often perceived as a commodification of sex such that the women involved in them are perceived as not being "in love" but merely interested in their partner's resources (Banks & Arnold,

2001), and are derogated as "gold-diggers" (Lehmiller & Agnew, 2010). These female-directed derogations are similar to those used in female intrasexual competition (e.g., "slut", "whore"; Campbell, 2013). We hypothesized that people with more favorable attitudes toward prostitution (i.e., those who condemn prostitution less) will condemn manolder age-discrepant relationships less (Hypothesis 4), and that endorsement of prostitution will mediate the association between people's age and their condemnation of these relationships (Hypothesis 5). Because we expected women to endorse prostitution less than men, we examined whether this mediation effect differed for men and women (Hypothesis 6).

2. Method

2.1. Participants and procedure

We recruited 430 participants (221 women) from Amazon's Mechanical Turk (MTurk). We excluded responses from 29 participants from analyses because they completed the entire survey in < 15 min—an unreasonably short duration given the length of the survey ($M=33.08\,\mathrm{min}$, SD=19.38). The remaining sample comprised 211 women ($M_{age}=37.47\,\mathrm{years}$, SD=12.41) and 190 men ($M_{age}=36.94\,\mathrm{years}$, SD=12.75). We implemented MTurk filters recommended by Peer, Vosgerau, and Acquisti (2014): The only MTurk workers who could access the survey were those who successfully completed at least 500 MTurk jobs with approval ratings of at least 95% for those jobs. Participants were compensated \$1.50 for their time. The study was approved by the institutional review board of the institution at which the research was conducted.

2.2. Materials

To measure moral condemnation of man-older age-discrepant relationships, participants were asked to imagine two strangers dating—an older adult man and a younger adult woman, roughly one generation apart—and then rate their reactions to this relationship on three 10-point scales: acceptability (1 = not at all acceptable, 10 = extremely acceptable), upset (1 = not at all upsetting, 10 = extremely upsetting), and disgust (1 = not at all disgusting, 10 = extremely disgusting). We constructed the composite variable condemnation (α = 0.90) from the mean of responses to these three items: upset, disgust, and acceptability (reverse-coded) of the man-older age-discrepant relationship.

Participants reported their attitudes concerning the acceptability of prostitution (-5=not at all acceptable, +5=extremely acceptable), and whether they agreed that prostitution should be legalized (-5=completely disagree, +5=completely agree). Participants also provided demographic information such as age and sex. We report analyses of a subset of the variables for which data were collected in order to test the target hypotheses. All variables from the larger dataset are available upon request.

3. Results

To test Hypotheses 1–4 and 6, we standardized the relevant variables and conducted a moderated mediation analysis (see Fig. 1) using a bootstrapping method via PROCESS for SPSS (model 8; Hayes, 2013). We included the predictor *participant's age*, the moderator *participant's sex*, the mediator *endorsement of prostitution*, and the outcome *condemnation* of man-old age-discrepant relationships. Table 1 summarizes the bootstrapping model, corresponding to Fig. 1.

Participant's sex did not predict condemnation. Participant's age was negatively associated with condemnation such that younger people condemned man-older age-discrepant relationships more than older people. Hypotheses 1a and 1b were not supported, because participant's sex and age did not interact to predict condemnation. Supporting

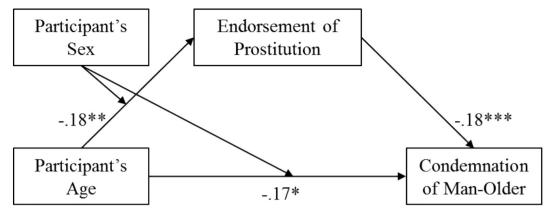


Fig. 1. Conceptual diagram of the moderated mediation bootstrapping model. *Notes*: All scores were standardized before analysis.

Table 1
Summary of the moderated mediation analysis.

Outcome: endorsement of prostitution ^a					
		В	SE	t	p
	Participant's age	-0.18	0.07	-2.73	.007
H2	Participant's sex	0.46	0.10	4.72	< .001
НЗ	Participant's age × participant's sex	0.17	0.10	1.79	.075
Outc	ome: condemnation of man-older ^b				
Outc	ome: condemnation of man-older ^b	В	SE	t	p
Outc	ome: condemnation of man-older ^b Endorsement of prostitution	B -0.18	SE 0.05	t -3.54	p < .001
				-3.54	-
	Endorsement of prostitution	-0.18	0.05	-3.54	< .001

Conditional	direct	effect (of participant's	age on	condemnation	of man-older

	Effect	SE	t	p
Women (n = 211)	-0.17	0.07	-2.49	.013
Men (n = 190)	-0.16	0.07	-2.23	.027

Indirect effect of participant's age \times participant's sex on condemnation of man-older

 Effect	SE
-0.03	0.02

Conditional indirect effect of participant's age on condemnation of man-older

		Effect	SE
Н6	Women $(n = 211)$	0.03	0.02
	Men $(n = 190)$	0.00	0.01

Notes: All scores were standardized before analysis. b = regression coefficient. SE = standard error associated with B. t = test statistic associated with B. Model statistics: ${}^{a}R^{2}$ = 0.07, F(3.397) = 10.04, p < .001; ${}^{b}R^{2}$ = 0.05, F(4,396) = 5.44, p < .001. H1 = Hypothesis 1, etc.

Hypothesis 2, men endorsed prostitution more than woman. Hypotheses 3a and 3b were not supported at the 0.05 level, but the interaction between participant's age and participant's sex predicting endorsement of prostitution was marginally significant (p=.075; Gelman, 2013). Predicted values for this interaction are shown in Fig. 2. We conducted simple slopes analyses recommended by Aiken and West (1991) to describe the interaction of continuous variables. These simple

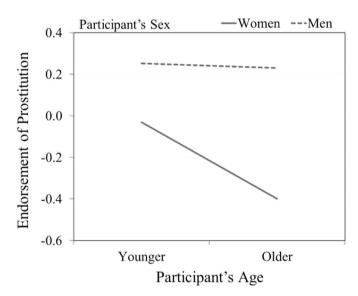


Fig. 2. Predicted values for *endorsement of prostitution* illustrating the interaction of participant's sex and participant's age at values that are one standard deviation above and below the mean (within sex). *Notes*: All scores were standardized before analysis.

slopes tests were conducted using values 1 SD above the mean (within-

sex) to represent older individuals, and 1 SD below the mean to represent younger individuals (see Fig. 2). Younger women endorsed prostitution more than older women (B=-0.18, SE=0.07, t=-2.68, p=.008; supporting Hypothesis 3b). Age was not associated with the endorsement of prostitution for men (B=-0.01, SE=0.07, t=-0.17, p=.868; contrary to Hypothesis 3a). Endorsement of prostitution was negatively associated with participant's age, and the magnitude of this association was larger for women than for men. Older men endorsed prostitution more than older women (B=0.63, SE=0.14, t=4.60, p<.001), and younger men endorsed prostitution more than younger women (B=0.28, SE=0.14, t=2.07, p=.039). That is, men endorsed prostitution more than women, and younger women had more favorable attitudes toward prostitution than was observed for older women. Supporting Hypothesis 4, endorsement of prostitution was negatively associated with condemnation, such that

To test Hypothesis 5, we conducted a simple mediation analysis using a bootstrapping method via PROCESS for SPSS (model 4; Hayes, 2013). We included the predictor *participant's age*, the mediator *endorsement of prostitution*, and the outcome *condemnation*. Supporting Hypothesis 5, endorsement of prostitution mediated the relationship

the more individuals endorsed prostitution, the less they condemned

man-older age-discrepant relationships.

between participant's age and condemnation ($R^2 = 0.05$, F[2.398] = 10.90, p < .001.; indirect effect of participant's age on condemnation: Effect = 0.02, SE = 0.01, 95% Confidence Intervals [0.003, 0.044]).

We used the moderated mediation model to test Hypothesis 6. The indirect effect of participant's age on condemnation, through endorsement of prostitution, was significant for women (confidence intervals did not go through 0; Hayes, 2013), but not for men (confidence intervals did go through 0; see Table 1). In other words, endorsement of prostitution mediates the association between women's age and women's condemnation of man-older age-discrepant relationships, but not the association between men's age and condemnation of man-older age-discrepant relationships.

4. Discussion

There are three primary findings from this research. First, younger people condemn man-older age-discrepant relationships more than older people, regardless of sex. Although we hypothesized that age and sex would interact to predict condemnation of such relationships due to maturation (i.e., as self-serving interests of men versus women change with age, so would their self-serving moralizations), we may be capturing a cohort effect. However, a cohort effect would more easily explain a positive association between age and condemnation, because younger (versus older) cohorts in the late 20th century endorse more modern values that reflect fewer moral constraints (e.g., greater permissiveness and self-indulgence; Hellevik, 2002). Second, we documented that there are no sex differences in condemnation, which replicates the results of Banks and Arnold (2001), and may be explained by the costs of advertising condemnation. People incur reputational costs from discovered hypocrisy (e.g., committing infidelity while condemning others for the same behavior; Kurzban, 2012). Perhaps because both men and women are at risk of discovered hypocrisy related to age-discrepant relationships, they do not differ in their condemnation.

Third, as we hypothesized, younger people more than older people endorse prostitution, with this association emerging for women but not for men. The endorsement of prostitution mediates the association between women's (but not men's) age and condemnation of man-older age-discrepant relationships. This suggests that one reason women condemn man-older relationships may be because they condemn prostitution, but this does not seem to be the case with men. Because we collected cross-sectional correlational data, we cannot make strong statements of causality. Future research should employ experimental methods to determine the presence and direction of causality.

One limitation of the current study is that participants resided in the United States, which means that our results may not generalize to other countries or cultures. Given that the prevalence of man-older age-discrepant relationships in the United States-7.4% of couples include a man 10 or more years older than the woman (U.S. Census Bureau, 2013)—is also found in countries such as Canada (7.0%; Boyd & Li, 2003) and Brazil (7.7%; Brazilian Institute of Geography and Statistics – BIGS, 2011), future research could profitably investigate these and other populations regarding their condemnation of such relationships, and the mediating role of prostitution endorsement. Another limitation is that self-reports are susceptible to social desirability biases, which may be particularly problematic in this research because we are measuring how strongly people morally condemn ideas (i.e., virtue-signaling; Chung & Monroe, 2003). Future research might investigate whether the current results are moderated by people's moral approbations, which could be measured by an instrument developed by Ryan and Riordan (2000).

Judgments of woman-older age-discrepant relationships differ from man-older age-discrepant relationships. Relative to man-older relationships, woman-older relationships receive lower third-party ratings of acceptability, happiness in the relationship (Banks & Arnold, 2001), and probability of long-term success (Cowan, 1984). The

psychological inputs and consequent outputs associated with condemning these two forms of age-discrepant relationships may differ. To facilitate concision, we focused on man-older age-discrepant relationships in the current research. However, future research should investigate the reasons people condemn woman-older relationships, which we predict are different from the reasons people condemn man-older relationships (i.e., not linked to prostitution endorsement).

Banks and Arnold (2001) argued that people condemn age-discrepant relationships because they activate incest-avoidance disgust responses, since these relationships may resemble parent-child romantic relationships. Theoretically, this seems unlikely because a much older adult (e.g., a 90 year old) is unlikely to father an 18 year old, and such a relationship should be perceived as the most disgusting (because the disgust is correlated with the discrepancy). Nevertheless, one way to test this alternative explanation is investigate whether moral condemnation of age-discrepant relationships is correlated with incest-avoidance disgust responses, which can be measured using the domain-specific disgust scale developed by Tybur, Lieberman, and Griskevicius (2009).

Because age-discrepant relationships are becoming more common and more stigmatized in modern times (Lehmiller & Agnew, 2011), the current research addresses a significant gap in the literature. "Immoral" behaviors—such as infidelity and exploitative violence—are condemned across cultures, and an evolutionary psychological perspective can explain why these values transcend cultural differences. Only a minority of people—e.g., those with the highest mate value, the greatest formidability—receive the most benefits when such morals are absent, and this strategic moralization deters the most capable members of a group from succeeding at the expense of others (Petersen, 2012). The current research is the first to use a coherent theoretical framework for investigating why people condemn age-discrepant relationships. We document that moral condemnation of age-discrepant relationships may be produced by adaptations that are part of a broader cognitive system of self-serving strategic moralization.

References

Aiken, L. S., & West, S. G. (1991). Multiple regression. Thousand Oaks, CA: Sage. Banks, C. A., & Arnold, P. (2001). Opinions towards sexual partners with a large age difference. Marriage & Family Review, 33, 5–18.

Basow, S. A., & Campanile, F. (1990). Attitudes toward prostitution as a function of attitudes toward feminism in college students. *Psychology of Women Quarterly*, 14, 135–141.

Baumeister, R. F., & Twenge, J. M. (2002). Cultural suppression of female sexuality. *Review of General Psychology*, 6, 166.

Block, C. R. (2000). The Chicago women's health risk study. Report to the National Institute of Justice. Chicago: Illinois Criminal Justice Information Authority.

Bowers, R. I., Place, S. S., Todd, P. M., Penke, L., & Asendorpf, J. B. (2012). Generalization in mate-choice copying in humans. *Behavioral Ecology*, 23, 112–124.

Boyd, M., & Li, A. (2003). May-December: Canadians in age-discrepant relationships. Canadian Social Trends, 70, 29–33.

 $\label{lem:bigs} Brazilian\ Institute\ of\ Geography\ and\ Statistics\ -\ BIGS\ (2011).\ Demographic\ census\ 2010.$ Retrieved from $\ http://censo2010.ibge.gov.br/apps/atlas/.$

Breitman, N., Shackelford, T. K., & Block, C. R. (2004). Couple age discrepancy and risk of intimate partner homicide. *Violence and Victims*, 19, 321–342.

Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12, 1–14.

Buunk, B. P., Dijkstra, P., Kenrick, D. T., & Warntjes, A. (2001). Age preferences for mates as related to gender, own age, and involvement level. *Evolution and Human Behavior*, 22, 241–250.

Campbell, J. C. (1992). "If I can't have you, no one can": Power and control in homicide of female partners. In J. Radford, & D. E. H. Russell (Eds.). *Femicide* (pp. 99–113). New York: Twayne.

Campbell, A. (2013). The evolutionary psychology of women's aggression. Philosophical Transactions of the Royal Society B, 368, 20130078.

Census Bureau, U. S. (2013). Current population survey. Retrieved from http://www.census.gov/hhes/families/files/cps2013/tabFG3-all.xls.

Chung, J., & Monroe, G. S. (2003). Exploring social desirability bias. *Journal of Business Ethics*. 44, 291–302.

Clark, M. S., & Mills, J. R. (2011). A theory of communal (and exchange) relationships. In P. A. M. Van Lange, A. W. Kurglanski, & E. T. Higgins (Eds.). *Handbook of theories of social psychology* (pp. 232–247).

Clark, M. S., & Waddell, B. (1985). Perceptions of exploitation in communal and exchange relationships. *Journal of Social and Personal Relationships*, 2, 403–418.

- Cowan, G. (1984). The double standard in age-discrepant relationships. Sex Roles, 11, 17–23.
- Daly, M., & Wilson, M. (1988). Homicide. Hawthorne, NY: Aldine de Gruyter.
- Fink, B., & Matts, P. J. (2008). The effects of skin colour distribution and topography cues on the perception of female facial age and health. *Journal of the European Academy of Dermatology and Venereology*, 22, 493–498.
- Gelman, A. (2013). P values and statistical practice. Epidemiology, 24, 69-72.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York, NY: Guilford Press.
- Hellevik, O. (2002). Age differences in value orientation—Life cycle or cohort effects? International Journal of Public Opinion Research, 14, 286–302.
- Kenrick, D. T., & Keefe, R. C. (1992). Age preferences in mates reflect sex differences in human reproductive strategies. *Behavioral and Brain Sciences*, 15, 75–133.
- Kurzban, R. (2012). Why everyone (else) is a hypocrite: Evolution and the modular mind. Princeton University Press.
- Lehmiller, J., & Agnew, C. (2011). May-December paradoxes: An exploration of age-gap relationships in western society. In W. R. Cupach, & B. H. Spitzberg (Eds.). *The Dark Side of Close Relationships II*. New York, NY: Routledge.
- Peer, E., Vosgerau, J., & Acquisti, A. (2014). Reputation as a sufficient condition for data quality on Amazon Mechanical Turk. Behavior Research Methods, 46, 1023–1031.
- Petersen, M. B. (2012). Moralization as protection against exploitation: Do individuals without allies moralize more? Evolution and Human Behavior, 34, 78–85.
- Place, S. S., Todd, P. M., Penke, L., & Asendorpf, J. B. (2010). Humans show mate copying after observing real mate choices. *Evolution and Human Behavior*, 31, 320–325.
- Reis, H. T., Maniaci, M. R., Caprariello, P. A., Eastwick, P. W., & Finkel, E. J. (2011). Familiarity does indeed promote attraction in live interaction. *Journal of Personality and Social Psychology*, 101, 557–570.

- Rodeheffer, C. D., Leyva, R. P. P., & Hill, S. E. (2016). Attractive female romantic partners provide a proxy for unobservable male qualities: The when and why behind human female mate choice copying. *Evolutionary Psychology*, 14, 1–8.
- Rudder, C.. May–December paradoxes: An exploration of age-gap relationships in Western Society. (2010, February 16). Retrieved from http://blog.okcupid.com/index.php/the-case-for-an-older-woman/ (March 15, 2016).
- Ryan, L. V., & Riordan, C. M. (2000). The development of a measure of desired moral approbation. *Educational and Psychological Measurement, 60,* 448–462.
- Saardchom, N., & Lemaire, J. (2005). Causes of increasing ages at marriage: An international regression study. Marriage & Family Review, 37, 73–97.
- Sawyer, S., Metz, M. E., Hinds, J. D., & Brucker, R. A. (2001). Attitudes towards prostitution among males: A "consumers' report". Current Psychology, 20, 363–376.
- Sohn, K. (2017). Men's revealed preference for their mates' ages. *Evolution and Human Behavior*, 38, 58–62.
- Tybur, J. M., Lieberman, D., & Griskevicius, V. (2009). Microbes, mating, and morality: Individual differences in three functional domains of disgust. *Journal of Personality and Social Psychology*, 97, 103–122.
- Vaillancourt, T., & Sharma, A. (2011). Intolerance of sexy peers: Intrasexual competition among women. *Aggressive Behavior*, *37*, 569–577.
- Watson, D., Klohnen, E. C., Casillas, A., Nus Simms, E., Haig, J., & Berry, D. S. (2004). Match makers and deal breakers: Analyses of assortative mating in newlywed couples. *Journal of Personality*, 72, 1029–1068.
- Waynforth, D. (2007). Mate choice copying in humans. Human Nature, 18, 264–271.Wilson, M., & Daly, M. (1993). An evolutionary psychological perspective on male sexual proprietariness and violence against wives. Violence and Victims, 8, 271–294.
- Wu, Z., & Hart, R. (2001). Marital and nonmarital union separation in Canada. Paper presented at the International Union for Scientific Study of Population.