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Ideological mate-guarding:

Sexual jealousy and mating strategy shape support for female honor norms

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Abstract

Feminine honor dictates that women should cultivate a reputation for sexual purity via behaviors such as dressing modestly and maintaining virginity before marriage. The dominant explanation for people's support for feminine honor is that female infidelity threatens male partners' honor. Beyond this, the literature affords little understanding of the evolutionary and psychological origins of feminine honor. We propose that feminine honor functions as an ideological form of mate guarding that is shaped by sexual jealousy and mating strategy. Two correlational studies ($N = 892$) revealed support for predictions derived from this *ideological mate guarding* account. In Study 1, dispositional jealousy and mating strategy (more monogamous orientation) predicted male participants' support for a mate's (especially a long term mate's) feminine honor. Moving beyond mate preferences, in Study 2 male and female participants' dispositional jealousy and mating strategy predicted support for feminine honor of women in general. Results applied beyond masculine honor norms, religiosity, political conservatism, and age. These findings enhance understanding of the origins and maintenance of feminine honor and related norms and ideologies that enable control over women's socio-sexual behavior.

Keywords: feminine honor norms, mate guarding, sexual jealousy, sociosexual orientation, mating strategy, ideology

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1. Introduction

Feminine honor prescribes women to maintain a reputation for sexual purity, via behaviors such as wearing modest clothes and maintaining virginity before marriage (Rodriguez-Mosquera, 2016; Vandello & Cohen, 2008). Honor norms have existed for thousands of years and are believed to have pre-dated and influenced sexual purity norms found in religious and secular codes today (e.g., Elakkary et al., 2014; Goldstein, 2002; Pitt-Rivers, 1974). Maintaining honor is particularly important in so-called “honor cultures” (e.g., societies in the Mediterranean, Middle East, Latin America, and Southern US; Uskul et al., 2019). However, honor norms are found, to some degree, in all cultures (Guerra et al., 2013) and, according to Rodriguez Mosquera, (2011, p. 65) are “pancultural ideals of masculinity and femininity”. The requirement to show sexual modesty places social and reproductive constraints on women (Kulczycki & Windle, 2011; Sev’er, 2005), and failure to maintain honor is seen as legitimate grounds for punishment, including intimate partner violence, forced suicide and honor killing (Chesler, 2009). But despite well-documented harmful consequences, research on the psychological origins of feminine honor norms is limited.

One account given by social psychologists (e.g., Gul et al., 2021; Vandello & Cohen, 2003; Vandello et al., 2009) and other social scientists (e.g., Pitt-Rivers, 1974; Sev’er & Yurdakul, 2001) is that suppressing women’s sexuality helps protect male and family honor because association with an immodest female damages the honor of her partner and his kin. Another account is that supporting traditional gender views, including feminine honor norms, helps legitimize men’s privilege and keep women subservient to men (e.g., Arat et al., 2010; Glick et al., 2015).

We propose that feminine honor serves an *ideological mate guarding* function, and that support for these norms is motivated by sexual jealousy and mating strategy, beyond concerns about protecting male and family honor. Several previous authors have given mate-guarding accounts of related cultural phenomena, including adultery laws, monogamous marriages, female genital cutting, religious rules and veiling (Daly et al., 1982; Dickemann, 1979; Goldstein, 2002; Grant & Montrose, 2018; Onyishi et al., 2016; Pazhoohi et al., 2017; Smuts, 1992; Strassmann et al., 2012; Van Slyke & Szocik, 2020). But these accounts have not addressed feminine honor specifically. Nor, surprisingly, has there been any empirical test of a key prediction of these mate-guarding accounts: that support will be motivated, at least in part, by sexual jealousy (Daly et al., 1982). Our hypothesis derives from a synthesis of research and theory on mate guarding, sexual jealousy, mating strategies, and ideological control.

1.1 Mate Guarding

The threat of lost paternity has been a powerful selective force throughout the evolution of animals (Parker, 1970; Trivers, 1972), resulting in myriad morphological, physiological and behavioral adaptations that increase males' ability to secure paternity (Birkhead & Møller, 1992). Although humans are usually socially monogamous, infidelity occurs across cultures (Schacht & Kramer, 2019) and extra-pair paternity has been documented in all human populations studied (Larmuseau et al., 2016), even in cultures with strictly enforced monogamy (Strassmann et al., 2012). Therefore, the threat of paternity loss was likely an important adaptive challenge that lead to the evolution of mate guarding behaviors (Daly et al., 1982, Symons, 1979). Although females of species with internal fertilization do not face the problem of cuckoldry, the threat of mate desertion imposes important fitness costs, especially in species, such as humans, in which paternal investment influences offspring survival (Gurven & Hill, 2009; Trivers, 1972). Women can also therefore be expected to

engage in mate guarding behaviors that increase the likelihood of retaining a mate (Buss & Shackelford, 1997). In humans, the emotion sexual jealousy is regarded as the motivational component of mate guarding (Buss, 2013; Daly et al., 1982; Symons, 1979). Accordingly, sexual jealousy is elicited by perceived threats of infidelity (Buss et al., 1992) and is associated with mate guarding behaviors (Buss, 2002; Burch & Gallup, 2020; Goetz et al., 2008).

1.2 Mate Guarding is Costly

Although mate guarding can increase reproductive fitness by decreasing the likelihood of cuckoldry or mate desertion (Buss, 2002), it is costly. Direct forms of mate guarding, involving vigilance, intervention and aggression, restrict males to one location and reduce time for activities such as feeding or pursuing additional mates (Alberts et al., 1996; Komdeur, 2001; Low, 2006). Aggressively repelling rivals can also lead to physical injury or death in nonhuman animals (Komdeur, 2001; Low, 2006). Among humans too, conflicts over women often result in injury or death (Daly & Wilson, 1988; Flinn, 1988). Additionally, unlike most other socially monogamous species, human females have concealed oestrus, so fertile periods are not easily identified (Strassmann, 1981). Ensuring paternity therefore requires extended periods of costly mate guarding (Buss, 2002). In summary, the costs of direct mate guarding are considerable. Indirect forms of mate guarding, however, such as ideological control, might have lower costs, and even operate in absentia.

1.3 Ideological Control

From classical political thinkers to contemporary social psychologists, scholars have recognized that people can be controlled not only by force, but also indirectly, using ideology (e.g., Durkheim, 1895/1982; Jackman, 1994; Jost & Banaji, 1994; Mannheim, 1929/1960; Marx & Engels, 1846/1970; Sidanius et al., 2001; Weber, 1922/1968). The interconnected set of norms, values and practices that constitute ideologies are particularly effective in

controlling people when they have legitimacy, appear as self-apparent truths, and are widely consented to within a society (Sidanius et al., 2001). Even individuals who are objectively disadvantaged by an ideology may support it, because of its perceived moral righteousness, and to maintain their own reputation as a morally righteous individual (Tyler, 2006; Weber, 1968).

Whereas most ideologies are viewed as benefitting their proponents through economic resources or political power (Jost, 2006), we suggest that feminine honor serves the reproductive interest of certain individuals or groups (e.g., men) by reducing the likelihood of cuckoldry or mate desertion. Like other ideologies, feminine honor is an inter-connected set of norms, values and practices (Pitt-Rivers, 1974; Rodriguez Mosquera, 2011) which is often seen as legitimate in society, and is widely endorsed and enforced by third parties (Chesler, 2015; Goldstein, 2002; Sev'er & Yurdakul, 2001) and coalitions (Barbaro et al., 2015; Betzig, 1993; Boyer, 2018). Feminine honor serves as an indirect form of mate guarding, because a man does not need to maintain vigilance or be ready to aggressively deter intrasexual rivals. Instead, the social milieu serves that function.

Hence, we propose, feminine honor is a culturally evolved ideology that enables indirect control over women's mating behavior, and reduced the risks of cuckoldry and mate desertion. Individuals' psychological mechanisms, including sexual jealousy, would have favored the creation and transmission of the norms, values and practices that constitute feminine honor. Social ecological conditions that precluded direct mate guarding (e.g., large populations and mobility) or increased the demand for mate guarding (e.g., male rivals) would have favored the cultural evolution of feminine honor.

1.4 Female Support for Feminine Honor Norms

Both sexes sometimes support norms that control women's sexuality (Baumeister & Twenge, 2002; Blaydes & Linzer, 2008; Glick et al., 2015; Muggleton et al., 2019).

Women's support for feminine honor may arise from intrasexual competition, given that women perceive promiscuous rivals as more likely to poach a mate (Schmitt & Buss, 2001). Additionally, because men may select mates based on cues to sexual fidelity (Mogilski et al., 2014) and invest more in a mate when they have greater confidence in her sexual fidelity (Scelza et al., 2020), women who seek paternal investment may support feminine honor to signal a reputation for sexual modesty. For these reasons, we expect not only men, but also women to give support for feminine honor norms.

1.5 Mating Strategy, Jealousy, and Ideological Mate-Guarding

Individuals for whom mate guarding is of particular importance, such as those with high levels of jealousy, can be expected to show greater support for ideologies such as feminine honor. Several authors have suggested that the emotion sexual jealousy should motivate support for cultural practices (such as laws against infidelity) that serve a mate-guarding function (e.g., Daly et al., 1982), yet, to our knowledge, no previous study has tested this prediction. Cuckoldry or desertion is potentially more costly for monogamously oriented individuals, because they are more invested in a primary mate (Buss & Schmitt, 1993). In contrast, more promiscuously oriented individuals can benefit from easy access to multiple mates. Therefore individuals who have a relatively monogamous mating strategy can also be expected to show more support for feminine honor norms.

1.6 Current Research

In two correlational studies conducted with MTurk and Prolific samples, we tested predictions derived from the *ideological mate-guarding* account of feminine honor. One source of support for feminine honor may be through men expecting their own mates to have a reputation for sexual modesty and loyalty. This preference for feminine honor should apply especially to a long-term mate, given that greater paternal investment increases the costs of cuckoldry (Buss & Schmitt, 1993). In Study 1 we therefore examined whether men's

dispositional jealousy and sociosexual orientation (SOI; a measure of mating strategy) were associated with supporting a long-term versus short-term mate's adherence to feminine honor norms. Another way individuals (both men and women) may promote feminine honor is by expecting women *in society as a whole*, beyond own mates, maintain a sexually modest reputation. In Study 2, we therefore tested whether male and female participants' dispositional jealousy and sociosexual orientation predicted support for feminine honor for women in general.

Because religiosity and social conservatism are common explanations given for endorsement of traditional gender ideologies, including honor norms (e.g., Glick et al., 2015), both studies measured and controlled for religiosity and political conservatism (as well as age) to test whether sexual jealousy and mating strategy would predict support for feminine honor even after controlling for these variables. Materials and additional analyses are reported in the online Supplementary Materials (SM). Data and analysis scripts are publicly available on the Open Science Framework ([Link](#)).

2. Study 1

The goal of Study 1 was to establish whether dispositional jealousy and sociosexual orientation were associated with men's support for feminine honor norms for short- and long-term mates, above and beyond demographic variables (age), and other ideological variables (religiosity and political conservatism).

2.1 Method

2.1.1 Participants. Initially, 307 heterosexual male participants from the US were recruited through MTurk. Excluding 13 participants who failed to pass attention check questions left a sample of 294 men for analyses (age range: 19-76, $M_{\text{age}} = 38.03$, $SD_{\text{age}} = 12.19$). Detailed demographics of participants are reported in SM. A sensitivity power analysis for our sample size of 294, with an alpha of 0.05 and power of 0.80 revealed

sufficient power to detect an effect size of $r = .14$ for a bivariate correlation model. In Study 1, the smallest effect size for jealousy's or SOI's association with feminine honor norms was $r = .19$, indicating sample size was sufficient.

2.1.2 Measures and procedure. Participants completed the following measures in a randomized order.

Socio-sexual orientation. To measure mating strategy, participants responded to the 3 items of the attitude subscale of the Revised Sociosexual Orientation Inventory (Penke & Asendorpf, 2008) which measures individual differences in the tendency to accept casual, uncommitted sexual relationships (e.g., "I can imagine myself being comfortable and enjoying 'casual' sex with different partners"; 1 = *strongly disagree* to 9 = *strongly agree*; SOI: $\alpha = .87$).

Dispositional jealousy. Dispositional jealousy was measured using the 16 cognitive and emotional jealousy items from the Multidimensional Jealousy Scale (Pfieffer & Wong, 1989). Participants answered with their current partner in mind, or, if single, with a past or imaginary partner in mind. The cognitive subscale measures frequency of thoughts such as "I worry that X (my partner) may be attracted to another man" ranging from 1 (*never*) to 7 (*all the time*). The emotional subscale measures emotional reactions to situations such as "X hugs and kisses another man" ranging from 1 (*not bad at all*) to 7 (*extremely bad*). A global jealousy score was obtained by averaging all 16 items ($\alpha = .92$).

Support for feminine honor. Support for feminine honor norms was measured with 10 items. Six items were from the feminine honor subscale of the Honor Scale (Rodriguez-Mosquera et al., 2002) which was developed using research founded in Mediterranean cultures of honor. These items were originally worded to measure participants' concern about their own honor (e.g., "How bad would you feel about yourself if you had sexual relations before marriage?"), but we adjusted the phrasing of the items to measure participants'

concerns about a mate's honor (e.g., "How bad would you feel if she had ...?"). We devised four additional conceptually consistent items designed to be more applicable to gender-progressive western cultures such as the US ("was known as someone flirtatious", "who cannot control her sexual desires", "who is not modest or discrete in her behavior", "who is not loyal to her man").

To assess support for long-term mate's feminine honor, participants indicated how bad they would feel if their wife/girlfriend had the reputation described in each item. To assess support for short-term mate's feminine honor, participants were asked to imagine a woman who they are sexually attracted to and hoping to have an uncommitted one-night stand, without an interest in having her as a long-term partner. Responses were on 7-point scales ranging from 1 (*not bad at all*) to 7 (*very bad*). Items were averaged to form two composite scores (short-term mate: $\alpha = .96$; long-term mate: $\alpha = .93$).

Political orientation and religiosity. Following Crawford et al. (2017), participants reported their political orientation on social and economic issues (1 = *very liberal*, 7 = *very conservative*). These two items were averaged ($r_s = .70$). We measured religiosity with one item (1 = *not at all*, 7 = *extremely*).

2.2 Results

Bivariate correlations and descriptive statistics are presented in Table 1. As expected, dispositional jealousy and monogamous mating strategy (i.e., lower SOI) were associated with men's support for both short- and long-term mates' feminine honor. Moreover correlations with long-term mate's honor were significantly higher than correlations with short-term mate's honor (jealousy: $z = 2.04$, $p = .021$; SOI: $z = 4.88$, $p < .001$). Additionally, feminine honor was more important to men when they considered long-term mates than when they considered short-term mates, $t(293) = 11.19$, $p < .001$, $d = .62$.

Table 1.

Study 1: Bivariate correlations (N = 294 men)

	1.	2.	3.	4.	5.	6.	7.
1. Feminine honor (short-term mate)	-	.54**	-.19**	.23**	-.14*	.26**	.18**
2. Feminine honor (long-term mate)		-	-.30**	.48**	-.14*	.36**	.35**
3. SOI			-	.06	-.09	-.40**	-.29**
4. Jealousy				-	-.33**	.07	.12*
5. Age					-	-.01	-.04
6. Religiosity						-	.50**
7. Political orientation							-
<i>M</i>	2.77	3.75	5.72	3.10	38.03	2.73	3.76
<i>SD</i>	1.66	1.41	2.35	1.11	12.19	2.05	1.61

Notes. * $p < 0.05$, ** $p < 0.01$

Next, we conducted hierarchical regression analyses to test whether men's support for short-term and long-term mates' honor was associated with dispositional jealousy and mating strategy even after controlling for religiosity, political orientation, and age. We added the control variables in Step 1, dispositional jealousy in Step 2, and SOI in Step 3. As expected, both dispositional jealousy and more monogamous mating strategy (i.e., lower SOI) predicted higher support for feminine honor norms for both short- and long-term mates, above and beyond religiosity, political orientation, and age (see Tables 2a and 2b).

Table 2a

Study 1: Hierarchical regression results on men's support for short-term mate's feminine honor norms

Steps		<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	95% CI
1	Age	-.02	.01	-.14	-2.41	.017	-.03, .00
	Religiosity	.18	.05	.22	3.42	.001	.08, .28
	Political orientation	.07	.07	.07	1.03	.304	-.06, .20
2	Age	-.01	.01	-.07	-1.27	.206	-.03, .01
	Religiosity	.18	.05	.22	3.43	.001	.08, .28
	Political orientation	.05	.07	.05	.75	.452	-.08, .18
	Jealousy	.29	.09	.19	3.24	.001	.11, .46
3	Age	-.01	.01	-.08	-1.45	.147	-.03, .00
	Religiosity	.14	.05	.17	2.61	.010	.03, .25
	Political orientation	.03	.07	.03	.47	.636	-.10, .16
	Jealousy	.30	.09	.20	3.41	.001	.13, .47
	SOI	-.10	.04	-.14	-2.24	.026	-.18, -.01

Table 2b

Study 1: Hierarchical regression results on men's support for long-term mate's feminine honor norms

Steps		<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	95% CI
1	Age	-.02	.01	-.13	-2.47	.014	-.03, .00
	Religiosity	.18	.04	.26	4.20	.000	.09, .26
	Political orientation	.19	.05	.21	3.48	.001	.08, .29
2	Age	.00	.01	.01	.28	.779	-.01, .01
	Religiosity	.17	.04	.25	4.62	.000	.10, .25
	Political orientation	.15	.05	.17	3.11	.002	.05, .24
	Jealousy	.57	.06	.45	8.98	.000	.45, .70
3	Age	.00	.01	.00	-.06	.951	-.01, .01
	Religiosity	.12	.04	.18	3.22	.001	.05, .20
	Political orientation	.12	.05	.14	2.64	.009	.03, .22
	Jealousy	.59	.06	.46	9.54	.000	.47, .71
	SOI	-.13	.03	-.22	-4.29	.000	-.19, -.07

3. Study 2

Study 1 examined men's support for feminine honor of their own mates. But if ideologies that control women's sexuality function as an indirect form of mate guarding, then sexual jealousy and mating strategy might also be expected to contribute to support for feminine honor beyond men's own mates, for women in general. Study 1 only involved male participants, but women can also support ideologies that control women's reproductive behavior (Baumeister & Twenge, 2002) so Study 2 examined predictions among both male and female participants.

Study 2 also included measures for other types of honor norms (masculine, family and integrity norms) to test whether support for feminine honor, specifically, rather than honor in general, is motivated by sexual jealousy and mating strategy. However, masculine honor, which prescribes men to maintain a reputation for toughness, formidability and aggressive retaliation in response to insults and threats, may have partially evolved as a mate guarding tactic to deter rival males and mate poachers (Shackelford, 2005). And feminine honor may

overlap with family and integrity honor, as these include moral virtues such as having a reputation as a loyal and honest person, and not betraying one's family (Rodriguez Mosquera, 2016). Therefore, sexual jealousy and mating strategy may also be associated with masculine, family and integrity honor norms, but we expected the association with feminine honor norms to be stronger.

Psychologists have argued that people support feminine honor in order to protect the male partner's or family's honor (Vandello & Cohen, 2003, 2008; Vandello et al., 2009). According to that account, masculine and family honor should predict support for feminine honor. Testing this alternative explanation was an additional reason for measuring other types of honor, so that we could examine the contribution of dispositional jealousy and sociosexual orientation on support for feminine honor above and beyond support for masculine, family and integrity honor. A final modification was that in Study 2 the full jealousy and sociosexual orientation scales were used.

3.1 Method

3.1.1 Participants. In determining the sample size, we did not perform a power analysis, but sought to recruit at least as many participants as in Study 1 ($N = 294$) from each gender. Initially, 638 participants (318 men and 320 women) were recruited from the US through Prolific. Excluding 14 participants who were not heterosexual, and 26 participants who failed to pass attention checks left 598 participants for analyses (300 men, 298 women; age range: 18-82, $M_{\text{age}} = 38.74$, $SD_{\text{age}} = 13.78$). Detailed demographics of participants are reported in SM. A sensitivity power analysis for a sample size of 298 and 300, with an alpha of 0.05 and power of 0.80 revealed sufficient power to detect an effect size of $r = .14$ for a bivariate correlation model. All effect sizes of interest were larger in magnitude than that of the sensitivity analysis, indicating that our sample size was sufficient.

3.1.2 Measures and procedure. Participants completed the following measures presented in a randomized order.

Socio-sexual orientation. We used the full 9-item Revised Sociosexual Orientation Inventory (Penke & Asendorpf, 2008), which includes items corresponding to attitudes as measured in Study 1, as well as desire (e.g., “How often do you experience sexual arousal when you are in contact with someone with whom you do not have a committed romantic relationship?”; 1 = *never* to 9 = *at least once a day*), and behavior (e.g., “With how many different partners have you had sexual intercourse on one and only one occasion?”; 1 = *zero* to 9 = *twenty or more*). A global sociosexual orientation score was obtained by computing the mean of all nine items (SOI-Total: $\alpha_{\text{men}}/\alpha_{\text{women}} = 84/.83$). Higher scores indicate more promiscuous behavior and less opposition to promiscuity.

Dispositional jealousy. In addition to the cognitive and emotional jealousy items used in Study 1, participants responded to the behavioral items (e.g., “I question X about his/her telephone calls.”; 1 = *never* to 7 = *all the time*) of the Multidimensional Jealousy Scale (Pfieffer & Wong, 1989). A global jealousy score was obtained by averaging all the 24 items ($\alpha_{\text{men}}/\alpha_{\text{women}} = .94/.93$).

Support for feminine, masculine, family and integrity honor norms. Support for feminine honor norms were measured with the same 10 items as in Study 1. The 7-item masculine (e.g., “How bad/wrong is it for a man if he lacks authority over his own family?”), 7-item integrity (e.g., “How bad/wrong is it for a person if he/she betrays other people?”), and 4-item family honor (e.g., “How bad/wrong is it for a person if his/her family has a bad reputation?”) subscales of the Honor Scale (Rodriguez-Mosquera et al., 2002) were also used. We included five extra conceptually-relevant items to measure support for masculine honor norms (“...he lets other people push him around?”, “...he is known as someone who cannot take care of himself?”, “...he backs down from a fight?”, “...he is seen as weak in the eyes of

his peers?”, and “...he is known as someone sissy?”). We added these items because research into the honor culture of the American South indicates that masculine honor is especially rooted in the belief that a man is responsible for protecting himself from insults and should have qualities such as self-sufficiency and physical toughness (Barnes et al., 2012; Saucier et al., 2016). Responses were on 7-point scales ranging from 1 (*not bad/wrong at all*) to 7 (*very bad/wrong*).

When all the honor items were entered into a principal-axis factor analysis with oblique rotation, the scree plot suggested a four or five-factor solution (eigenvalues = 12.53, 4.29, 3.07, 1.50, 1.16). We then excluded one feminine honor item (“How bad/wrong is it for a woman if she is known as someone who is not loyal to her man?”), and two masculine honor items (“How bad/wrong is it for a man if he has the reputation of being someone without sexual experience?”, and “he has not yet had a sexual relationship?”) that did not load on their expected factors. After setting the number of factors extracted to four, the items formed interpretable groups, which were consistent with the expected four-factor structure. Loadings for the first factor (9 feminine honor items) ranged between 0.75 and 0.93, for the second factor (7 integrity honor items) between 0.61 to 0.81, for the third factor (10 masculine honor items) between -0.51 and -0.84, and for the fourth factor (4 family honor items) between -0.48 and -0.84. All had cross-loadings below .31. The same four-factor structure appeared when the factor analysis was conducted separately for men and women. Items for each subscale were averaged (feminine honor: $\alpha_{\text{men}}/\alpha_{\text{women}} = .95$; masculine honor: $\alpha_{\text{men}}/\alpha_{\text{women}} = .93$; family honor: $\alpha_{\text{men}}/\alpha_{\text{women}} = .89/.85$; integrity honor: $\alpha_{\text{men}}/\alpha_{\text{women}} = .90$).

Political orientation and religiosity. Political orientation was measured with the same items as in Study 1 ($r_{s\text{-}men}/r_{s\text{-}women} = .79/.73$). Following Kurzban et al. (2010) and Price et al. (2014), we measured religiosity with five items, measuring level of religiosity, level of spirituality (1 = *not at all*, 7 = *very*), frequency of private prayer (1 = *never* of *almost never*, 7

= *several times a day*), frequency of current attendance to religious services, and expected future frequency of attendance to religious services (1 = *never or almost never*, 5 = *more than once a week*). Because responses to items were not on the same scales, we calculated the religiosity variable with standardized items ($\alpha_{\text{men}}/\alpha_{\text{women}} = .94/.90$).

3.2 Results

Bivariate correlations and descriptive statistics for male and female participants separately are shown in Tables 3a and 3b. As expected, dispositional jealousy and monogamous mating strategy (i.e., lower SOI) positively related to both men's and women's support for feminine honor. Support for masculine and family honor norms were also positively related to dispositional jealousy and monogamous mating strategy, for both men and women.

Table 3a

Study 2: Bivariate correlations for male participants (N = 300)

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Feminine honor	-	.56**	.57**	.25**	-.53**	.32**	-.03	.56**	.38**
2. Masculine honor		-	.71**	.36**	-.15*	.20**	-.01	.40**	.31**
3. Family honor			-	.53**	-.23**	.16**	.01	.38**	.25**
4. Integrity honor				-	-.06	.01	-.06	.16**	.03
5. SOI					-	-.18**	.13*	-.39**	-.16**
6. Jealousy						-	-.23**	.20**	.08
7. Age							-	.06	.14*
8. Religiosity								-	.37**
9. Political orientation									-
<i>M</i>	3.22	3.79	4.22	5.67	3.92	2.61	38.24	-0.03 ^a	3.62
<i>SD</i>	1.66	1.38	1.51	1.04	1.60	0.97	13.41	0.93	1.68

Notes. ^a Mean on religiosity is based on standardized scores * $p < 0.05$, ** $p < 0.01$

Table 3b

Study 2: Bivariate correlations for female participants (N = 298)

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Feminine honor	-	.53**	.46**	.21**	-.53**	.26**	.14*	.54**	.50**
2. Masculine honor		-	.51**	.23**	-.12*	.44**	-.07	.28**	.33**
3. Family honor			-	.50**	-.17**	.24**	.05	.27**	.21**
4. Integrity honor				-	-.09	.10	.07	.21**	.00

5. SOI	-	.02	-.09	-.42**	-.29**
6. Jealousy	-	-.12*	.14*	.09	
7. Age	-	.14*	.16**		
8. Religiosity	-	.37**			
9. Political orientation	-				
<i>M</i>	2.98	3.51	4.30	5.82	3.00
<i>SD</i>	1.59	1.34	1.44	0.97	1.39

Notes. ^a Mean on religiosity is based on standardizes scores * $p < 0.05$, ** $p < 0.01$

Next, we conducted hierarchical regression analyses to test whether dispositional jealousy and mating strategy (SOI) were associated with men's and women's support for feminine honor, even after controlling for age, religiosity, political orientation, and other honor norms (masculine, family, integrity). We added age, religiosity, and political orientation in Step 1, other honor norms in Step 2, dispositional jealousy in Step 3, and SOI in Step 4.

As expected, among male participants, dispositional jealousy and monogamous mating strategy (i.e., lower SOI) predicted higher support for feminine honor norms, above and beyond age, religiosity, political orientation, and other honor norms (Table 5). Among female participants, monogamous mating strategy, but not dispositional jealousy, predicted higher support for feminine honor norms above and beyond these control variables.

Table 5

Study 2: Hierarchical regression results on support for feminine honor norms

Sex	Steps		<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>	95% CI
Men	1	Age	-.01	.01	-.08	-1.78	.077	-.02, .00
		Religiosity	.89	.09	.49	9.65	.000	.71, 1.07
		Political orientation	.21	.05	.21	4.15	.000	.11, .31
	2	Age	-.01	.01	-.07	-1.61	.110	-.02, .00
		Religiosity	.59	.08	.33	7.01	.000	.43, .76
		Political orientation	.13	.05	.13	2.93	.004	.04, .22
		Masculine honor	.21	.07	.18	2.93	.004	.07, .36
		Family honor	.34	.07	.31	4.82	.000	.20, .48
		Integrity honor	-.07	.08	-.04	-.84	.401	-.22, .09
	3	Age	-.00	.01	-.03	-.65	.517	-.01, .01
		Religiosity	.55	.08	.31	6.59	.000	.39, .71
		Political orientation	.13	.04	.13	2.95	.003	.04, .22

		Masculine honor	.19	.07	.16	2.67	.008	.05, .33
		Family honor	.33	.07	.30	4.72	.000	.19, .47
		Integrity honor	-.04	.08	-.02	-.49	.624	-.19, .11
		Jealousy	.28	.07	.16	3.82	.000	.14, .42
Women	4	Age	.00	.01	.02	.58	.565	-.01, .01
		Religiosity	.33	.08	.19	4.15	.000	.18, .49
		Political orientation	.12	.04	.12	2.97	.003	.04, .20
		Masculine honor	.25	.07	.21	3.90	.000	.13, .38
		Family honor	.25	.06	.23	3.85	.000	.12, .37
		Integrity honor	.00	.07	.00	.03	.980	-.14, .14
		Jealousy	.25	.07	.14	3.68	.000	.11, .38
		SOI	-.34	.04	-.33	-7.99	.000	-.42, -.26
	1	Age	.00	.01	.03	.62	.534	-.01, .01
		Religiosity	.82	.10	.42	8.49	.000	.63, 1.01
		Political orientation	.34	.05	.34	6.88	.000	.24, .43
	2	Age	.01	.01	.07	1.67	.097	-.00, .02
		Religiosity	.64	.09	.33	7.22	.000	.47, .82
		Political orientation	.23	.05	.24	5.13	.000	.14, .32
		Masculine honor	.32	.06	.27	5.42	.000	.20, .43
		Family honor	.22	.06	.20	3.80	.000	.11, .34
		Integrity honor	-.05	.08	-.03	-.60	.548	-.20, .11
	3	Age	.01	.01	.073	1.75	.082	-.00, .02
		Religiosity	.64	.09	.323	7.16	.000	.46, .81
		Political orientation	.24	.05	.238	5.18	.000	.15, .33
		Masculine honor	.30	.06	.249	4.71	.000	.17, .42
		Family honor	.22	.06	.199	3.76	.000	.11, .34
		Integrity honor	-.05	.08	-.028	-.59	.559	-.20, .11
	4	Jealousy	.07	.07	.044	.98	.329	-.07, .22
		Age	.01	.004	.07	1.93	.055	.00, .02
		Religiosity	.41	.09	.21	4.72	.000	.24, .57
		Political orientation	.19	.04	.19	4.47	.000	.11, .27
		Masculine honor	.31	.06	.26	5.42	.000	.20, .42
		Family honor	.19	.05	.17	3.51	.001	.08, .29
		Integrity honor	-.04	.07	-.02	-.50	.616	-.18, .10
		Jealousy	.12	.07	.07	1.79	.075	-.01, .25
		SOI	-.37	.05	-.33	-7.95	.000	-.46, -.28

Notes. Bold indicates statistical significance, $p < .05$.

Similar hierarchical regression results were conducted on support for masculine, family, and integrity honor norms (see Tables S1-S3 in SM). Men's and women's support for masculine honor norms, and women's (not men's) support for family honor norms were predicted by dispositional jealousy. For men, these associations were not as strong as with feminine honor, but for women these associations were stronger than with feminine honor.

Mating strategy did not predict support for masculine, family, or integrity honor norms for either sex.

4. General Discussion

Synthesizing research and theory on mate guarding, sexual jealousy, mating strategies, and ideological control, we proposed that support for feminine honor serves as an ideological form of mate guarding. Across two correlational studies, we found support for predictions derived from this account. In Study 1, men's tendency to experience sexual jealousy and men's (more monogamous) mating strategy were associated with more concern about their own mates' feminine honor. Associations were stronger when men considered long-term mates compared to short-term mates, consistent with the argument that mate guarding is more important in long-term mating because of the higher probability of parental investment (Buss, 2002; Shackelford et al., 2006). Study 2 showed that sexual jealousy and monogamous mating strategy were associated with support for *women in general* having feminine honor. These associations held even after accounting for concerns about protecting other forms of honor (family, masculine, and integrity), and for other variables (religiosity, political orientation, and age) that are commonly argued as explanation for people's support for traditional gender ideologies, including honor norms (e.g., Glick et al., 2015; Vandello & Cohen, 2003). Among female participants, however, the association between sexual jealousy and feminine honor was non-significant after including these additional variables in a regression analysis. One explanation for finding stronger associations among male than female participants is that due to paternity uncertainty, men risk higher fitness costs from infidelity, and have correspondingly stronger concerns about a partner's sexual fidelity (Buss et al., 1992), so men may be more inclined than women to support ideologies that enable the suppression of female sexuality.

As with men, women who were more oriented towards a monogamous mating strategy were more likely to support feminine honor norms (Study 2). Notably, the effect size for this association was similar in men ($\beta = -.34$) and women ($\beta = -.37$). There are several potential explanations. One is that reported support for feminine honor reflects strategic signaling of a preference for sexual modesty by women with relatively monogamous mating strategies. Such signaling may function to increase male mates' paternity confidence and thereby increase chances of paternal investment, given that men invest more when they are more certain of their mate's sexual fidelity (Apicella & Marlowe, 2004; Scelza et al., 2020). Alternatively, by supporting and spreading feminine honor norms, women may be strategically enforcing a monogamous mating strategy, which may reduce the risk of mate poaching by intrasexual rivals.

Study 2 results showed that dispositional jealousy was associated with men's and women's support for masculine and family honor norms (reported in SM), in addition to the association with feminine honor norms. One possible explanation is that masculine honor enables mate guarding by increasing men's ability to deter potential rivals and mate poachers (Shackelford, 2005), and family honor promotes the family's role in mate guarding, by directly encouraging female kin's sexual chastity, and by encouraging male kin's formidability and bravery (Daly et al., 1982; Goldstein, 2002).

Our finding that individuals with a relatively monogamous mating strategy show more support for feminine honor is consistent with multiple previous findings showing links between mating strategy and socially conservative ideologies and practices related to sexuality. Individuals with a relatively monogamous (vs. promiscuous) mating strategy report higher religiosity (Weeden & Kurzban, 2013) and religious attendance (Weeden et al., 2008), and report lower approval of atheists (Moon et al., 2020), gay rights (Pinsof & Haselton, 2017), and recreational drug use (Kurzban et al., 2010). The current findings also raise the

possibility that such phenomena could serve a mate guarding function, and be additionally influenced by sexual jealousy. Indeed, theoretical accounts have argued that mate guarding should be a particular concern for individuals pursuing a more monogamous mating strategy (Buss & Schmitt, 1993; Gangestad & Simpson, 2000), and data shows that more monogamous orientation is associated with higher jealousy (Kupfer et al., 2022).

Although we have primarily considered how individuals' concerns about their mates' fidelity, multiple other factors likely contribute to shaping feminine honor norms. Relatives also have fitness interests that can be served by controlling female sexual behavior. For example, parents with more sons have fitness influenced by their sons' paternity certainty and may therefore contribute to mate guarding by supporting ideologies that suppress female sexuality (Blake et al., 2018). Motives not directly related to mate guarding or mating strategy might also contribute to support for feminine honor. In some cultures, male and family honor can be contingent on a woman maintaining her feminine honor (Vandello & Cohen, 2003), suggesting that motives to acquire status and reputation likely enhance efforts to promote feminine honor. Feminist perspectives emphasize that men's support for feminine honor arises from men's pursuit of control and dominance over women as a group (e.g., Glick et al., 2015; Lerner 1986; Sev'er, 2005). And according to some cultural evolutionary perspectives, groups that controlled sexual behavior and enforced monogamy were more successful because of lower within-group competition and conflict (Henrich et al., 2012). Ideologies such as feminine honor may thus have proliferated along with the success of such cultural groups.

4.1 Limitations and Future Directions

Given the correlational nature of our design, the direction of causation is uncertain. Experimental evidence is needed to test whether there is a casual effect of jealousy and mating strategy on support for feminine honor norms. Additionally, unmeasured variables

may have influenced associations. Although we took account of several plausible variables – including age, religiosity, political conservatism, and concern for male, family and integrity honor – we may have overlooked others. Social dominance orientation, reputation sensitivity, or perceived threats to community values could also play a role in support for feminine honor norms.

Studies investigating the individual-level causes and consequences of honor norms have almost exclusively been conducted with US participants, which has mixed honor and dignity values (e.g., Gul et al., 2021; Foster et al., 2022; McLean et al., 2018; Saucier et al., 2016). The current research also used participants from the US, which is sufficient for an initial test of an association hypothesized to be species-typical. However, understanding how sexual jealousy and mating strategy influences feminine honor across different cultures is an important goal for future research. Research would also be enriched by examining whether ideological mate guarding, and sexual jealousy, is at the core of “harmful traditional practices” including sequestering, honor-based violence, and female genital mutilation. The psychological mechanisms (sexual jealousy and mating strategy) underpinning ideological mate guarding may also be found to interact with socio-ecological conditions (e.g., sex ratio; actual or perceived number of same-sex rivals) to explain cross-cultural and regional variation in the strength of feminine honor norms.

The current research did not investigate precisely how sexual jealousy and mating strategy shape feminine honor, beyond self-reported support for women’s, and mate’s feminine honor. Support for feminine honor could be enacted in various ways: People may collectively punish women who fail to protect their honor (Chesler, 2015); ostracize or ridicule men who fail to protect female kin’s honor or fail to punish a dishonorable woman (Boyer, 2018; Vandello et al. 2009); condone wife beating (Eisner & Ghunaim, 2013); transmit normative feminine honor information (Caffaro et al., 2016); approve of women who

stay with their husbands even after facing honor-based partner aggression (Vandello & Cohen, 2003). Future research should investigate the various cultural transmission mechanisms through which sexual jealousy leads to the cultural evolution and maintenance of feminine honor norms.

4.2 Conclusion

According to the ideological mate guarding account of feminine honor we have described here, feminine honor culturally evolved due to the pressures of paternity uncertainty and intra-sexual competition. Previous scholars have given mate guarding accounts of other cultural phenomena that enable the control of female sexuality (e.g., Daly et al., 1982; Smuts, 1995), but here we provided an account of the origins of feminine honor, specifically. Moreover, although prior scholars anticipated an association (e.g., Daly et al., 1982), the current findings provide, to our knowledge, the first empirical evidence that sexual jealousy is associated with ideologies that serve to control female sexuality.

References

- Alberts, S. C., Altmann, J., & Wilson, M. L. (1996). Mate guarding constrains foraging activity of male baboons. *Animal Behaviour*, 51(6), 1269-1277.
<https://doi.org/10.1006/anbe.1996.0131>
- Apicella, C. L., & Marlowe, F. W. (2004). Perceived mate fidelity and paternal resemblance predict men's investment in children. *Evolution and Human Behavior*, 25(6), 371-378.
- Arat, Y. (2010). Religion, politics, and gender equality in Turkey: Implications of a democratic paradox? *Third World Quarterly*, 31, 869-884.
<https://doi.org/10.1080/01436597.2010.502712>
- Barbaro, N., Pham, M. N., & Shackelford, T. K. (2015). Solving the problem of partner infidelity: Individual mate retention, coalitional mate retention and in-pair copulation frequency. *Personality and Individual Differences*, 82, 67–71.
<https://doi.org/10.1016/j.paid.2015.02.033>
- Barnes, C. D., Brown, R. P., & Osterman, L. L. (2012). Don't tread on me: Masculine honor ideology in the U.S. and militant responses to terrorism. *Personality and Social Psychology Bulletin*, 38(8), 1018–1029. <https://doi.org/10.1177/0146167212443383>
- Baumeister, R. F., & Twenge, J. M. (2002). Cultural suppression of female sexuality. *Review of General Psychology*, 6(2), 166-203. <https://doi.org/10.1037/1089-2680.6.2.166>
- Betzig L. (1993). Sex, succession, and stratification in the first six civilizations: How powerful men reproduced, passed power on to their sons, and used power to defend their wealth, women, and children. In L. Ellis (Ed.), *Socioeconomic stratification and social inequality* (pp. 37-74). Praeger.
- Birkhead T. R., Møller, A. P. (1992). *Sperm competition in birds: Evolutionary causes and consequences*. Academic Press.

- Blake, K. R., Fourati, M., & Brooks, R. C. (2018). Who suppresses female sexuality? An examination of support for Islamic veiling in a secular Muslim democracy as a function of sex and offspring sex. *Evolution and Human Behavior*, 39(6), 632-638.
- Blaydes, L., & Linzer, D. A. (2008). The political economy of women's support for fundamentalist Islam. *World Politics*, 60(4), 576-609.
<https://doi.org/10.1353/wp.0.0023>
- Boyer, P. (2018). *Minds make societies*. Yale University Press.
- Burch, R. L., & Gallup Jr, G. G. (2020). Abusive men are driven by paternal uncertainty. *Evolutionary Behavioral Sciences*, 14(2), 197-209.
- Buss, D. M. (2002). Human mate guarding. *Neuroendocrinology Letters*, 23(4), 23-29.
- Buss, D. M., & Schmitt, D. P. (1993). Sexual Strategies Theory: An evolutionary perspective on human mating. *Psychological Review*, 100(2), 204-232.
- Buss, D. M., & Shackelford, T. K. (1997). From vigilance to violence: Mate retention tactics in married couples. *Journal of Personality and Social Psychology*, 72(2), 346-361.
<https://doi.org/10.1037/0022-3514.72.2.346>
- Buss, D. M., Larsen, R. J., Westen, D., & Semmelroth, J. (1992). Sex differences in jealousy: Evolution, physiology, and psychology. *Psychological Science*, 3(4), 251-256.
<https://doi.org/10.1111/j.1467-9280.1992.tb00038.x>
- Buss, D. M. (2013). Sexual jealousy. *Psihologijske teme*, 22(2), 155-182.
- Caffaro, F., Mulas, C., & Schmidt, S. (2016). The perception of honour-related violence in female and male university students from Morocco, Cameroon and Italy. *Sex Roles*.
doi:10.1007/s11199-015-0576-8
- Crawford, J. T., Brandt, M. J., Inbar, Y., Chambers, J. R., & Motyl, M. (2017). Social and

- economic ideologies differentially predict prejudice across the political spectrum, but social issues are most divisive. *Journal of Personality and Social Psychology*, 112(3), 383-412. <https://doi.org/10.1037/pspa0000074>
- Chesler, P. (2009). Are honor killings simply domestic violence? *Middle East Quarterly*, 16(2), 61-69
- Chesler, P. (2015). When women commit honor killings. *Middle East Quarterly*, 2, 1-12.
- Daly, M., & Wilson, M. (1988). *Homicide*. Transaction Publishers.
- Daly, M., Wilson, M., & Weghorst, S. J. (1982). Male sexual jealousy. *Ethology and Sociobiology*, 3(1), 11-27. [https://doi.org/10.1016/0162-3095\(82\)90027-9](https://doi.org/10.1016/0162-3095(82)90027-9)
- Dickemann, M. (1979). The ecology of mating systems in hypergynous dowry societies. *Social Science Information*, 18(2), 163-195.
<https://doi.org/10.1177/053901847901800201>
- Durkheim, É. (1982). *The rules of sociological method and other selected texts on sociology and its method* (W. D. Halls, Trans.). Macmillan. (Original work published 1895).
- Eisner, M., & Ghuneim, L. (2013). Honor killing attitudes amongst adolescents in Amman, Jordan. *Aggressive Behaviour*, 39, 405–417. <https://doi.org/10.1002/ab.21485>
- Elakkary, S., Franke, B., Shokri, D., Hartwig, S., Tsokos, M., & Püschel, K. (2014). Honor crimes: Review and proposed definition. *Forensic Science, Medicine, and Pathology*, 10(1), 76-82. <https://doi.org/10.1007/s12024-013-9455-1>
- Flinn, M. V. (1988). Mate guarding in a Caribbean village. *Ethology and Sociobiology*, 9(1), 1-28. [https://doi.org/10.1016/0162-3095\(88\)90002-7](https://doi.org/10.1016/0162-3095(88)90002-7)
- Foster, S., Bock, J. E., Carvallo, M., Pollet, C. L., & Stern, W. (2022). Honor-endorsing

- women and relational aggression: Evidence for the presence of feminine aggression norms in southern U.S. women. *Personality and Individual Differences*, 194, 111668. <https://doi.org/10.1016/j.paid.2022.111668>
- Gangestad, S. W., & Simpson, J. A. (2000). The evolution of human mating: Trade-offs and strategic pluralism. *Behavioral and Brain Sciences*, 23(4), 573-587.
- Glick, P., Sakalli-Ugurlu, N., Akbas, G., & Metin Orta, I. (2015). Why do women endorse honor beliefs? Ambivalent sexism and religiosity as predictors. *Sex Roles*. <https://doi.org/10.1007/s11199-015-0550-5>
- Goetz, A. T., Shackelford, T. K., Romero, G. A., Kaighobadi, F., & Miner, E. J. (2008). Punishment, proprietariness, and paternity: Men's violence against women from an evolutionary perspective. *Aggression and Violent Behavior*, 13(6), 481-489. <https://doi.org/10.1016/j.avb.2008.07.004>
- Goldstein, M. A. (2002). The biological roots of heat-of-passion crimes and honor killings. *Politics and the Life Sciences*, 28-37.
- Gul, P., Cross, S. E., & Uskul, A. K. (2021). Implications of culture of honor theory and research for practitioners and prevention researchers. *American Psychologist*, 76(3), 502-515. <https://doi.org/10.1037/amp0000653>
- Gurven, M., & Hill, K. (2009). Why do men hunt? A reevaluation of “man the hunter” and the sexual division of labor. *Current Anthropology*, 50(1), 51-74. <https://doi.org/10.1086/595620>
- Hayes, A. F. (2017). Partial, conditional, and moderated moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1), 4-40. <https://doi.org/10.1080/03637751.2017.1352100>
- Jackman, M. (1994). *The velvet glove: Paternalism and conflict in gender, class, and race relations*. University of California Press.

Jost, J. T. (2006). The end of the end of ideology. *American Psychologist*, 61(7), 651-670.

<https://doi.org/10.1037/0003-066x.61.7.651>

Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology*, 33(1), 1-27.

<https://doi.org/10.1111/j.2044-8309.1994.tb01008.x>

Komdeur, J. (2001). Mate guarding in the Seychelles warbler is energetically costly and adjusted to paternity risk. *Proceedings of the Royal Society of London. Series B: Biological Sciences*, 268(1481), 2103-2111. <https://doi.org/10.1098/rspb.2001.1750>

Kulczycki, A., & Windle, S. (2011). Honor killings in the Middle East and North Africa.

Violence Against Women, 17(11), 1442-1464.

<https://doi.org/10.1177/1077801211434127>

Kupfer, T. R., Sidari, M. J., Zietsch, B. P., Jern, P., Tybur, J. M., & Wesseldijk, L. W. (2022).

Why are some people more jealous than others? Genetic and environmental factors. *Evolution and Human Behavior*, 43(1), 26-33.

Kurzban, R., Dukes, A., & Weeden, J. (2010). Sex, drugs and moral goals: Reproductive strategies and views about recreational drugs. *Proceedings of the Royal Society B: Biological Sciences*, 277(1699), 3501-3508. <https://doi.org/10.1098/rspb.2010.0608>

Larmuseau, M. H., Matthijs, K., & Wenseleers, T. (2016). Cuckolded fathers rare in human populations. *Trends in Ecology & Evolution*, 31(5), 327-329.

<https://doi.org/10.1016/j.tree.2016.03.004>

Lerner, G. (1986). *The creation of patriarchy*. Oxford University Press.

Low, M. (2006). The energetic cost of mate guarding is correlated with territorial intrusions in the New Zealand stitchbird. *Behavioral Ecology*, 17(2), 270-276.

<https://doi.org/10.1093/beheco/arj025>

Mannheim, K. (1960). *Ideology and utopia: An introduction to the sociology of knowledge*

- Routledge & Kegan Paul. (Original work published 1929).
- Marx, K., & Engels, F. (1970). *The German ideology* (C. J. Arthur, Ed.). International Publishers. (Original work published 1846)
- Mogilski, J. K., Wade, T. J., & Welling, L. L. (2014). Prioritization of potential mates' history of sexual fidelity during a conjoint ranking task. *Personality and Social Psychology Bulletin*, 40(7), 884-897.
- Moon, J. W., Krems, J. A., & Cohen, A. B. (2020). Opposition to short-term mating predicts anti-atheist prejudice. *Personality and Individual Differences*, 165, 110136.
- Muggleton, N. K., Tarran, S. R., & Fincher, C. L. (2019). Who punishes promiscuous women? Both women and men are prejudiced towards sexually-accessible women, but only women inflict costly punishment. *Evolution and Human Behavior*, 40(3), 259-268. <https://doi.org/10.1016/j.evolhumbehav.2018.12.003>
- Onyishi, I. E., Prokop, P., Okafor, C. O., & Pham, M. N. (2016). Female genital cutting restricts sociosexuality among the Igbo people of southeast Nigeria. *Evolutionary Psychology*, 14(2), 1-7. <https://doi.org/10.1177/1474704916648784>
- Parker, G. A. (1970). Sperm competition and its evolutionary consequences in the insects. *Biological Reviews*, 45(4), 525-567. <https://doi.org/10.1111/j.1469-185x.1970.tb01176.x>
- Pazhoohi, F., Lang, M., Xygalatas, D., & Grammer, K. (2017). Religious veiling as a mate guarding strategy: Effects of environmental pressures on cultural practices. *Evolutionary Psychological Science*, 3(2), 118-124. <https://doi.org/10.1007/s40806-016-0079-z>
- Penke, L., & Asendorpf, J. B. (2008). Beyond global sociosexual orientations: A more

- differentiated look at sociosexuality and its effects on courtship and romantic relationships. *Journal of Personality and Social Psychology*, 95(5), 1113-1135.
<https://doi.org/10.1037/0022-3514.95.5.1113>
- Pfeiffer, S. M., & Wong, P. T. (1989). Multidimensional jealousy. *Journal of Social and Personal Relationships*, 6(2), 181-196. <https://doi.org/10.1177/026540758900600203>
- Pinsof, D., & Haselton, M. G. (2017). The effect of the promiscuity stereotype on opposition to gay rights. *PloS one*, 12(7), e0178534.
<https://doi.org/10.1371/journal.pone.0178534>
- Pitt-Rivers, J. (1974). Honour and social status. In J. G. Peristiany (Ed.), *Honour and Shame: The Values of the Mediterranean Society* (pp 19-77). University of Chicago Press.
- Price, M. E., Pound, N., & Scott, I. M. (2014). Female economic dependence and the morality of promiscuity. *Archives of Sexual Behavior*, 43(7), 1289-1301.
<https://doi.org/10.1007/s10508-014-0320-4>
- Reynolds, T., Baumeister, R. F., & Maner, J. K. (2018). Competitive reputation manipulation: Women strategically transmit social information about romantic rivals. *Journal of Experimental Social Psychology*, 78, 195-209.
- Rodriguez Mosquera, P. M. (2011). Masculine and feminine honor codes. *Revista de Psicología Social*, 26(1), 63-72.
- Rodriguez Mosquera, P. M. (2016). On the importance of family, morality, masculine, and feminine honor for theory and research. *Social and Personality Psychology Compass*, 10(8), 431-442. <https://doi.org/10.1111/spc3.12262>
- Saucier, D. A., Stanford, A. J., Miller, S. S., Martens, A. L., Miller, A. K., Jones, T. L.,

- McManus, J. L., & Burns, M. D. (2016). Masculine honor beliefs: Measurement and correlates. *Personality and Individual Differences*, 94, 7-15.
<https://doi.org/10.1016/j.paid.2015.12.049>
- Scelza, B. A., Prall, S. P., Blumenfield, T., Crittenden, A. N., Gurven, M., Kline, M., Koster, J., Kushnick, G., Mattison, S. M., Pillsworth, E., Shenk, M. K., Starkweather, K., Stieglitz, J., Sum, C., Yamaguchi, K., & McElreath, R. (2019). Patterns of paternal investment predict cross-cultural variation in jealous response. *Nature Human Behaviour*, 4(1), 20-26. <https://doi.org/10.1038/s41562-019-0654-y>
- Scelza, B. A., Prall, S. P., & Starkweather, K. (2020). Paternity confidence and social obligations explain men's allocations to romantic partners in an experimental giving game. *Evolution and Human Behavior*, 41(1), 96-103.
- Schacht, R., & Kramer, K. L. (2019). Are we monogamous? A review of the evolution of pair-bonding in humans and its contemporary variation cross-culturally. *Frontiers in Ecology and Evolution*, 7, <https://doi.org/10.3389/fevo.2019.00230>
- Schmitt, D. P., & Buss, D. M. (2001). Human mate poaching: Tactics and temptations for infiltrating existing mateships. *Journal of Personality and Social Psychology*, 80(6), 894- 917. <https://doi.org/10.1037/0022-3514.80.6.894>
- Sev'er, A. (2005). Patriarchal pressures on women's freedom, sexuality, reproductive health and women's co-optation into their own subjugation. *Women's Health and Urban Life*, 4(1), 27-44
- Sev'er, A. & G. Yurdakul (2001). Culture of honour, culture of change: A feminist analysis of honour killings in rural Turkey. *Violence Against Women* 7(9), 964-999.
<https://doi.org/10.1177/10778010122182866>
- Shackelford, T. K. (2005). An evolutionary psychological perspective on cultures of honor.

Evolutionary Psychology, 3(1), 381-391.

<https://doi.org/10.1177/147470490500300126>

Shackelford, T. K., Goetz, A. T., Guta, F. E., & Schmitt, D. P. (2006). Mate guarding and frequent in-pair copulation in humans. *Human Nature*, 17(3), 239-252.

<https://doi.org/10.1007/s12110-006-1007-x>

Sidanius, J., Levin, S., Federico, C. M., & Pratto, F. (2001). Legitimizing ideologies: The social dominance approach. In J. T. Jost & B. Major (Eds.), *The psychology of legitimacy: Emerging perspectives on ideology, justice, and intergroup relations* (pp. 307–331). Cambridge University Press.

Smuts, B. (1995). The evolutionary origins of patriarchy. *Human Nature*, 6(1), 1-32.

<https://doi.org/10.1007/bf02734133>

Strassmann, B. I. (1981). Sexual selection, paternal care, and concealed ovulation in humans. *Ethology and Sociobiology*, 2(1), 31-40.

[https://doi.org/10.1016/0162-3095\(81\)90020-0](https://doi.org/10.1016/0162-3095(81)90020-0)

Strassmann, B. I., Kurapati, N. T., Hug, B. F., Burke, E. E., Gillespie, B. W., Karafet, T. M., & Hammer, M. F. (2012). Religion as a means to assure paternity. *Proceedings of the National Academy of Sciences*, 109(25), 9781-9785.

<https://doi.org/10.1073/pnas.1110442109>

Symons, D. (1979). *The evolution of human sexuality*. Oxford University Press.

Trivers R. L. (1972). Parental investment and sexual selection. In B. Campbell (Ed.) *Sexual selection and descent of man* (pp. 136–179). Aldine.

Tyler, T. R. (2006). Psychological perspectives on legitimacy and legitimation. *Annual Review of Psychology*, 57(1), 375-400.

<https://doi.org/10.1146/annurev.psych.57.102904.190038>

Uskul, A. K., Cross, S. E., Günsoy, C., & Gul, P. (2019). Cultures of honor. In D. Cohen &

- S. Kitayama (Eds.), *Handbook of cultural psychology* (pp. 793–821). The Guilford Press.
- Vandello, J. A., & Cohen, D. (2008). Culture, gender, and men's intimate partner violence. *Social and Personality Psychology Compass*, 2(2), 652-667.
<https://doi.org/10.1111/j.1751-9004.2008.00080.x>
- Vandello, J. A., & Cohen, D. (2003). Male honor and female fidelity: Implicit cultural scripts that perpetuate domestic violence. *Journal of Personality and Social Psychology*, 84(5), 997-1010. <https://doi.org/10.1037/0022-3514.84.5.997>
- Vandello, J. A., Cohen, D., Grandon, R., & Franiuk, R. (2009). Stand by your man: Indirect prescriptions for honorable violence and feminine loyalty in Canada, Chile, and the United States. *Journal of Cross-Cultural Psychology*, 40(1), 81-104.
<https://doi.org/10.1177/0022022108326194>
- Van Slyke, J. A., & Szocik, K. (2020). Sexual selection and religion: Can the evolution of religion be explained in terms of mating strategies? *Archive for the Psychology of Religion*, 42(1), 123-141. <https://doi.org/10.1177/0084672420909460>
- Weber, M. (1968). *Economy and society: An outline of interpretive sociology* (G. Roth, & C. Wittich, Eds.). Bedminster Press (Original work published 1922).
- Weeden, J., Cohen, A. B., & Kenrick, D. T. (2008). Religious attendance as reproductive support. *Evolution and Human Behavior*, 29(5), 327-334.
<https://doi.org/10.1016/j.evolhumbehav.2008.03.004>
- Weeden, J., & Kurzban, R. (2013). What predicts religiosity? A multinational analysis of reproductive and cooperative morals. *Evolution and Human Behavior*, 34(6), 440-445. <https://doi.org/10.1016/j.evolhumbehav.2013.08.006>