# Benevolent and Hostile Sexism in Endorsement of Heterosexist Marriage Traditions Among Adolescents and Adults 

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#### Abstract

Within most western countries, gendered proposal, surname, and wedding traditions remain widely endorsed. A previous study indicated that endorsement of proposal and surname traditions is associated with higher levels of benevolent sexism (BS) in university students in the USA. Three studies ( $\mathrm{N}=367$ ) extended research to adolescents (dating age) and 30-year-olds (typical first-time marriage age). For the first time, these studies examined gendered wedding traditions (e.g., father walking a bride down the aisle). Different combinations of ambivalent sexism predicted participants' opinions about surname change after marriage and the choice of children's surnames. In younger adolescents (11-18 years; 56 boys, 88 girls, 68.1\% White), hostile sexism (HS) predicted endorsement of surname change, whereas benevolent sexism predicted endorsement in 16- to 18 -year-olds ( 58 boys, 84 girls, $76.8 \%$ White) and 30 -year-olds ( 37 men, 44 women, $74.1 \%$ White). In adolescent samples, both BS and HS predicted endorsement of patronymic traditions for children, whereas only BS did in the adult sample. The findings suggest that different types of sexism predict traditional beliefs in specific age groups.


Keywords Benevolent sexism • Gender • Heterosexual relationships • Proposals • Surname decisions • Marriage traditions

Recent movements such as \#metoo and support for closing the gender pay gap indicate that some people are aware of sexism and want to eliminate it (Jaffe, 2018). However, gender-typed traditions remain entrenched in heterosexual relationships and marriage practices (Leaper \& Robnett, 2018). Seemingly innocuous traditions around proposals, weddings, and surname changes are symbolic of wider gender inequality (Boxer \& Gritsenko, 2005; Fairchild, 2014). Many heterosexual rituals (e.g., the father giving his daughter away) put men in a position of power because they are reminiscent of times where paternalism was normative (Fairchild, 2014; Otnes \& Pleck, 2003). Research shows a link between the endorsement of these rituals and sexism in US university students (Robnett \& Leaper, 2013). The current studies extend investigation of these heterosexual

[^0]relationship traditions to adolescence (when interest in romantic relationships emerges; Rudman \& Glick, 2021) and in 30-year-olds (when marriage is being considered and first marriages typically occur; Mehta et al., 2020). Exploring attitudes at stages on either side of the emerging adulthood period allows us to understand the origins and maintenance of marriage tradition endorsement.

## Endorsement of Marriage Traditions

Relationship milestones in heterosexual relationships are more frequently led by men than women (Sassler \& Miller, 2011). For example, men initiate marriage proposals more than women do. The most widespread proposal archetype constitutes a man kneeling and presenting a ring to the woman (Schweingruber et al., 2004). Indeed, a recent survey in the US reported that $97 \%$ of grooms proposed to their brides (Fetters, 2019). Moreover, participants are more likely to rate proposals by men than women as leading to a successful, strong marriage (Schweingruber et al., 2008). As a result, couples likely feel normative pressures to follow traditions.

A potential consequence of such normative pressure is women's relationship dissatisfaction. Specifically, women
may be reluctant to take an active role in leading a proposal, which means that they are often put in the position of passively waiting for the man to propose (Robnett \& Leaper, 2013; Sassler \& Miller, 2011). Baker and Elizabeth (2013) examined the transition from cohabitation to marriage and found that often women were not satisfied with long-term cohabitation. However, women were reluctant to be proactive in formalizing the relationship and waited for their partner's proposal. When women proposed, their partners often felt obligated to propose before publicly announcing the engagement. Thus, there seems to be a social requirement for men to propose. Likewise, men's input is prioritized over women's in deciding to get married (i.e., the groom asking the bride's father for permission). In this case, two men make the decision before the woman (Fairchild, 2014). These gendered traditions around proposing prevent women from taking an agentic role in moving the relationship forward (Robnett \& Leaper, 2013).

Another male-dominated tradition in heterosexual relationships is women adopting the man's surname after marriage. In the nineteenth century, surname change was a legal requirement for women because they were viewed as their husband's property (Boxer \& Gritsenko, 2005). Despite the removal of this obligation, many women in the US and UK uphold this tradition (Robnett et al., 2018a; Scheuble et al., 2012). In the UK, $85 \%$ of married heterosexual women, between 18 and 30 adopt their husband's surname (Savage, 2020). Although laws may not require surname change anymore, legal procedures continue to encourage the traditional practice of the woman adopting her husband's surname. For example, in England and Wales, it is free for a woman to change her name at institutions (e.g., banks) using her marriage certificate. For men wanting to take their wife's surname, the UK Deed Poll website says that government departments such as the Passport Office will accept the marriage certificate but many companies such as financial institutions will not so men often need to follow the "deed poll" option (Peters, 2018; UK Deed Poll, 2021). The UK deed poll website states "Traditionally, a man does not change his surname upon marriage" (UK Deed Poll, 2021). This direct acknowledgement of tradition as well as the greater efforts required by men to change their name may discourage a couple from adopting the woman's name and persuade them to follow the status quo.

The elevation of men's over women's surnames often continues when couples decide which name to give their children. Fathers' names tend to be given more than mothers' names: a patronymic naming trend. For example, from a sample of 600 female university employees, $90 \%$ gave their first-born child their father's surname (Johnson \& Scheuble, 2002). If women retained their surname, they were more likely to give their surname to their child; however, the father's name was often included. Like proposals,
it seems that women's surnames alone are not viewed as enough (Baker \& Elizabeth, 2013). Men taking their wives’ surnames may also be subjected to social scrutiny. Hamilton et al. (2011) found in a sample of 800 Americans that almost half $(46.5 \%)$ of respondents disagreed that it was ok for men to change their name after marriage.

Patronymic naming traditions reflect societal power imbalances between women and men (Boxer \& Gritsenko, 2005), which is evidenced in research demonstrating that surname decisions influence how people are perceived along a variety of power-related dimensions. Forbes et al. (2002) found that a woman with a hyphenated surname was viewed as more career-focused and educated than the average married woman. Furthermore, women who retain their surnames are perceived as holding more power-related traits and being less committed to a successful marriage than women who take their husbands' names. The latter are described as having more affiliative, loving traits (Kelley, 2023; Robnett et al., 2016; Shafer, 2017). Research exploring views of men corroborate this finding. Specifically, men whose wives kept their surname tend to be viewed as holding less power in the relationship than their partner, particularly by those higher in hostile sexism (Robnett et al., 2018a, b). These men are also perceived to be worse romantic partners than traditional men (Kelley, 2023). Together, these findings illustrate that marital surname choices are a feminist issue: These choices are rooted in gendered power dynamics and highlight a dou-ble-bind wherein women must balance the need to preserve autonomy and identity with the need to appear committed to family life (Boxer \& Gritsenko, 2005; Nugent, 2010).

## The Role of Ambivalent Sexism in Heterosexual Relationships

Theoretical perspectives on heterosexual gender relations suggest marriage traditions are likely influenced by sexist ideology. According to ambivalent sexism theory (Glick \& Fiske, 1996), gendered power dynamics are maintained by two associated forms of sexist ideology: benevolent sexism (BS) and hostile sexism (HS). BS is characterized by seemingly positive beliefs about women as the more moral and kinder gender group, who should be cherished, protected, and provided for by men (Glick \& Fiske, 2001). In contrast, HS is an overtly negative view of women as manipulative and deceitful. Although divergent in evaluative tone, BS and HS are positively correlated (Glick et al., 2000; Hammond \& Overall, 2017). This confluence of BS and HS results in the maintenance of existing gender relations. Women who conform to traditional roles are rewarded with adoration and preferential treatment prescribed by BS, and women who violate such expectations are derogated, as prescribed by HS (Glick \& Fiske, 1996, 2001).

BS is central in guiding expectations and behaviors in intimate heterosexual relationships (Fairchild, 2014; Overall \& Hammond, 2018). In dating, actions reflecting BS (e.g., men paying for women on the first date, holding the door open for women) are viewed as desirable in men (Paynter \& Leaper, 2016). Later in relationships, BS encourages women to focus on attaining a committed marriage, having children, and foregoing the pursuit of personal power including status and education (Lee et al., 2010; Rudman \& Heppen, 2003). Consequently, BS not only impacts behavior in romantic relationships, but also steers men and women into separate gendered roles in wider society.

Despite research into both ambivalent sexist attitudes and the endorsement of marriage traditions, little research has been conducted to explore their association. Notably, Robnett and Leaper (2013) conducted a survey with undergraduate students examining their views of marriage proposals and surname changes. Participants strongly endorsed proposal and surname traditions. After controlling for demographic factors, BS was the only significant predictor of endorsing these traditions. When asked to explain why they endorsed the surname tradition, many women reported a desire to unite the family under the same surname. This reasoning is representative of the heterosexual intimacy and protective paternalism facets of BS in the sense that women valuing family unity reflects traditional gender roles of warm, supportive caregivers (Glick \& Fiske, 1996). Along a similar vein, Robnett and Leaper (2013) found that some women were reluctant to propose due to fear of rejection, whereas some men were motivated to propose because they valued the agency attached with being the one to initiate the proposal. The pattern of men being in control of relationship progression reflects paternalistic chivalry, which is closely related to BS (Hammond \& Overall, 2015; Viki et al., 2003). Although participants in Robnett and Leaper (2013) spoke positively about marriage traditions, the association with BS suggests such traditions contribute to the maintenance of gender inequality more broadly through casting traditional roles and preferences prescribed by BS as positive and harmless (Hopkins-Doyle et al., 2019).

Even less is known about endorsement of wedding day traditions. However, the few studies investigating these traditions show that an unequal division of labor between bride and groom in wedding day preparation is also seen positively (Ellingsaeter, 2022). Related research shows that when talking about their wedding ceremonies, grooms were viewed favourably and seen as acting benevolently by leaving most wedding tasks to the bride (Froschauer \& Durrheim, 2019). Instead of being recognised as an unfair division, grooms were seen as acting selflessly. Although these studies suggest that wedding day traditions symbolise BS, there is a dearth of empirical evidence linking traditions and BS. Using quantitative analyses, we investigate whether BS beliefs are
associated with endorsement of gendered wedding traditions for the first time.

Although the endorsement of hostile sexism has also been found to play a role in both adult and adolescent relationships in terms of relationship problems (Cross \& Overall, 2019; de Lemus et al, 2010; Martinez-Pecino \& Durán, 2019), we decided to focus on the role of BS in relation to the endorsement of marriage traditions. The romantic and chivalrous notions attached to marriage traditions can be seen as an extension of the favourable views often held about earlier heterosexist dating behaviour such as men initiating first dates. In addition, Viki et al. (2003) found that such behaviours were significantly positively correlated with BS but not HS. Men choosing when the couple becomes engaged is an example of this in a more established relationship (e.g., Sassler \& Miller, 2011). For these reasons, we focus on BS rather than HS in the context of endorsing marriage traditions.

## Developmental Course of Sexism

Both BS and HS have roots in childhood. Awareness of traditional gendered roles and traits begins in childhood (Robnett et al., 2018a, b). From as young as six years, children are aware of occupational roles typically held by men versus women (Liben et al., 2001). Children are also exposed to BS ideals from an early age through media, such as Disney films and imaginative play. Girls learn the gender roles of women as helpless princesses needing to be rescued by heroic princes (Casad et al., 2015; Rudman \& Glick, 2021). Further, children are aware of and endorse BS and HS, and levels of sexism endorsement have been linked to how they view themselves in relation to traits such as warmth and competence (Hammond \& Cimpian, 2021).

In adolescence, the own-gender preferences and segregated relationships (i.e., characteristic of HS) displayed in childhood are replaced by interdependence as heterosexual adolescents take a romantic interest in each other (Dunham et al., 2016). The numbers of adolescents having romantic relationships increases sharply at this stage-from $25 \%$ at 12 -years to $70 \%$ at 18-years old (Carver et al., 2003). In early relationships, BS ideals prescribe the expectation that boys play a more dominant role than girls. For example, boys should initiate romantic involvement, pay for dates, and ensure girls’ get home safely (Rudman \& Glick, 2021). Boys who meet these expectations are rated as attractive by girls, which increases with greater relationship experience (Montañés et al., 2013; Viejo et al., 2015). Overall, adolescence marks the emergence of ambivalent sexism with rising peaks in HS and BS in 14-to18-year-olds (Glick \& Hilt, 2000).

Although sexism might increase in adolescence, there are gender differences in this pattern across the life span. Men consistently score higher on HS from adolescence to adulthood
compared to women (Ferragut et al., 2017). Over time, women's BS and HS as well as men's HS follow a U-shaped trajectory: sexism is relatively high in late adolescence, decreases in middle adulthood (i.e., post typical age for marriage, reproduction), and increases again in later adulthood. In contrast, men's BS increases linearly over time (Hammond et al., 2018). Men's enduring endorsement of BS is consistent with evidence showing there are social and status benefits to be gained. Adult women prefer men who espouse BS over men who do not as romantic partners (Gul \& Kupfer, 2019). These findings suggest that BS continues to hold appeal for women and men especially early in romantic life, but this is maintained through to married life and beyond for men.

## The Present Studies

The present studies extend previous investigations with undergraduate students by examining the views of younger and older populations in three studies. This extension allows us to gain insight into the role of BS in influencing views on marriage traditions in those who are just starting to take an interest in heterosexual romantic relationships through to those who are considering making these relationships legally recognized. Further, to gain a more complete understanding of heterosexist marriage traditions, we expanded our investigation to include wedding day preferences, in addition to proposal and surname decisions. The consistent encouragement of women to get married and popular wedding day rituals reinforce a gender power imbalance (Fairchild, 2014; Ingraham, 2009).

For this reason, we focused on the role of adolescents' (11-18 years old) and young adults' (early to mid-30s) BS (and HS) in explaining ongoing preference for heterosexist marriage traditions. As BS emerges and remains a predictor of relationship behaviors in both adolescence and adulthood (Glick \& Hilt, 2000; Viki et al., 2003), it is plausible to predict that BS would be associated with beliefs and preferences around marriage. We used open-ended questions in the studies with adolescents to avoid presuming the views of this never-before-studied participant group. In addition, given that wedding traditions had not been studied previously, we also used open-ended questions to develop closed-ended questions about this topic in Study 3. The codes emerging from the first two studies informed the development of the closed-ended questions answered by young adults.

## Study 1

Study 1 explored adolescents' (aged 11 to 18 years) views of heterosexual marriage traditions. Adolescence marks a shift from the gender-segregated relationships of
childhood toward interdependence for heterosexual adolescents (Dunham et al., 2016). This transition coincides with the emergence of an awareness of power and status differences between genders and the introduction of ambivalent sexist attitudes, with both BS and HS peaking in adolescence (Glick \& Hilt, 2000; Hammond et al., 2018). Given that studies have linked BS to differential gender roles in adolescent dating and partner preferences (Montañés et al., 2013), we expect an association between BS and endorsement of marriage traditions in adolescents.

Based on prior theory and research (e.g., Glick \& Fiske, 1996; Robnett \& Leaper, 2013) and higher mean levels of sexist attitudes in boys than girls (Ferragut et al., 2017), we predicted that gender identity and BS levels would play a role in views towards marriage traditions. Specifically, we hypothesized that reporting that a couple should have a man's surname and that children should have the father's surname would be predicted by greater benevolent sexism and being a boy (Hypothesis 1a). Second, we predicted that wanting men to initiate the proposal and supporting gendered traditions in their wedding day would be predicted by greater BS and being a boy (Hypothesis 1b). Finally, we conducted exploratory analyses where we repeated the analyses related to Hypotheses 1a and 1b with HS incorporated as an exploratory predictor. We explored HS because of its positive correlation with BS (Hopkins-Doyle et al., 2019) and because both peak in adolescence (Hammond et al., 2018).

## Method

## Transparency and Openness

We report how we determined our sample size, data exclusions and all measures in the study in this section. All data was analysed using IBM SPSS (Version 27). This study was pre-registered on the Open Science Framework (OSF): https:// osf.io/fumdn/?view_only=5fdac7f180c544e9aa1bfa07a2f56c e1. The data, code and study materials are available following the anonymised link: https://osf.io/vs95k/?view_only= 00d53969b77643b6a5f1d6ccd6841e6f. The predictions and analysis plan were pre-registered after data had been collected but before the data had been viewed by the authors.

## Participants

Participants were 144 secondary school students in southeast England aged between 11 and 18 years old ( $M=14.72$ $S D=1.95$ ). This included 11 11-year-olds, 1112 -year-olds, 17 13-year-olds, 2014 -year-olds, 3215 -year-olds, 2916 -yearolds, 11 17-year-olds and 13 18-year-olds. There were 56
boys ( $38.9 \%$ ), and 88 girls ( $61.1 \%$ ). Participants identified as White ( $n=98,68.1 \%$ ), Mixed ( $n=7,4.9 \%$ ), Black ( $n=3$, $2.1 \%$ ), Asian ( $n=34,23.7 \%$ ), and two (1.4\%) participants did not disclose their ethnicity. With a power of 0.80 and an alpha of $.05, \mathrm{G}^{*}$ Power (version 3.1) returned a sample of 158 participants to run a logistic regression (Faul et al., 2009). Our posited odds-ratio was 1.89 , although with 144 participants we would have needed an odds-ratio of 1.95 to reach statistical significance. We recruited 158 participants, but we dropped participants because of interviewer error and those who did not report their gender identity as man or woman.

## Measures

## Benevolent Sexism

Participants completed the English translation of the ambivalent sexism inventory for adolescents (ISA; de Lemus et al., 2010). Item 15 ("In a disaster, girls ought not necessarily to be rescued before boys") was removed from analyses due to participants finding the wording difficult to interpret. Consequently, the scale contained 19 items ( $\alpha=.79$ ) divided into two subscales: 9 measured $B S(a=.64)$ and 10 measured HS $(a=.78)$. Participants rated the extent of their agreement with each statement on an adapted scale from 1 (disagree a lot) to 5 (agree a lot). Mean scores for BS and HS subscales were calculated separately. Higher mean scores indicated higher levels of BS and HS.

## Heterosexual Marriage Traditions and Preferences

Participants answered closed- and open-ended questions, some adapted from Robnett and Leaper (2013), to investigate beliefs and preferences about heterosexual marriage traditions. Below, we list the questions included in the analyses.

## Beliefs Questions

Participants were asked about their beliefs on marital surname decisions: "Whose surname should they [the couple] have?" and "What do you think they should do if they decide to have children?".

## Preferences Questions

Participants were asked about their preferences: "If you were to get married, what would you like your proposal to
be like?" and "If you were to get married, what would you like your wedding to be like?". Regarding proposal preferences, as participants' sexual orientations were unknown, responses were only coded as "man proposes" if the gender of the proposer was clearly male (i.e., a boy saying, "I want to propose" or a girl saying, "I want the man to propose"). If participants said, "I want them to propose" and they do not mention the gender of their future partner at any point in the interview, we did not assume heterosexuality.

## Procedure

The study received ethical approval from the University of Surrey Reference 1329-PSY-17). Before taking part, participants over 16 years provided written consent. Parents provided written consent for participants under 16, and children provided assent. Participants reported their date of birth, gender identity, and ethnicity. Next, we interviewed participants about marriage traditions and helped them complete the ISA. Task order was counterbalanced. We conducted interviews in person in schools and university before the COVID-19 pandemic. During the pandemic, interviews were conducted via Microsoft Teams. Interviews were recorded and transcribed.

## Coding Open-Ended Responses

Responses to the interview questions were coded using content analysis (Bakeman \& Gottman, 1997; Tenebaum et al., 2016). First, two researchers read the transcripts in search of common themes in participants' responses and the coding scheme was further modified by the first author. Codes were not mutually exclusive, but if participants gave both a traditional and a non-traditional response, their response was coded as traditional only. To obtain intercoder reliability (i.e., kappa values $>.75$; Fleiss, 1981), the first author and research assistant coded 52 (36.1\%) transcripts for "Whose surname should they have?" $(\kappa=.73)$, "What do you think they should do if they decide to have children? $(\kappa=.79)$, and "If you were to get married - what would you like your proposal to be like?" ( $\kappa=.76$ ). On "If you were to get married - what would you like your wedding to be like?" coders reached inter-rater reliability on a sample of 32 participants ( $22.2 \%$ ) with $\kappa=.90$.

Disagreements were resolved through discussion. For example, in response to the "Whose surname should they have?", a participant gave the response "technically it's the man's name but it doesn't, preferably it would be the man's, but does it really matter, probably, but you know". One coder coded this as "either, doesn't matter, it's their choice" and the other coded it as "man's name" and "either doesn't
matter, it's their choice." Upon discussion, coders agreed to code the response as both "man's name" and "either doesn't matter, it's their choice." Although the participant implies that they feel it does not matter, coders agreed the word "preferably" warranted being coded. In another example of a disagreement, one participant gave the response, "if they both agree on it then the man's but ... well it doesn't have to be $100 \%$, but that's what it normally is." One coder coded this as "other" and the other coded it is "man's name" and "either doesn't matter, it's their choice." Upon discussion, coders agreed to code the response as both "man's name" and "either doesn't matter, it's their choice" because coders agreed that the participant appeared to endorse the man's surname being adopted but also suggests that this is dependent on both partners' agreement and that other surname decisions are possible. After coding, we also categorised answers as traditional or non-traditional codes (Table 1 displays all codes).

## Results

To test our hypotheses, we first ran one-sample chi-square tests followed by logistic regression analyses for each of the four dependent variables (two beliefs, two preferences). For one-sample chi-square tests, we examined whether participants gave traditional answers above chance levels. We followed these analyses by examining whether BS and participant gender were associated with the likelihood of giving traditional beliefs and preferences. Before conducting logistic regression analyses, assumptions were checked and were met. In each logistic regression, BS and gender identity were entered as predictors. Beliefs and preferences questions were entered as the criterion variables in separate analyses. Traditional answers were scored as one, and non-traditional as zero. A further exploratory model with HS added as an independent variable was also tested.

## Surname Traditions

Table 2 displays proportions of traditional and non-traditional answers given for each dependent variable. Table 3 shows logistic regression model statistics. Tables 4 and 5 display exploratory analyses.

## Whose Surname Should People Have After Marriage?

Fifty-one participants ( $35.4 \%$ ) gave a traditional answer (i.e., mentioned taking the man's surname), 85 participants $(59.0 \%$ ) gave a non-traditional answer, and eight
participants (5.6\%) did not answer. Fewer participants gave traditional responses than expected by chance, $\chi^{2}(1)=8.50$, $p=.004$. The logistic regression model was not significant, $\chi^{2}(2)=2.77, p=.250$, neither gender identity nor BS predicted participants beliefs about whose surname a couple should chose after marriage. When HS was added to the model, it was significant, $\chi^{2}(3)=9.63, p=.022$, and HS was the only significant predictor (see Table 4 for model statistics). Inconsistent with predictions, the likelihood of participants endorsing couples' taking the man's surname was predicted by greater HS, but not BS or participant gender identity.

## Which Surname Should Their Children Take?

Fifty-seven participants (39.6\%) gave a traditional answer (i.e., taking the father's name), 86 participants ( $59.7 \%$ ) gave a non-traditional answer, and one participant ( $0.7 \%$ ) did not answer. Fewer participants gave traditional responses than chance, $\chi^{2}(1)=5.88, p=.015$. The logistic regression model was statistically significant, $\chi^{2}(2)=6.20, p=.045$. Only BS was a significant positive predictor of believing children should have the father's name. When HS was added, the model remained significant, $\chi^{2}(3)=11.89, p=.008$. In this model, only HS was a significant predictor of believing children should have the father's name.

## Proposal and Wedding Preferences

Table 2 displays proportions of traditional and non-traditional answers given for each dependent variable. Table 3 shows logistic regression model statistics.

## If You Were to Get Married, What Would You Want Your Proposal to Be Like?

Forty-seven participants (32.6\%) gave a traditional answer (i.e., man leads proposal, getting down on one knee etc.) and 97 participants ( $67.4 \%$ ) gave a non-traditional answer. A one-way chi-square test indicated that fewer participants gave traditional responses than expected by chance $\chi^{2}(1)=17.36, p<.001$. The logistic regression model was statistically significant, $\chi^{2}(2)=15.70, p<.001$. Consistent with H1b, both gender identity and BS were significant predictors of wanting a traditional proposal. Boys were more likely than girls to want a traditional proposal, and greater BS increased likelihood of wanting a traditional proposal. When HS was added, the model remained significant, $\chi^{2}(3)=15.92, p=.001$. However, consistent with predictions, only gender identity and BS were significant predictors of wanting a traditional proposal.
Table 1 Coding Scheme Used for Coding of Open-Ended Questions in Studies 1 and 2

| Section | Question | Traditional Codes | Criteria | Non-traditional codes |
| :--- | :--- | :--- | :--- | :--- |

Table 1 (continued)

| Section | Question | Traditional Codes | Criteria | Non-traditional codes | Criteria |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | If you were to get married - what would you want your wedding to be like? | Gendered traditions | Referencing traditional gendered wedding roles or rituals for the participant's culture: "white wedding", the bride doing most of the planning, the bride walked down the aisle by her father, bridesmaids, focus on bride's beauty or physical appearance, traditional bridal outfit (e.g., dress) | Other | Referencing any answer other than gendered wedding traditions |

## If You Were to Get Married, What Would You Want Your Wedding to Be Like?

Twenty-one participants (14.6\%) gave a traditional answer (i.e., gendered rituals or roles associated with weddings - white wedding dress, being given away by father), 122 participants ( $84.7 \%$ ) gave a non-traditional answer, and one participant $(0.7 \%)$ did not answer. A one-way chi-square test showed that fewer participants gave traditional responses than chance, $\chi^{2}(1)=71.34$, $p<.001$. The logistic regression model was significant, $\chi^{2}(2)=11.18, p=.004$. Inconsistent with predictions, BS did not predict participants' preference for a traditional wedding. Likewise inconsistent with predictions, boys were less likely to endorse traditional preferences in their future weddings compared to girls. When HS was added, the model was significant, $\chi^{2}(3)=13.71, p=.003$, but only gender identity predicted preference for a traditional wedding.

## Discussion

Study 1 investigated whether gender identity, BS, and HS were associated with heterosexual marriage traditions in British adolescents. Partially supporting H1a, higher BS scores predicted adolescents' endorsement of children having their father's surname. However, when HS was added to the model, only HS predicted participants' reporting that children should have their fathers' surname. Thus, in this age group, HS may be more predictive of this belief than BS. As expected, (H1b), and consistent with Robnett and Leaper (2013), BS and being a boy predicted preference for a traditional proposal: either wanting the man to propose, wanting gendered traditions within the proposal or both. This association remained consistent when HS was added to the model. Finally, in contrast to our prediction (H1b), being a girl predicted wanting a traditional wedding.

The findings for gender identity were mixed. Boys reported that they wanted to be the ones to propose more than girls did. This finding extends the literature describing cultural pressures on boys, prescribed by BS, for them to take a more dominant role in relationships (Rudman \& Glick, 2021). Boys may be aware of pressures to be proactive at the engagement stage. This finding is consistent with research on children's media that shows active boys and passive girls (Spinner et al., 2022).

In contrast, however, girls were more likely to endorse wedding traditions than boys. This difference may reflect the greater socialization received by girls from an early age, in which they become well acquainted with bridal culture in media (Ingraham, 2009). Boys do not typically receive such

Table 2 Study 1 Participants' Responses to the Belief Questions

| Code Type | Questions |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Whose surname should they have? |  | What about if they have children? (whose surname should they have?) |  | If you were to get marriedwhat would you want your proposal to be like? |  | If you were to get married-what would you want your wedding to be like? |  |
| Traditional | Man's | 35.4\% | Father's | 39.6\% | Traditional | 20.8\% | Gendered | 14.6\% |
|  |  |  |  |  | Man proposes | 22.2\% |  |  |
| Non-traditional | Keep their own | 17.4\% | Same as parents | 26.4\% | Either proposes | 10.4\% | Other | 84.7\% |
|  | Either name, doesn't matter, it's their choice | 60.4\% | Either name, doesn't matter, parent's choice | 29.2\% | Positive | 42.4\% |  |  |
|  | Double-barrel surname | 10.4\% | Double-barrel surname | 25.7\% | Location | 25.0\% |  |  |
|  | Other | 2.1\% | Other | 10.4\% | Private | 17.4\% |  |  |
|  |  |  |  |  | Other | 21.5\% |  |  |

Note. $n=8(5.6 \%)$ responses were missing for whose surname should the couple have and $n=1(0.7 \%)$ response was missing for what about if they have children (whose surname should the children have) and what would you like your wedding to be like respectively. Each response was treated as binary; mentioned or not mentioned. Percentages here referred to the portion of participants who mentioned each response. Participants sometimes gave multiple different responses, so percentages do not total $100 \%$.
socialization. The novel addition of asking about wedding day traditions expands on the previous literature on girls’ socialization by suggesting that it leads to not just awareness of these norms but also acceptance of them.

The present study also extended previous research by examining a new age group. Although we replicated findings that BS predicted traditional proposal preferences, we also found that children's surname choice was predicted by HS once it was in the model. At this age, young people's beliefs about surnames seem to be driven more by HS than BS. Children display own-gender preferences and tend to gravitate towards more segregated relationships (Dunham et al., 2016). Combative interactions and hostile relations between genders in childhood and early adolescence is normalised because of a lack of interdependence between the boys and girls (Rudman \& Glick, 2021). As heterosexual adolescents begin to engage romantically with the other gender, there may be greater interdependence and interaction between the genders.

Nonetheless, in contrast to older ages (Robnett \& Leaper, 2013), our sample was more likely to support non-traditional than traditional practices. This finding suggests that young people may be less supportive of heterosexist norms than previous generations or that there is an age-related change. Given that this finding contrasts with previous literature, it requires replication before accepting that there is a difference between adults and adolescents. Because we did not have large numbers of young people in some age groups, we did not explore whether there was an age-related effect, which is a limitation of Study 1. Future research should examine agerelated changes in support of non-traditional practices.

## Study 2

In Study 1, we found that when HS and BS were added together to models, HS alone predicted surname decisions. We suspect that part of the reason may be that BS becomes more central once young people reach dating age (de Lemus et al., 2010). To test whether BS is indeed influential in older adolescents' decisions, we focused on a narrow age range of 16 - to 18 -year-olds' views of heterosexual marriage traditions in Study 2. While adolescents may start dating before this age, they are most likely to have had a recent romantic relationship from 16 to 18 years old (Carver et al., 2003). Moreover, there are positive associations between BS levels and involvement in romantic relationships in older adolescents (de Lemus et al., 2010; Viejo et al., 2015). These findings suggest that BS plays a role in older adolescents' evaluation of marriage preferences and beliefs around traditions (Ramiro-Sánchez et al., 2018).

Based on ambivalent sexism theory and in line with findings from Robnett and Leaper (2013), we made predictions about beliefs and preferences for traditional marriages. For beliefs, we expected that having the man's surname and believing children should have the father's surname would be predicted by greater benevolent sexism and being a boy (H1a). For preferences, we predicted that wanting a traditional proposal initiated by a man and supporting gendered traditions as part of a wedding day would be predicted by greater BS and being a boy (H1b). Again, traditionality of responses relative to chance were reported, and HS was included in exploratory analyses.
Table 3 Logistic Regression Analyses for Adolescents' Endorsement of Surname, Proposal, and Wedding Traditions (Study 1)

| Variables | Belief Questions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A couple should take a man's surname ${ }^{\text {a }}$ |  |  |  |  |  |  | A child should have the father's surname ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |
|  | B | SE | Wald | $d f$ | $p$ | $\operatorname{Exp}(\mathrm{B})$ | 95\% CI for Exp <br> (B) |  | B | SE | Wald | $d f$ | $p$ | $\operatorname{Exp}(\mathrm{B})$ | 95\% CI for $\operatorname{Exp}$ (B) |  |
|  |  |  |  |  |  |  | Lower | Upper |  |  |  |  |  |  | Lower | Upper |
| Gender Identity ${ }^{\mathrm{e}}$ | -0.08 | 0.37 | 0.05 | 1 | . 831 | 0.92 | 0.45 | 1.92 | -0.00 | 0.36 | 0.00 | 1 | . 991 | 1.00 | 0.49 | 2.02 |
| BS | 0.54 | 0.33 | 2.66 | 1 | . 103 | 1.72 | 0.90 | 3.31 | 0.77 | 0.32 | 5.70 | 1 | . 017 | 2.15 | 1.15 | 4.04 |
| Constant | -1.94 | 0.92 | 4.50 | 1 | . 034 | 0.14 |  |  | -2.48 | 0.89 | 7.80 | 1 | . 005 | 0.08 |  |  |


|  | Prefer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wanti | 1 pro |  |  |  |  |  |  | Wanti | gender | wedding | aditi |  |  |  |  |
|  | B | SE | Wald | $d f$ | $p$ | Exp (B) | $95 \% \mathrm{Cl}$ <br> (B) | or Exp | B | SE | Wald | $d f$ | $p$ | Exp (B) | 95\% C | or $\operatorname{Exp}(\mathrm{B})$ |
|  |  |  |  |  |  |  | Lower | Upper |  |  |  |  |  |  | Lower | Upper |
| Genera Identity | -0.14 | 0.38 | 0.13 | 1 | . 720 | 0.87 | 0.41 | 1.85 | -0.04 | 0.37 | 0.01 | 1 | . 915 | 0.96 | 0.47 | 1.98 |
| BS | 0.11 | 0.38 | 0.09 | 1 | . 769 | 1.12 | 0.53 | 2.34 | 0.48 | 0.35 | 1.89 | 1 | . 169 | 1.61 | 0.82 | 3.18 |
| HS | 0.84 | 0.33 | 6.38 | 1 | . 012 | 2.31 | 1.21 | 4.43 | 0.69 | 0.30 | 5.42 | 1 | . 020 | 2.00 | 1.12 | 3.58 |
| Constant | -3.00 | 1.04 | 8.39 | 1 | . 004 | 0.05 |  |  | -3.51 | 1.03 | 11.71 | 1 | <. 001 | 0.03 |  |  |

[^1]Table 4 Exploratory Logistic Regression Analyses for Adolescents' Endorsement of Surname Traditions (Study 1)

| Variables | Belief Questions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A couple should take a man's surname ${ }^{\text {a }}$ |  |  |  |  |  |  |  | A child should have the father's surname ${ }^{\text {b }}$ |  |  |  |  |  |  |  |
|  | $B$ | SE | Wald | $d f$ | $p$ | $\operatorname{Exp}(\mathrm{B})$ | 95\% CI for $\operatorname{Exp}$ <br> (B) |  | $B$ | $S E$ | Wald | $d f$ | $p$ | $\operatorname{Exp}(\mathrm{B})$ | 95\% CI for Exp <br> (B) |  |
|  |  |  |  |  |  |  | Lower | Upper |  |  |  |  |  |  | Lower | Upper |
| Gender Identity ${ }^{\text {c }}$ | -0.14 | 0.38 | 0.13 | 1 | . 720 | 0.87 | 0.41 | 1.85 | -0.04 | 0.37 | 0.01 | 1 |  | . 9150.96 | 0.47 | 1.98 |
| BS | 0.11 | 0.38 | 0.09 | 1 | . 769 | 1.12 | 0.53 | 2.34 | 0.48 | 0.35 | 1.89 | 1 |  | . 1691.61 | 0.82 | 3.18 |
| HS | 0.84 | 0.33 | 6.38 | 1 | . 012 | 2.31 | 1.21 | 4.43 | 0.69 | 0.30 | 5.42 | 1 |  | . 0202.00 | 1.12 | 3.58 |
| Constant | -3.00 | 1.04 | 8.39 | 1 | . 004 | 0.05 |  |  | -3.51 | 1.03 | 11.71 | 1 |  | <. 0010.03 |  |  |

Note. ${ }^{\text {a }} R^{2}=.09$ (Nagelkerke) this model correctly classified $66.2 \%$ of cases in comparison to $62.5 \%$ correctly classified by the constant only model
${ }^{\mathrm{b}} R^{2}=.11$ (Nagelkerke) this model correctly classified $69.2 \%$ of cases in comparison to $60.1 \%$ correctly classified by the constant only model.
${ }^{\mathrm{c}}$ Male was treated as the reference category in the analysis.

## Method

## Transparency and Openness

We report how we determined our sample size, data exclusions and all measures in the study in this section. All data was analysed using IBM SPSS (Version 27). This study was pre-registered on the OSF https://osf.io/c3dwn/?view_only= cb34cba84f054aefbb63ff405d064df7. The data, code and study materials are available following the anonymised link: https://osf. io/vs95k/?view_only=00d53969b77643b6a5f1d6ccd6841e6f.

## Participants

Participants were 142 students from two secondary schools and colleges in the UK. Sample size calculations were the same as in Study 1 (see Study 1 for details) and suggested
a sample of 158 participants with a posited odds-ratio of 1.89. Sensitivity analyses with 142 participants suggested we would have needed an odds-ratio of 1.96 to reach statistical significance. This figure was calculated as an individual odds ratio; the odds ratio for a multivariate model will differ slightly due to shared variance. Participants were aged between 16 and 18 years ( $M=16.87, S D=.61$ ). This included 36 16-year-olds, 88 17-year-olds, and 1818 -yearolds. Fifty-eight were boys ( $40.8 \%$ ) and 84 were girls ( $59.2 \%$ ). Participants identified as White ( $n=109,76.8 \%$ ), Black African ( $n=2,1.4 \%$ ), Indian ( $n=4,2.8 \%$ ), Pakistani ( $n=6,4.2 \%$ ), Chinese ( $n=3,2.1 \%$ ), Middle Eastern ( $n=2$, $1.4 \%$ ), Mixed ( $n=8,5.6 \%$ ), Other ( $n=6,4.2 \%$ ), and two did not disclose this information (1.4\%). Only participants who reported their gender identity, identified as heterosexual and completed the survey fully and accurately were included in analyses. Participants who did not fit these criteria were excluded and so the sample size was lower than planned.

Table 5 Exploratory Logistic Regression Analyses for Adolescents' Endorsement of Proposal and Wedding Traditions (Study 1)

| Variables | Preference Questions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wanting a traditional proposal ${ }^{\text {a }}$ |  |  |  |  |  |  |  | Wanting gendered wedding traditions ${ }^{\text {b }}$ |  |  |  |  |  |  |  |
|  | B | SE | Wald | $d f$ | $p$ | Exp(B) | $\begin{aligned} & 95 \% \text { CI for Exp } \\ & \text { (B) } \end{aligned}$ |  | B | SE | Wald | $d f$ | $p$ | $\operatorname{Exp}(\mathrm{B})$ | $\begin{aligned} & 95 \% \text { CI for } \\ & \text { Exp (B) } \end{aligned}$ |  |
|  |  |  |  |  |  |  | Lower | Upper |  |  |  |  |  |  | Lower | Upper |
| Gender Identity ${ }^{\text {c }}$ | 1.11 | 0.38 | 8.57 | 1 | . 003 | 3.03 | 1.44 | 6.35 | -2.13 | 0.78 | 7.46 | 1 | . 006 | 0.12 | 0.03 | 0.55 |
| BS | 0.84 | 0.37 | 5.27 | 1 | . 022 | 2.32 | 1.13 | 4.77 | 0.08 | 0.51 | 0.02 | 1 | . 882 | 1.08 | 0.40 | 2.94 |
| HS | -0.14 | 0.30 | 0.22 | 1 | . 641 | 0.87 | 0.48 | 1.58 | 0.70 | 0.45 | 2.40 | 1 | . 121 | 2.02 | 0.83 | 4.91 |
| Constant | -3.11 | 1.04 | 9.00 | 1 | . 003 | 0.04 |  |  | -3.35 | 1.44 | 5.39 | 1 | . 020 | 0.04 |  |  |

Note. ${ }^{\text {a }} R^{2}=.15$ (Nagelkerke) this model correctly classified $69.4 \%$ of cases in comparison to $67.4 \%$ correctly classified by the constant only model.
${ }^{\mathrm{b}} R^{2}=.16$ (Nagelkerke) this model correctly classified $85.3 \%$ of cases which matches the constant only model ( $85.3 \%$ ).
${ }^{\mathrm{c}}$ Male was treated as the reference category in the analysis.

## Measures

## Benevolent Sexism and Hostile Sexism

To measure endorsement of BS, participants completed the ambivalent sexism inventory (Glick \& Fiske, 1996). Participants indicated their agreement with 22 items $(a=84)$ on a six-point Likert scale ( $0=$ disagree strongly, $5=$ agree strongly $)$. Eleven items each measured BS (e.g., "Women should be cherished and protected by men") and HS ("Women are too easily offended"). Six items were reverse scored. Mean scores were created for BS $(a=.76)$ and HS $(a=.87)$ sub-scales. Higher mean scores indicated higher levels of BS and HS.

## Heterosexual Marriage Traditions Beliefs and Preferences

Participants in Study 2 answered the same questions as in Study 1. Before typing their answers, participants were instructed that "All the questions refer to marriage between men and women" to clarify that these questions were referring to heterosexual relationships and marriage practices only.

## Procedure

This study received ethical approval from the University of Surrey (FHMS 21-22 082 EGA). Participants completed the study online. Before taking part, participants watched a video introducing the study and the consent procedure before opening the Qualtrics page. After providing informed consent, participants provided demographic information (age, gender identity, ethnic group, country they were staying in, and sexual orientation).

Next, participants completed the ASI and heterosexual marriage traditions beliefs and preferences questions. Task order was counterbalanced. Finally, participants watched a debrief video and were thanked.

## Coding Open-Ended Responses

Participants' responses to the survey questions were coded with a sample of 30 transcripts (21.1\%). Intercoder reliability was achieved on all criterion variables: surname of couple ( $\kappa=.91$ ), surname of children ( $\kappa=.87$ ), proposal ( $\kappa=.93$ ), and wedding $(\kappa=1.00)$. Participants' typed responses were often shorter and clearer than the transcribed answers given in Study 1 possibly because of including older adolescents only, which led to more consistency between coders. Participants' answers were also classified as traditional (scored as 1) and non-traditional (scored as 0 ). See Table 1 for details of coding scheme.

## Results

As in Study 1, we report proportions of traditional and non-traditional answers, one-sample chi-square tests (against chance), and logistic regression analyses for each criterion variable. In all cases, the assumptions of logistic regression were checked and met before conducting analyses. There were no order effects based on whether participants completed the ASI or the openended questions first. Therefore, it is not included in our models.

## Surname Beliefs

Table 6 shows proportions of traditional and non-traditional answers. Table 7 displays logistic regression model statistics. Table 8 shows exploratory analyses.

Table 6 Study 2 Participants' Responses to the Belief Questions

| Code Type | Questions |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Whose surname should they have? |  | What about if they have children? (whose surname should they have?) |  | If you were to get married -what would you want your proposal to be like? |  | If you were to get married-what would you want your wedding to be like? |  |
| Traditional | Man's | $37.3 \%$ | Father's | 43.7\% | Traditional | 11.3\% | Gendered | 9.2\% |
|  |  |  |  |  | Man proposes | $24.6 \%$ |  |  |
| Non-traditional | Keep their own | 9.2\% | Same as parents | 27.5\% | Either proposes | 4.2\% | Other | 90.8\% |
|  | Either name, doesn't matter, it's their choice | 64.1\% | Either name, doesn't matter, parent's choice | 45.1\% | Positive | 62.7\% |  |  |
|  | Double-barrel surname | 4.2\% | Double-barrel surname | 16.9\% | Location | 30.3\% |  |  |
|  | Other | 1.4\% | Other | 4.9\% | Private | 17.6\% |  |  |
|  |  |  |  |  | Other | 14.1\% |  |  |

[^2]Table 7 Logistic Regression Analyses for Adolescents' Endorsement of Surname Traditions (Study 2)

| Variables | Belief Questions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A couple should take a man's surname ${ }^{\text {a }}$ |  |  |  |  |  |  |  | A child should have the father's surname ${ }^{\text {b }}$ |  |  |  |  |  |  |  |
|  | $B$ | SE | Wald | $d f$ | $p$ | $\operatorname{Exp}(\mathrm{B})$ | 95\% CI for $\operatorname{Exp}(\mathrm{B})$ |  | $B$ | $S E$ | Wald | $d f$ | $p$ | $\operatorname{Exp}(\mathrm{B})$ | 95\% CI for Exp (B) |  |
|  |  |  |  |  |  |  | Lower | Upper |  |  |  |  |  |  | Lower | Upper |
| Gender Identity ${ }^{\text {c }}$ | -0.10 | 0.40 | 0.07 | 1 |  | .7980 .90 | 0.41 | 1.99 | -0.43 | 0.37 | 1.38 | 1 |  | . 2400.65 | 0.32 | 1.33 |
| BS | 1.55 | 0.32 | 23.99 | 1 |  | $<.0014 .72$ | 2.54 | 8.78 | 0.86 | 0.25 | 11.88 | 1 |  | $<.0012 .36$ | 1.45 | 3.84 |
| Constant | -3.78 | 0.74 | 26.26 | 1 |  | $<.0010 .02$ |  |  | -1.86 | 0.56 | 10.94 | 1 |  | $<.0010 .16$ |  |  |

Note. ${ }^{\text {a }} R^{2}=.29$ (Nagelkerke) this model correctly classified $73.9 \%$ of cases in comparison to $62.7 \%$ correctly classified by the constant only model.
${ }^{\mathrm{b}} R^{2}=.13$ (Nagelkerke) this model correctly classified $62.0 \%$ which matched the constant only model (56.3\%).
${ }^{\mathrm{c}}$ Male was treated as the reference category in the analysis.

## Whose Surname Should They Have?

Fifty-three participants (37.3\%) gave a traditional answer (i.e., mentioning the man's name being taken) and 89 participants $(62.7 \%)$ gave a non-traditional answer. Fewer participants gave traditional responses than expected by chance, $\chi^{2}(1)=9.13, p=.003$. The logistic regression model was statistically significant, $\chi^{2}(2)=33.88, p<.001$. Inconsistent with predictions, gender identity was not a significant predictor of adolescents' surname choice. However, in line with predictions, BS did predict surname choice. As BS increased so did participants saying a couple should take the man's surname. When HS was added, the model remained statistically significant, $\chi^{2}(3)=37.10, p<.001$. Only BS was a significant predictor of giving a traditional surname choice $(p<.001)$.

## Which Surname Should Their Children Take?

Sixty-two participants (43.7\%) gave a traditional answer (i.e., mentioning the father's name being taken) and 80 participants ( $56.3 \%$ ) gave a non-traditional answer. Participants were as likely to give traditional as a non-traditional answer, $\chi^{2}(1)=2.28, p=.131$. The logistic regression model was statistically significant, $\chi^{2}(2)=14.84, p<.001$. Inconsistent with expectations, gender identity did not predict beliefs about child surnames. However, in line with the hypothesis, BS was a significant predictor. As BS increased so did the likelihood of participants saying a child should be given their father's surname. When HS was added, the model was also statistically significant, $\chi^{2}(3)=24.61, p<.001$. The same pattern was found for BS, but HS and gender identity also predicted child surnames. Increases in HS, likewise, increased the likelihood of giving a traditional answer. However, inconsistent

Table 8 Logistic Regression Analyses for Adolescents' Endorsement of Surname Traditions (Study 2)

|  | Belief Questions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A couple should take a man's surname ${ }^{\text {a }}$ |  |  |  |  |  |  |  | A child should have the father's surname ${ }^{\text {b }}$ |  |  |  |  |  |  |  |
|  | $B$ | $S E$ | Wald | $d f$ | $p$ | $\operatorname{Exp}(\mathrm{B})$ | $\begin{aligned} & 95 \% \text { CI for } \\ & \operatorname{Exp}(B) \end{aligned}$ |  | $B$ | $S E$ | Wald | $d f$ | $p$ | $\operatorname{Exp}(\mathrm{B})$ | 95\% CI for Exp <br> (B) |  |
|  |  |  |  |  |  |  | Lower | Upper |  |  |  |  |  |  | Lower | Upper |
| Gender Identity ${ }^{\text {c }}$ | -0.35 | 0.43 | 0.64 | 1 |  | .4230 .71 | 0.30 | 1.65 | -0.84 | 0.41 | 4.27 | 1 |  | . 0390.43 | 0.19 | 0.96 |
| BS | 1.43 | 0.32 | 20.30 | 1 |  | $<.0014 .18$ | 2.24 | 7.80 | 0.68 | 0.26 | 7.12 | 1 |  | . 0081.98 | 1.20 | 3.28 |
| HS | 0.42 | 0.23 | 3.17 | 1 |  | . 0751.52 | 0.96 | 2.41 | 0.67 | 0.22 | 9.07 | 1 |  | . 0031.95 | 1.26 | 3.01 |
| Constant | -4.24 | 0.80 | 27.87 | 1 |  | <. 0010.01 |  |  | -2.60 | 0.65 | 16.23 | 1 |  | <. 0010.07 |  |  |

Note. ${ }^{\text {a }} R^{2}=.31$ (Nagelkerke) this model correctly classified $76.1 \%$ of cases in comparison to $62.7 \%$ correctly classified by the constant only model.
${ }^{\mathrm{b}} R^{2}=.21$ (Nagelkerke) this model correctly classified $66.2 \%$ of cases in comparison to $56.3 \%$ correctly classified by the constant only model.
${ }^{\mathrm{c}}$ Male was treated as the reference category in the analysis.
with predictions, girls rather than boys were more likely to endorse patronymic naming traditions.

## Proposal and Wedding Preferences

## If You Were to Get Married, What Would You Want Your Proposal to Be Like?

Forty-two participants (29.6\%) gave a traditional answer, and 100 participants ( $70.4 \%$ ) gave a non-traditional answer. Fewer participants gave a traditional response than expected by chance, $\chi^{2}(1)=23.69, p<.001$. The logistic regression model was non-significant, $\chi^{2}(2)=1.14, p=.566$. The model remained non-significant when HS was added, $\chi^{2}(3)=1.41, p=.704$.

## If You Were to Get Married, What Would You Want Your Wedding to Be Like?

Thirteen participants (9.2\%) gave a traditional answer, and 129 participants $(90.8 \%)$ gave a non-traditional answer. Fewer participants gave traditional responses than expected by chance, $\chi^{2}(1)=94.76, p<.001$. The logistic regression model was non-significant, $\chi^{2}(2)=4.73, p=.094$. When HS was added, the model remained non-significant, $\chi^{2}(3)=4.92, p=.178$.

## Discussion

Study 2 examined heterosexual marriage traditions in older adolescents between the ages 16 to 18 years, which is the age when they are most likely beginning serious romantic relationships (Carver et al., 2003). Consistent with Study 1 and our prediction (H1a), BS predicted beliefs that women should take the man's name and patronymic name traditions for children. Unlike Study 1, however, this effect held even after HS was added to the models. Patronymic name traditions were predicted by BS, HS, as well as being a girl. In contrast with our prediction (H1b), BS and gender identity did not predict proposal or wedding preferences.

That BS remained a predictor after HS was added to models suggests that, in this constrained age group, BS may be more influential than HS. As young people enter heterosexual romantic relationships, BS becomes central to their understanding of how relationships should be conducted and what is expected of women and men (de Lemus et al., 2010; Viejo et al., 2015). HS was a significant predictor of patronymic naming traditions for children but not in couples. This distinction might reflect nuances in how BS and HS influence heterosexual relations in distinct ways. In respect of couples' surnames, and specifically a woman changing her name to her husbands, BS might be a more proximal
predictor. BS prescribes women's subordination to men, especially in heterosexual relationships, as positive and necessary for relationship success (Overall \& Hammond, 2018). But when it comes to patronymic surnaming for children, HS which reflects preference for male dominance, may be more proximal. However, these findings are limited by the small sample which reduced predictive power, particularly for HS. Further replication is needed with a larger sample of young adults to investigate the role of HS in endorsement of patronymic surnaming for children.

Unexpectedly, the influence of BS was not found for proposal and wedding preferences. This finding is inconsistent with Study 1 and with Robnett and Leaper (2013). Although there is good evidence to suggest that late adolescence is an important stage for the development of romantic relationships, perhaps proposals and marriage are quite abstract for people as young as 16 to 18 years old. Further research is needed to investigate what might predict preferences for marriage traditions at this age.

In addition, we replicated findings from Study 1 showing that participants provided less traditional responses than chance about whose name to take after marriage, who proposes, and wedding traditions. Participants were at chance levels for patronymic naming traditions, which seems more impervious to change than other traditions (Johnson \& Scheuble, 2002). Nonetheless, the pattern suggests that young people are less traditional, which indicates this age group may be more open to challenging gender norms.

## Study 3

To gain an understanding of how those about to enter marriage think about heterosexual norms, Study 3 focused on people in their 30s. In the UK, the average age to marry for the first time is 31.5 years for women and 33.4 years for men (Office for National Statistics, 2019). By focusing on an age group for whom marriage is a relevant heterosexual milestone, we could better understand how preferences for marriage traditions might be influenced by sexism. Participants answered closed-ended questions about their endorsement of marriage traditions. We used a different method to triangulate the findings. Instead of asking about endorsement of surname, proposal, and wedding traditions, we measured participants' overall endorsement of traditional beliefs about marriage (including surnames and proposals) and their overall preferences for these traditions in the future. Based on previous research linking higher BS and higher endorsement of heterosexual marriage traditions, as well as findings reporting more consistent endorsement of BS in men (Hammond et al., 2018; Robnett \& Leaper, 2013), we expected that higher BS scores and being a man would predict endorsement of
traditional beliefs (H1a) as well as endorsing these traditional preferences for their own future marriages (H1b). HS was included in exploratory analyses for the same reasons as in Studies 1 and 2. In addition, addressing previous assertions about the possible influence of political values (see Robnett \& Leaper, 2013), we controlled for political orientation in the analyses.

## Method

## Transparency and Openness

We report how we determined our sample size, data exclusions and all measures in the study in this section. All data was analysed using IBM SPSS (Version 27). The hypotheses and analysis plan were pre-registered before data analysis on the OSF: https://osf.io/qwvfk/?view_only=54c37b7888 314 dfdb 455 e 4 c 27 a 2478 e 5 . The data, code and study materials are available following the anonymised link: https://osf.io/ vs95k/?view_only=00d53969b77643b6a5f1d6ccd6841e6f.

## Participants

Participants were 81 adults living in the UK. We posited a medium effect size $f^{2}$ of .15 . $G^{*}$ Power (version 3.1) calculation with 0.85 power, and an alpha of .05 returned a sample of 86 participants for linear regression. A sensitivity analysis calculation indicates that we reached an effect size of 0.16 and a power of 0.82 . Participants were aged between 30 and 36 years old ( $M=32.26, S D=1.84$ ). There were 44 women ( $54.3 \%$ ) and 37 men (45.7\%). Participants identified as White ( $n=60,74.1 \%$ ), Black Caribbean ( $n=3,3.7 \%$ ), Black African ( $n=6,7.4 \%$ ), Indian ( $n=2,2.5 \%$ ), Pakistani ( $n=3,3.7 \%$ ), Chinese ( $n=2,2.5 \%$ ), Mixed ( $n=2,2.5 \%$ ), Turkish ( $n=1,1.2 \%$ ), Vietnamese ( $n=1,1.2 \%$ ), and one participant preferred not to say (1.2\%). Participants were paid $£ 2.25$ for participation through Prolific. Because of the study aims, only participants who had never been married, were heterosexual, and identified as men or women were recruited, resulting in a lower sample size than calculated.

## Measures

## Ambivalent Sexism

BS and HS were measured using the short form ASI (Rollero et al., 2014). Participants indicated their agreement with 12 items ( $a=86 ; 6$ each for HS and BS) on a six-point Likert scale from disagree strongly (0) to agree strongly (5). A mean score
was created for the BS ( $\alpha=.82$ ) and HS ( $\alpha=.87$ ) sub-scales. Higher mean scores indicated higher levels of BS and HS.

## Heterosexual Marriage Tradition Beliefs and Preferences

Participants answered close-ended questions by completing Likert scales about their beliefs and future preferences for heterosexual marriage traditions around surnames and proposals.

## Beliefs

Participants' beliefs about heterosexual marriage traditions were assessed using three items $(a=.69)$. Items assessed endorsement of beliefs about taking the man's surname (i.e., "Whose surname do you think they should take?"; $1=$ definitely take the man's surname, $5=$ definitely take the woman's surname); children having father's surname (i.e., "If a married couple have children, whose surname do you think they should have?"; $1=$ definitely take father's surname, $5=$ definitely take mother's surname); and proposal (i.e., "To what extent do you believe that the man should propose to the woman?"; $1=$ not at all, $5=$ very much). Depending on participant gender, responses were reverse scored so that higher scores indicated more traditional beliefs (i.e., taking man's name, man proposing), and a mean score was computed.

## Preferences

Participants' preferences for marriage traditions in the future was measured using 3 items ( $a=.69$ ). These items assessed preference for surnames (i.e., If you were to get married, whose surname would you want to take?"; $1=$ definitely take my partner's name, $5=$ definitely want my partner to take my name); child's surname (i.e., "If you were to have children, whose surname would you want them to have?"; $1=$ definitely want my surname, $5=$ definitely want my partner's surname); and proposal (i.e., "If you were to get engaged, who would you want to propose?"; $1=\mathrm{I}$ definitely want to propose, $5=$ definitely want my partner to propose). Depending on participant gender identity, some items were reverse scored before a mean was created. Specifically, for surnames, women's responses were reverse scored, and for child's surname and proposal, men's responses were reverse scored. Higher scores indicated more traditional preferences (i.e., taking man's name, man proposing).

## Procedure

This study received ethical approval from the University of Surrey (Reference Number 1329-PSY-17 Amendment 1). Participants reported their demographic information (e.g., age, gender identity, ethnic group, sexual orientation, relationship status, marital status, occupation, highest level of

Table 9 Adults' Beliefs Toward and Preferences for Heterosexual Marriage Traditions (Study 3)

| Criterion variable | $M$ | $S D$ | $t(80)$ | $p$ | $d$ | $95 \% \mathrm{CI}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| To what extent do you believe a man should propose to the woman? ${ }^{\mathrm{a}}$ | 3.36 | 1.19 | 2.51 | .015 | 0.30 | $[0.06,0.54]$ |
| Whose surname do you think they should take? | 3.40 | 0.68 | 5.20 | $<.001$ | 0.58 | $[0.34,0.81]$ |
| If a married couple have children, whose surname do you think they | 3.57 | 0.89 | 5.72 | $<.001$ | 0.64 | $[0.39,0.87]$ |
| $\quad$ should have? |  |  |  |  |  |  |
| Overall Traditional Beliefs ${ }^{\mathrm{b}}$ | 3.43 | 0.72 | 5.39 | $<.001$ | 0.60 | $[0.36,0.83]$ |
| Who would you want to propose? | 3.99 | 1.08 | 8.24 | $<.001$ | 0.92 | $[0.65,1.17]$ |
| Whose surname would you take? | 3.33 | 0.96 | 3.12 | .003 | 0.35 | $[0.12,0.57]$ |
| Whose surname would you want your children to have? | 3.53 | 1.08 | 4.40 | $<.001$ | 0.49 | $[0.26,0.72]$ |
| Overall Traditional Preferences | 3.62 | 0.82 | 6.77 | $<.001$ | 0.75 | $[0.50,1.00]$ |

Note. Higher scores indicate more traditional beliefs and more traditional preferences.
${ }^{\text {a }}$ Eleven participants did not answer the question "To what extent do you think a man should propose to a woman?" and were excluded from this analysis. Degrees of freedom were 69.
${ }^{\mathrm{b}}$ For the participants with missing data Overall Traditional Beliefs scale was an average two items (i.e., "Whose surname do you think they should take?"; "If a married couple have children, whose surname do you think they should have?").
education completed, political orientation), and then completed the ASI and criterion measures in a randomised order.

## Results

First, we ran one-sample $t$-tests to examine endorsement of traditional marriage beliefs and preferences (relative to midpoint). Next, we ran separate multiple regression analyses for traditional marriage beliefs and preferences (criterion variables). BS and gender identity were predictors. Political orientation was controlled for in the analyses. HS was added as an exploratory predictor in two additional regression models. Before conducting analyses, we checked that assumptions were met.

## Marriage Tradition Beliefs

Table 9 shows that participants' mean scores for marriage beliefs were above the midpoint and were traditional in absolute terms. Multiple regression analyses showed that the model was significant, $F(3,77)=13.62, p<.001$, $R^{2}=.35$. Table 10 shows that consistent with H1a, BS was the only significant predictor of traditional marriage beliefs.

Likewise, when HS was added to the model, BS remained the only significant predictor of traditional marriage beliefs, $F(4,76)=10.09, p<.001, R^{2}=.35$. Inconsistent with H1a, gender identity was unrelated to traditional marriage beliefs. Similarly, political orientation was not associated with beliefs. See Table 11 for exploratory analyses with HS.

## Marriage Tradition Preferences

Table 9 shows participants' marriage preferences were traditional in absolute terms (i.e., above mid-point). Multiple regression analyses showed that our predicted model was not statistically significant, $F(3,77)=1.06, p=.370, R^{2}=.04$. When HS was added to the model, it remained statistically non-significant, $F(4,76)=1.89, p=.120, R^{2}=.09$.

## Discussion

Study 3 examined the influence of gender identity, BS, and HS on traditional marriage beliefs and preference among participants who are most likely to be considering marriage i.e., 30-year-olds (Office for National Statistics, 2019). BS predicted holding traditional beliefs about upholding proposal and surname traditions. However, unlike Studies 1 and

Table 10 Multiple Regression Analyses Assessing Predictors of Traditional Beliefs (Study 3)

| Variables | $B$ | $95 \%$ CI for $B$ |  | $S E B$ | $\beta$ | $s r^{2}$ |
| :--- | :--- | :---: | :--- | :--- | :--- | :--- |
|  |  | Lower | Upper |  |  |  |
| Constant | 2.16 | 1.62 | 2.70 | 0.27 |  |  |
| Gender Identity | 0.21 | -0.07 | 0.49 | 0.14 | 0.15 | .02 |
| Benevolent Sexism | $0.32^{*}$ | 0.21 | 0.44 | 0.06 | $0.51^{*}$ | .25 |
| Political Orientation | 0.09 | -0.03 | 0.21 | 0.06 | 0.14 | .02 |

Note. ${ }^{*} p<.001$.

Table 11 Exploratory Multiple Regression Analyses Assessing Predictors of Traditional Beliefs (Study 3)

| Variables | $B$ | $95 \%$ CI for $B$ |  | SE B | $\beta$ | $s r^{2}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Lower | Upper |  |  |  |
| Constant | 2.17 | 1.62 | 2.73 | 0.28 |  |  |
| Gender Identity | 0.20 | -.0 .09 | 0.50 | 0.15 | 0.14 | .02 |
| Benevolent Sexism | $0.32^{*}$ | 0.19 | 0.45 | 0.06 | $0.50^{*}$ | .22 |
| Hostile Sexism | 0.01 | -0.13 | 0.15 | 0.07 | 0.02 | .00 |
| Political Orientation | 0.08 | -0.05 | 0.21 | 0.07 | 0.13 | .01 |

Note. ${ }^{*} p<.001$.

2, neither HS nor gender identity were associated with levels of traditional beliefs. Inconsistent with predictions but in line with Study 2, there were no significant predictors of holding traditional preferences for participants' own marriages in the future.

That BS predicted traditional beliefs in this age group highlights BS as a consistent influence from late adolescence to adulthood. This finding provides support for and expands on Robnett and Leaper's (2013) link between BS and the endorsement of heterosexual marriage traditions, by showing that BS also serves to impact how adults judge others' marriage related preferences. That HS was not a predictor in either of the exploratory analyses in this age group suggests that BS may be a more proximal influence than HS. Generally, HS tends to be lower in this age group - following a U-shaped trajectory over the life course (Hammond et al., 2018).

Nevertheless, this age group scored above the midpoint in endorsement of traditional beliefs and preferences. This is consistent with similar work examining undergraduate students' traditional beliefs and preferences (Robnett \& Leaper, 2013). This finding suggests that when people are at typical marriages age, they may be more traditional than at earlier stages of life.

## General Discussion

The present studies examined people's beliefs and preferences for heterosexual marriage traditions by incorporating different methods (open-ended interviews and closed-ended questionnaires). We extended the previous investigations by incorporating patronymic naming traditions and wedding preferences. In addition, we included adolescent samples and an adult sample to explore the views of those at the start of their dating lives as well as those who are more likely to be considering marriage. Different ambivalent sexist ideologies predicted beliefs about naming traditions. Some gender differences were found in the adolescent samples, but not the adult sample. Below, we interpret these findings in relation to BS and HS.

## The Influence of BS and HS Ideologies

Across studies, BS and HS functioned differently as predictors. Specifically, in early to middle adolescents (aged 11 to 18 years), HS predicted beliefs that women should have men's surnames after marriage. With a restricted age group of older adolescents (aged 16 to 18 years) and in an adult sample (mid-30s), BS predicted beliefs that women should have men's surnames. These patterns are consistent with research on undergraduate students, where BS also predicted these prescriptions (Robnett \& Leaper, 2013). For men, BS increases from late adolescence into adulthood, whereas for women it tends to follow a U-shaped trajectory with a decrease after late adolescence with a later increase (Hammond et al., 2018). Nevertheless, our study suggests that BS seems to function similarly for women and men, and for undergraduate students as for adults in their 30s.

Our studies further extended research pertaining to naming beliefs by examining patronymic naming traditions. Although BS predicted patronymic naming traditions in the younger adolescent sample in Study 1, only HS remained a predictor when entered into the models. In Study 2, with older adolescents, both BS and HS predicted naming traditions, whereas in the adult sample (Study 3), only BS was a predictor. Across these samples, our findings indicate that HS is replaced by BS as a predictor of traditional beliefs about naming traditions, for women's and children's surnames.

It is possible that HS being a stronger influence than BS over beliefs about surnaming practices at younger ages may be representative of high levels of HS in adolescence (Hammond et al., 2018) due to segregated relationships. The waning of HS as a predictor may be the result of increased interaction between the genders later in life. Children display own-gender preferences and tend to gravitate towards more segregated relationships (Dunham et al., 2016). However, as heterosexual adolescents begin to engage romantically with the other gender, there may be greater interdependence and interaction between the genders, which may lead to BS having a greater influence on beliefs (de Lemus et al., 2010; Glick \& Hilt, 2000; Rudman \& Glick, 2021).

The greater influence of BS as people grow older reflects the core purpose of BS: To temper men's HS and allow them to fulfil heterosexual intimacy needs with women, including emotional, relational, and sexual needs. Our findings point to the fundamental nature of BS and HS as working together to maintain existing gendered traditions in beliefs, and preferences. Perhaps adolescents who endorsed surname traditions were involved in more segregated relationships and so the influence of BS was limited. In addition, adolescents' sexist attitudes have been linked to a variety of other social characteristics such as parent's beliefs and education (Mastari et al., 2019). Future research could explore a wider variety of social characteristics to see how they relate to endorsement of marriage traditions and in turn, sexist attitudes.

Although seemingly harmless and endorsed by many, these gendered traditions mask hidden power in heterosexual romantic relationships (see Robnett \& Leaper, 2013; Zipp et al., 2004). Greater endorsement of BS leads girls and women to focus on relational goals (including partner's needs) and success in feminine-typed domains (i.e., getting married, being a good mother, etc.), and eschew goals considered selforientated or masculine (del Prado et al., 2007; Hammond \& Overall, 2015; Montañés et al., 2012). Recent research with US girls shows those high in paternalistic attitudes (a subcomponent of BS) have higher family hopes, lower aspirations for masculine-stereotyped careers (e.g., in STEM), and greater desire for aesthetic orientated careers (e.g., fashion model; Farkas \& Leaper, 2016). Endorsement of traditional gendered beliefs may predict a suite of actions within relationships that hide power while preventing gender equality.

## Traditionality of Beliefs

Another difference between studies was the degree to which participants endorsed heterosexual marriage traditions. The youngest sample of 11- to 18-year-olds were below chance in endorsing traditional beliefs and preferences. Likewise, the restricted sample of older adolescents were below chance in endorsing naming traditions after marriage and preferences, but they were at chance in following patronymic naming traditions. In contrast, the adults were above the midpoint in endorsement for all marriage traditions, and this is consistent with previous research among undergraduate students (Robnett \& Leaper, 2013). Moreover, children's gender stereotypes are more similar to parents' stereotypes in children over 18 years than in 6-to 17 -year-olds (Tenenbaum \& Leaper, 2002). This pivot toward traditionality and their parents' views may explain why women do not propose (Baker \& Elizabeth, 2013) and continue to change their names after marriage (Savage, 2020).

## Gender Differences

Finally, gender effects were mixed across the samples. In the youngest age group of adolescents (Study 1), boys were more
likely than girls to want a traditional proposal, whereas girls were more likely than boys to mention traditional aspects of weddings. These differences may stem from BS prescriptions in which boys are active heroes (Hammond \& Cimpian, 2021) and girls are passive princesses (Casad et al., 2015). Girls and boys may have focused on different aspects of proposals and weddings. Given that these effects were not replicated across studies, further investigation with young adolescents is needed. If the gender effect remains, we need to probe why girls and boys endorse different marriage traditions. Results where sexism and gender together predicted endorsement of marriage traditions suggest that sexism levels could be a potential mediator of gender differences. Future research should explore the direction of this relationship.

## Limitations and Future Research Discussions

One limitation of the current investigation is that these studies are cross-sectional in design. Therefore, we cannot ascertain whether our findings reflect a cohort or a developmental effect. Moreover, we were slightly underpowered in our studies because of having to exclude participants. Although sensitivity analyses suggested that we were adequately powered to find effects, we may have uncovered additional small effects with larger samples. Future research should try to disentangle these effects using longitudinal designs with large samples.

Additionally, a limitation of Studies 1 and 2 was that we did not examine beliefs and preferences for all naming, proposal, and wedding traditions. Results showed less traditionalism in adolescents' proposal and wedding preferences than in their beliefs about surname traditions. However, this pattern might not hold when adolescents are asked about their preferences and beliefs for all traditions. Future research should explore how beliefs and preferences differ for these traditions and are related to each other.

Although the mixed-methods approach is a strength in some respects, the open-ended questions used in Study 1 and 2 might account for part of the reason that the nontraditional responses were greater than traditional responses. In open-ended responses, participants may have focused their answers on things that come to mind first such as location or presence of family. For this reason, non-traditional factors may have been described more frequently even if adolescents also pictured traditional wedding practices. As a result, participants responses may appear more non-traditional using open-ended rather than closed-ended measures. To explore age and generational differences in the endorsement of marriage traditions across age groups, future research should use closed-ended and open-ended questions with a variety of age groups to compare whether the method influences responses.

Moreover, the inclusion criteria utilised and lack of diversity within each of the samples makes generalisability of our findings uncertain. For example, because we excluded non-binary and sexual minority participants, we cannot ascertain the extent to which the link between BS and endorsement of traditional beliefs reflects the attitudes of these communities. Most participants were White, so our present studies are not well positioned to account for the role of ethnic-racial or cultural variation in attitudes towards gendered marriage traditions. Moreover, there may be pertinent ethnic-racial differences in endorsement of BS (Davis et al., 2022) that could impact our findings. That being said, the ethnicity of our sample generally reflects the population of England and Wales (i.e., $86 \%$ of the population identify as White; Office for National Statistics, 2018). Future research should include a wider population to explore the role of different sociodemographic backgrounds on views towards heteronormative marriage traditions.

Finally, a limitation that we need to consider is that heterosexual marriage rates are on the decline. Indeed, in the UK, rates decreased by $6.5 \%$ to from 2018 to 2019 with 213,122 other-gender registered marriages in the UK (Office for National Statistics, 2022). About $22 \%$ of couples who lived together were cohabiting rather than being married, but these couples may marry in the future (UK Parliament, 2022). Comparisons with the US suggest that the decline in the UK is steeper than in the US from 2018 to 2019. In comparison, in the US, the marriage rate increased from 2020 to 2021 (Center for Disease Control, 2023). Future research needs to examine why this heterosexual tradition is on the decline in the UK. Cross-cultural work conducted between the US and the UK might help us understand how cultural values influence these decisions. Nonetheless, given the numbers of marriages in the UK and the US and the number of couples who follow traditional naming practices (Savage, 2020), why sexist practices persist for so many needs to be understood.

## Practice Implications

The present findings suggest that heterosexual marriage traditions mask unequal power in gender relations. Across a varied age range, both BS and HS were related to endorsement of these traditions. These associations indicate the problematic nature of marriage traditions in maintaining the gender status quo. Future work is needed to demystify these associations. Studies have shown that acceptance of BS ideals is decreased once people are aware and educated about the negative consequences of BS (Becker \& Swim, 2011; de Lemus et al., 2014). Educating adolescents and adults about how BS is
linked to heterosexual relationship traditions, which may impact power imbalances in relationships, could encourage transformative conversations between partners and among peers.

The low levels of traditionalism in adolescents' responses suggest that the next generation may be faced with the consequences of breaking traditions. Robnett et al. (2016) indicate that this could provoke family conflict if family and friends are strong endorsers of tradition. Indeed, men have proposed before announcing their engagement when their partners had proposed previously (Baker \& Elizabeth, 2013). Women have reported taking their partner's surname to legitimise their relationship (Schweingruber et al., 2004). These actions suggest that couples are both aware of the norms, and the threat of social scrutiny, should they choose not to conform to them. Exploring the consequences of breaking traditions need to be further studied to help couples make choices without negative consequences.

## Conclusion

In conclusion, findings across three studies fill a gap in the literature by examining the role of ambivalent sexism and gender identity in the views of those who are at the start of their dating lives as well as those close to marital age, both key developmental milestones in heterosexual relationships. Our findings suggest that HS and BS may impact surname beliefs differently based on age or cohort (e.g., see Glick \& Hilt, 2000). Future research may explore the role of relationship status in the endorsement of heterosexual marriage preferences, as well as expand on the research linking sexism to views of couple's surname decisions and related power dynamics.

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Data, Materials, and Code Availability For each of the three studies included in this paper, the data, code and study materials are available on the Open Science Framework using the following anonymised
links: https://osf.io/vs95k/?view_only=00d53969b77643b6a5f1d6ccd 6841e6f.

The hypotheses and analysis plans for each study were pre-registered on the OSF:

Study 1 https://osf.io/fumdn/?view_only=5fdac7f180c544e9aa1b fa07a2f56ce1.

Study 2 https://osf.io/c3dwn/?view_only=cb34cba84f054aefbb63 ff405d064df7.

Study 3 https://osf.io/qwvfk/?view_only=7dca0c9f96094da19447 f0db43d16047.

## Compliance with Ethical Standards

Ethics Approval and Consent All studies received ethical approval. Please see main manuscript for details. For all participants under the age of 16 , parental informed consent was obtained, and participants gave assent after a description of the study was given. All participants over the age of 16 read an information sheet about the study and gave informed consent to take part in the study.

Competing Interests The authors have no competing interests to report with regard to the content of this article.

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## References

Baker, M., \& Elizabeth, V. (2013). 'Did you just ask me to marry you?': The gendered nature of heterosexual relationship progressions. Women's Studies Journal, 27(2), 32. https://www.wsanz.org.nz/ journal/docs/WSJNZ272BakerElizabeth32-43.pdf
Bakeman, R., \& Gottman, J. M. (1997). Observing interaction: An introduction to sequential analysis (2nd ed.). Cambridge University Press. https://doi.org/10.1017/cbo9780511527685
Becker, J. C., \& Swim, J. K. (2011). Seeing the unseen: Attention to daily encounters with sexism as way to reduce sexist beliefs. Psychology of Women Quarterly, 35(2), 227-242. https://doi.org/ 10.1177/0361684310397509

Boxer, D., \& Gritsenko, E. (2005). Women and surnames across cultures: Reconstituting identity in marriage*: WL. Women and Language, 28(2), 1-11. https://www.proquest.com/scholarly-journals/women-surnames-across-cultures-reconstituting/docview/198881480/se-2
Carver, K., Joyner, K., \& Udry, J. R. (2003). National estimates of adolescent romantic relationships. In P. Florsheim (Ed.), Adolescent romantic relations and sexual behavior (pp. 37-70). Psychology Press. https://doi.org/10.4324/9781410607782
Casad, B. J., Salazar, M. M., \& Macina, V. (2015). The real versus the ideal: Predicting relationship satisfaction and well-being from endorsement of marriage myths and benevolent sexism.

Psychology of Women Quarterly, 39(1), 119-129. https://doi.org/ 10.1177/0361684314528304

Center for Disease Control. (2023). Retrieved on April 5, 2023 from-https://www.cdc.gov/nchs/data/dvs/marriage-divorce/national-marriage-divorce-rates-00-21.pdf
Cross, E. J., \& Overall, N. C. (2019). Women experience more serious relationship problems when male partners endorse hostile sexism. European Journal of Social Psychology, 49(5), 1022-1041. https://doi.org/10.1002/ejsp. 2560
Davis, T. M., Settles, I. H., \& Jones, M. K. (2022). Standpoints and situatedness: Examining the perception of benevolent sexism in black and white undergraduate women and men. Psychology of Women Quarterly, 46(1), 8-26. https://doi.org/10.1177/03616843211043108
de Lemus, S., Moya, M., \& Glick, P. (2010). When contact correlates with prejudice: Adolescents' romantic relationship experience predicts greater benevolent sexism in boys and hostile sexism in girls. Sex Roles, 63, 214-225. https://doi.org/10.1007/ s11199-010-9786-2
de Lemus, S., Navarro, L., Velásquez, M. J., Ryan, E., \& Megías, J. L. (2014). From sex to gender: A university intervention to reduce sexism in Argentina, Spain, and El Salvador. Journal of Social Issues, 70(4), 741-762. https://doi.org/10.1111/josi. 12089
del Prado Silván-Ferrero, M. D. P., \& Bustillos López, A. (2007). Benevolent Sexism toward men and women: Justification of the traditional system and conventional gender roles in Spain. Sex Roles, 57(7), 607-614. https://doi.org/10.1007/s11199-007-9271-8
Dunham, Y., Baron, A. S., \& Banaji, M. R. (2016). The development of implicit gender attitudes. Developmental Science, 19(5), 781-789. https://doi.org/10.1111/desc. 12321
Ellingsæter, A. L. (2022). Resisting or maintaining gender inequality? Wedding traditions among Norwegian millennials. Acta Sociologica., 66(1), 44-58. https://doi.org/10.1177/00016993221074826
Fairchild, E. (2014). Examining wedding rituals through a multidimensional gender lens: The analytic importance of attending to (in) consistency. Journal of Contemporary Ethnography, 43(3), 361-389. https://doi.org/10.1177/0891241613497750
Farkas, T., \& Leaper, C. (2016). Chivalry's double-edged sword: How girls' and boys' paternalistic attitudes relate to their possible family and work selves. Sex Roles, 74(5), 220-230. https://doi.org/10. 1007/s11199-015-0556-z
Faul, F., Erdfelder, E., Buchner, A., \& Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. Behavior Research Methods, 41(4), 11491160. https://doi.org/10.3758/BRM.41.4.1149

Ferragut, M., Blanca, M. J., Ortiz-Tallo, M., \& Bendayan, R. (2017). Sexist attitudes and beliefs during adolescence: A longitudinal study of gender differences. European Journal of Developmental Psychology, 14(1), 32-43. https://doi.org/10.1080/17405629. 2016.1144508

Fetters, A. (2019, July 29). 'He said yes'. The Atlantic. https://www. theatlantic.com/family/archive/2019/07/women-proposing-tomen/594214/
Fleiss, J. L. (1981). Statistical methods for rates and proportions (2 ${ }^{\text {nd }}$ ed.). John Wiley.
Forbes, G. B., Adams-Curtis, L. E., White, K. B., \& Hamm, N. R. (2002). Perceptions of married women and married men with hyphenated surnames. Sex Roles, 46(5-6), 167-175. https://doi. org/10.1023/A:1019613819247
Froschauer, U., \& Durrheim, K. (2019). "It's the bride's day": The paradox of women's emancipation. Feminism \& Psychology, 29(1), 58-75. https://doi.org/10.1177/0959353518803975
Glick, P., \& Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. Journal of Personality and Social Psychology, 70(3), 491-512. https://doi.org/10.1037/ 0022-3514.70.3.491

Glick, P., \& Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. American Psychologist, 56(2), 109-118. https://doi. org/10.1037/0003-066X.56.2.109
Glick, P., Fiske, S. T., Mladinic, A., Saiz, J. L., Abrams, D., Masser, B., ... \& López, W. L. (2000). Beyond prejudice as simple antipathy: Hostile and benevolent sexism across cultures. Journal of Personality and Social Psychology, 79(5), 763. https://doi.org/10.1037/ 0022-3514.79.5.763
Glick, P., \& Hilt, L. (2000). From combative children to ambivalent adults: The development of gender prejudice. In T. Eckes \& H. M. Trautner (Eds.). The Developmental Social Psychology of Gender, 243-272. Psychology Press. https://doi.org/10.4324/97814 10605245
Gul, P., \& Kupfer, T. R. (2019). Benevolent sexism and mate preferences: Why do women prefer benevolent men despite recognizing that they can be undermining? Personality and Social Psychology Bulletin, 45(1), 146-161. https://doi.org/10.1177/0146167218781000
Hamilton, L., Geist, C., \& Powell, B. (2011). Marital name change as a window into gender attitudes. Gender \& Society, 25(2), 145-175. https://doi.org/10.1177/0891243211398653
Hammond, M. D., \& Cimpian, A. (2021). "Wonderful but weak": Children's ambivalent attitudes toward women. Sex Roles, 84(1-2), 76-90. https://doi.org/10.1007/s11199-020-01150-0
Hammond, M. D., Milojev, P., Huang, Y., \& Sibley, C. G. (2018). Benevolent sexism and hostile sexism across the ages. Social Psychological and Personality Science, 9(7), 863-874. https://doi.org/ 10.1177/1948550617727588

Hammond, M. D., \& Overall, N. C. (2015). Benevolent sexism and support of romantic partner's goals: Undermining women's competence while fulfilling men's intimacy needs. Personality and Social Psychology Bulletin, 41(9), 1180-1194. https://doi.org/10. 1177/0146167215593492
Hammond, M. D., \& Overall, N. C. (2017). Dynamics within intimate relationships and the causes, consequences, and functions of sexist attitudes. Current Directions in Psychological Science, 26(2), 120-125. https://doi.org/10.1177/0963721416686213
Hopkins-Doyle, A., Sutton, R. M., Douglas, K. M., \& Calogero, R. M. (2019). Flattering to deceive: Why people misunderstand benevolent sexism. Journal of Personality and Social Psychology, 116(2), 167-192. https://doi.org/10.1037/pspa0000135
Ingraham, C. (2009). White weddings: Romancing heterosexuality in popular culture. Routledge. https://doi.org/10.4324/9780203931028
Jaffe, S. (2018). The collective power of \#metoo. Dissent, 65(2), 80-87. https://doi.org/10.1353/dss.2018.0031
Johnson, D. R., \& Scheuble, L. K. (2002). What should we call our kids? Choosing children's surnames when parents' last names differ. The Social Science Journal, 39(3), 419-429. https://doi.org/ 10.1016/S0362-3319(02)00203-3

Kelley, K. (2023). The effect of marital surname choices on heterosexual women's and men's perceived quality as romantic partners. Socius, 9, 1-14. https://doi.org/10.1177/2378023122114853
Leaper, C., \& Robnett, R. D. (2018). Sexism. In R. J. R. Levesque (Ed.), Encyclopedia of adolescence (2nd ed., pp. 3502-3511). Springer. https://doi.org/10.1007/978-1-4419-1695-2
Lee, T. L., Fiske, S. T., Glick, P., \& Chen, Z. (2010). Ambivalent sexism in close relationships: (Hostile) power and (benevolent) romance shape relationship ideals. Sex Roles, 62(7), 583-601. https://doi.org/10.1007/s11199-010-9770-x
Liben, L. S., Bigler, R. S., \& Krogh, H. R. (2001). Pink and blue collar jobs: Children's judgments of job status and job aspirations in relation to sex of worker. Journal of Experimental Child Psychology, 79(4), 346-363. https://doi.org/10.1006/jecp.2000.2611
Martinez-Pecino, R., \& Durán, M. (2019). I love you but I cyberbully you: The role of hostile sexism. Journal of Interpersonal Violence, 34(4), 812-825. https://doi.org/10.1177/0886260516645817

Mastari, L., Spruyt, B., \& Siongers, J. (2019). Benevolent and hostile sexism in social spheres: The impact of parents, school and romance on Belgian adolescents' sexist attitudes. Frontiers in Sociology, 4(47), 1-14. https://doi.org/10.3389/fsoc.2019.00047
Mehta, C. M., Arnett, J. J., Palmer, C. G., \& Nelson, L. J. (2020). Established adulthood: A new conception of ages 30 to 45 . American Psychologist, 75(4), 431. https://doi.org/10.1037/amp0000600
Montañés, P., De Lemus, S., Bohner, G., Megías, J. L., Moya, M., \& Garcia-Retamero, R. (2012). Intergenerational transmission of benevolent sexism from mothers to daughters and its relation to daughters' academic performance and goals. Sex Roles, 66, 468-478. https://doi.org/10.1007/s11199-011-0116-0
Montañés, P., De Lemus, S., Moya, M., Bohner, G., \& Megías, J. L. (2013). How attractive are sexist intimates to adolescents? The influence of sexist beliefs and relationship experience. Psychology of Women Quarterly, 37(4), 494-506. https://doi.org/10.1177/ 0361684313475998
Nugent, C. (2010). Children's surnames, moral dilemmas: Accounting for the predominance of fathers' surnames for children. Gender \& Society, 24(4), 499-525. https://doi.org/10.1177/0891243210376380
Office for National Statistics. (2018). Population of England and Wales. https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by-ethnicity/national-and-regional-populations/population-of-england-and-wales/latest
Office for National Statistics. (2019). Marriages in England and Wales: 2016. https://www.ons.gov.uk/peoplepopulationandcommunity/ birthsdeathsandmarriages/marriagecohabitationandcivilpartner ships/bulletins/marriagesinenglandandwalesprovisional/2016
Office for National Statistics. (2022). Marriage in England and Wales: 2019. https://www.ons.gov.uk/peoplepopulationandcommunity/ birthsdeathsandmarriages/marriagecohabitationandcivilpartner ships/bulletins/marriagesinenglandandwalesprovisional/2019
Otnes, C. C., \& Pleck, E. (2003). Cinderella dreams: The allure of the lavish wedding. University of California Press.
Overall, N. C., \& Hammond, M. D. (2018). How intimate relationships contribute to gender inequality: Sexist attitudes encourage women to trade off career success for relationship security. Policy Insights from the Behavioral and Brain Sciences, 5(1), 40-48. https://doi. org/10.1177/2372732217745096
Paynter, A., \& Leaper, C. (2016). Heterosexual dating double standards in undergraduate women and men. Sex Roles, 75(7-8), 393-406. https://doi.org/10.1007/s11199-016-0628-8
Peters, E. (2018). The influence of choice feminism on women's and men's attitudes towards name changing at marriage: an analysis of online comments on UK social media. Names, 66(3), 176-185. https://doi.org/10.1080/00277738.2017.1415540
Ramiro-Sánchez, T., Ramiro, M. T., Bermúdez, M. P., \& Buela-Casal, G. (2018). Sexism in adolescent relationships: A systematic review. Psychosocial Intervention, 27(3), 123-132. https://doi. org/10.5093/pi2018a19
Robnett, R. D., Daniels, E. A., \& Leaper, C. (2018a). Growing up gendered: Feminist perspectives on development. In C. B. Travis, \& J. W. White (Eds.), APA handbook of the psychology of women: History, theory, and battlegrounds (pp. 437-454). American Psychology Association. https://doi.org/10.1037/ 0000059-022
Robnett, R. D., \& Leaper, C. (2013). "Girls don't propose! Ew.": A mixedmethods examination of marriage tradition preferences and benevolent sexism in emerging adults. Journal of Adolescent Research, 28(1), 96-121. https://doi.org/10.1177/0743558412447871
Robnett, R. D., Underwood, C. R., Nelson, P. A., \& Anderson, K. J. (2016). "She might be afraid of commitment": Perceptions of women who retain their surname after marriage. Sex Roles, 75(9-10), 500-513. https://doi.org/10.1007/ s11199-016-0634-x

Robnett, R. D., Wertheimer, M., \& Tenenbaum, H. R. (2018b). Does a woman's marital surname choice influence perceptions of her husband? An analysis focusing on gender-typed traits and relationship power dynamics. Sex Roles, 79(1-2), 59-71. https://doi.org/ 10.1007/s11199-017-0856-6

Rollero, C., Glick, P., \& Tartaglia, S. (2014). Psychometric properties of short versions of the Ambivalent Sexism Inventory and Ambivalence Toward Men Inventory. TPM-Testing, Psychometrics, Methodology in Applied Psychology, 21(2), 149-159. https:// doi.org/10.4473/TPM21.2.3
Rudman, L. A., \& Glick, P. (2021). The social psychology of gender: How power and intimacy shape gender relations. The Guilford Press.
Rudman, L. A., \& Heppen, J. B. (2003). Implicit romantic fantasies and women's interest in personal power: A glass slipper effect? Personality and Social Psychology Bulletin, 29(11), 1357-1370. https://doi.org/10.1177/0146167203256906
Sassler, S., \& Miller, A. J. (2011). Waiting to be asked: Gender, power, and relationship progression among cohabiting couples. Journal of Family Issues, 32(4), 482-506. https://doi.org/10.1177/0192513X10391045
Savage, M. (2020). Taking a husband's name emerged from patriarchal history. So why do so many young western couples still follow the tradition. https://www.bbc.com/worklife/article/20200921-why-do-women-still-change-their-names\#:~:text=In\ the\ US\% 2C\%20most\%20women,they\%20still\%20follow\%20the\%20practice
Scheuble, L. K., Johnson, D. R., \& Johnson, K. M. (2012). Marital name changing attitudes and plans of college students: Comparing change over time and across regions. Sex Roles, 66(3-4), 282-292. https://doi.org/10.1007/s11199-011-0089-z
Schweingruber, D., Anahita, S., \& Berns, N. (2004). "Popping the question" when the answer is known: The engagement proposal as performance. Sociological Focus, 37(2), 143-161. https://doi. org/10.1080/00380237.2004.10571239
Schweingruber, D., Cast, A. D., \& Anahita, S. (2008). "A story and a ring": Audience judgments about engagement proposals. Sex Roles, 58(3-4), 165-178. https://doi.org/10.1007/ s11199-007-9330-1

Shafer, E. F. (2017). Hillary Rodham versus Hillary Clinton: Consequences of surname change in marriage. Gender Issues, 34, 316-332. https://doi.org/10.1007/s12147-016-9182-5
Spinner, L., Cameron, L., \& Tenenbaum, H. R. (2022). Gender stereotypes in young children's magazines. Mass Communication and Society, 26(1), 147-170. https://doi.org/10.1080/15205436. 2022.2052902

Tenenbaum, H., Leman, P., Aznar, A., \& To, C. (2016). Researching children's conversations. In J. Prior \& J. Van Herwegen (Eds.), Practical research with children (pp. 89-106). Routledge. https:// doi.org/10.4324/9781315676067
Tenenbaum, H. R., \& Leaper, C. (2002). Are parents' gender schemas related to their children's gender-related cognitions? A Meta-Analysis. Developmental Psychology, 38(4), 615-630. https://doi.org/ 10.1037/0012-1649.38.4.615

UK Deed Poll. (2021, April 23). A man's name change rights and options upon marriage. Retrieved April 4, 2023, from https:// www.deedpoll.org.uk/a-mans-rights-upon-marriage/
UK Parliament. (2022, November 03). "Common law marriage" and cohabitation. https://commonslibrary.parliament.uk/researchbriefings/sn03372/
Viejo, C., Ortega-Ruiz, R., \& Sánchez, V. (2015). Adolescent love and wellbeing: The role of dating relationships for psychological adjustment. Journal of Youth Studies, 18(9), 1219-1236. https:// doi.org/10.1080/13676261.2015.1039967
Viki, G. T., Abrams, D., \& Hutchison, P. (2003). The "true" romantic: Benevolent sexism and paternalistic chivalry. Sex Roles, 49(9-10), 533-537. https://doi.org/10.1023/A:1025888824749
Zipp, J. F., Prohaska, A., \& Bemiller, M. (2004). Wives, husbands, and hidden power in marriage. Journal of Family Issues, 25(7), 923-948. https://doi.org/10.1177/0192513X04267151

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[^1]:    Note. ${ }^{\mathrm{a}} R^{2}=.03$ (Nagelkerke) this model correctly classified $63.2 \%$ of cases in comparison to $62.5 \%$ correctly classified by the constant only model.
    ${ }^{\mathrm{b}} R^{2}=.06$ (Nagelkerke) this model correctly classified $60.1 \%$ which matched the constant only model ( $60.1 \%$ ).
    ${ }^{\mathrm{c}} R^{2}=.14$ (Nagelkerke) this model correctly classified $68.8 \%$ of cases in comparison to $67.4 \%$ correctly classified by the constant only model.
    ${ }^{\mathrm{d}} R^{2}=.13$ (Nagelkerke) this model correctly classified $85.3 \%$ of cases which matches the constant only model ( $85.3 \%$ ).
    ${ }^{\mathrm{e}}$ Male was treated as the reference category in the analysis.

[^2]:    Note. Each response was treated as binary; mentioned or not mentioned. Percentages here referred to the portion of participants who mentioned each response. Participants sometimes gave multiple different responses, so percentages do not total $100 \%$.

