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RESEARCH ARTICLE

Does Interacting with Women Encourage Civic and Prosocial Attitudes? Evidence from Simulated Contact Experiments in Saudi Arabia and Kuwait

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Abstract

Research suggests that interacting with women may encourage civic and prosocial attitudes, yet findings to date have been limited to democracies notable for their egalitarian norms. Using simulated contact experiments under controlled conditions, this article tests hypotheses for the first time in Saudi Arabia and Kuwait, arguably "hard cases" given persistent norms of patriarchy and gender segregation. Yet, despite stronger contexts for male dominance, results suggest that interacting with women may indeed steer Saudi and Kuwaiti men toward more civic and other-regarding orientations, including aspects of tolerance, egalitarianism, openness, and community rule-following. These findings add much-needed comparative perspective to experimental research on mixed-gender dynamics and align with broader work highlighting the benefits of diverse interactions for groups and nations.

Keywords: Gender; Middle East; diversity; civic; prosocial; patriarchy; experiments

Diverse interactions are theorized to produce a host of benefits, ranging from reductions of intergroup prejudice (the "contact hypothesis") to performance advantages for teams, juries, and other working groups. Yet evidence for the benefits of *gender* diversity has primarily emerged in democracies where norms of gender equality are relatively strong. Where gender hierarchies are more rigid and institutionalized, it is less clear why men – as a visibly higher-status group – should

This article has earned badges for transparent research practices: Open Data and Open Materials. For details see the Data Availability Statement.

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be motivated to adjust their attitudes and behaviors around women, particularly toward the more civic and prosocial outcomes suggested by recent work.

At the same time, how citizens respond to social diversity is critical for political scientists to understand. Globalization and immigration are intensifying diversity across dimensions such as race and ethnicity, and gender diversity within institutions and the workplace attracts increasing attention. How can societies adjust to rising diversity at all levels, harnessing the benefits while minimizing the drawbacks? In this context, the dynamics of civic and prosocial orientations – long a subject of general interest to political scientists (e.g., Almond and Verba 1963; Inglehart 1997; Inglehart and Norris 2003; Putnam 1993; Smith 2015) – are particularly relevant.

To contribute, this article uses experiments for the first time in the Middle East and North Africa (MENA) – specifically in Saudi Arabia and Kuwait – to test hypotheses about the benefits of mixed-gender interactions. Both are highly inegalitarian by global standards, furnishing hard cases. The Global Gender Gap Index, which assesses overall progress toward gender equality, ranks Saudi Arabia 127th and Kuwait 130th out of 146 countries (World Economic Forum 2022). Due to gender segregation norms, two simulated contact experiments were conducted, especially useful in situations where face-to-face contact is risky (Crisp and Turner 2009). Under controlled conditions, college men were randomly assigned to imagine vivid and sustained interactions with either women or men.

Results are somewhat mixed, but still striking, adding comparative perspective to theories of diverse interactions and their benefits. In Saudi Arabia, men assigned to interact with a woman reported greater openness and tolerance, compared to identical interactions with a man. In Kuwait, they reported greater openness, egalitarianism, and rule-following. Findings demonstrate how simulated interactions with women may encourage civic and prosocial attitudes *despite* highly inegalitarian and segregated surroundings. As such, they may support the development of educational strategies to combat gender biases and the devaluation of women, particularly in male-dominated contexts.

Findings also provide empirical insight into a policy domain that is much contested but rarely studied systematically. Questions about the positives and negatives of "gender mixing" course through many MENA countries, well beyond Saudi Arabia and Kuwait. In Jordan, for example, Barnett, Jamal, and Monroe (2021) found that mixed-gender work spaces weakened women's desire to engage in paid labor and thereby win greater gender equality through economic empowerment. In Egypt, Bush and Prather (2021) found that both men and women, when primed to think of a mixed-gender group of officeholders, were less inclined to want to contact their representatives. The present study contributes by testing assumptions, both positive and negative, about the dynamics of mixed-gender interactions in socially conservative contexts.

Theoretical benefits of diverse interactions

Significant research suggests that interacting with those who are different, while potentially uncomfortable, may foster positive outcomes. For example, the "contact

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hypothesis," widely studied in psychology and political science, proposes that interactions among members of different groups can promote positive attitudes and reduce prejudice. While these effects are generally well documented, less is known about mechanisms, which may include increasing knowledge and disconfirming negative stereotypes, reducing anxiety, increasing empathy and perspective taking, and triggering efforts at positive impression management (Paluck, Green, and Green 2019; Pettigrew and Tropp 2006, 2008).

Diverse interactions may also generate performance advantages[1] for teams, juries, and working groups and foster broader civic and prosocial orientations, including egalitarianism, openness, fairness, and conscientiousness. For example, social diversity can spur informational diversity, as members share different experiences and perspectives. Mutz (2002) found that exposure to those with dissonant political views was associated with greater political tolerance. Diverse interactions, particularly more collaborative ones, can inhibit ingroup bias (Scacco and Warren 2018), foster intergroup cooperation (Chang and Peisakhin 2019), and encourage individual efforts to make a positive impression and preserve social harmony (Phillips, Liljenquist, and Neale 2009). In two experiments, White participants displayed greater conscientiousness, such as complex thinking and deeper information processing, when groups were randomly assigned to involve Black participants (Antonio et al. 2004; Sommers 2006). Sommers (2006, 106) speculated that diverse interactions may "remind whites of their motivation to avoid prejudice, encouraging them to exercise more care and leniency."

Much of the canonical research on the benefits of diverse interactions focuses on race, ethnicity, and religion. But recently, the benefits and drawbacks of mixed-gender interactions have also been studied empirically, and several experiments highlight similar outcomes, particularly civic and prosocial ones for men. For example, men contribute more to a public good and volunteer more for charitable causes in the presence of audiences composed of women compared to only men (Van Vugt and Iredale 2013). Lount, Messé and Kerr (2000, 228) found that men, perhaps motivated by a "heightened sense of obligation to do their part," were more conscientious around women, putting in more effort when randomly paired with a woman coworker. Another study, in Norway, found that men soldiers randomly assigned to share a room and work in a squad with women soldiers subsequently showed less discriminatory tendencies (Finseraas et al. 2016).

Observational studies also suggest civic and prosocial outcomes in gender-diverse circumstances, broadly conceived, including aspects of rule-following, egalitarianism, and social responsibility. For example, men engage in less jaywalking across busy streets when walking with a woman, compared to when walking with men or alone (Pawlowski, Atwal, and Dunbar 2008). Male CEOs with firstborn daughters pay employees more (Dahl, Dezső, and Ross 2012). Corporate boards with more women tend to be more engaged in corporate social responsibility efforts (Rao and Tilt 2016). Men provide more gender egalitarian answers to women interviewers (Benstead 2013; Flores-Macias and Lawson 2008; Galla et al. 1981; Huddy et al. 1997; Kane and Macaulay 1993; Lueptow, Moser, and Pendleton 1990). Men legislators with daughters vote in more gender-egalitarian ways (Washington

[1]For overviews, see Page (2008) and Phillips (2014).

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2008). Clayton, De Kadt and Dumas (2022) counted 11 studies finding that having a daughter encouraged mothers' and/or fathers' feminist orientations. Yet they were all conducted in wealthy democracies, and they themselves found no evidence that such effects replicated in South Africa – a less gender-egalitarian nation.

Indeed, while the evidence is strong that interacting with women *can* foster civic and prosocial outcomes for men, the underlying mechanisms and scope conditions under which those outcomes are likely to emerge are poorly understood. For intergroup contact to reduce prejudice, scholars have long highlighted the importance of "equal status" that is "sanctioned by institutional supports (i.e., by law, custom, or local atmosphere)."[2] More equal status may also be key to realizing the benefits of gender diversity, raising the question of whether such benefits would accrue in societies with wide gender gaps.

Background and hypotheses

Such gaps are undeniably wide in both Saudi Arabia and Kuwait (Appendix F). Gender segregation and male guardianship persist in both countries, though these practices should not be deemed "traditional" or "Islamic," as they are neither static nor unchallenged. Public schools are gender-segregated by law, and, while unevenly enforced, segregation may extend to restaurants, shops, government offices, mosques, health clubs, and public transportation. Algharabali (2010, 23) argues that "gender segregation is implicit in every aspect of society in Kuwait," and Le Renard (2008, 610) describes Saudi women as having "constituted a separate category, legally discriminated against and spatially segregated" – even as both scholars emphasize women's efforts to establish autonomy within or despite segregated spaces.

These points are not intended to suggest that women lack any power or agency, but rather to emphasize the salience of gendered hierarchies. Social dominance theory therefore offers a plausible alternative hypothesis: where social hierarchies are strong and salient, higher-status groups have incentives to uphold those hierarchies (Pratto, Sidanius, and Levin 2006). Thus, when interacting with women, men may seek to maintain dominance rather than aspire to higher civic and prosocial standards. This would be consistent with classic concepts of patriarchy, which highlight systemic incentives for men to "dominate, oppress and exploit women" (Walby 1990, 214). Accordingly, the following competing hypotheses are tested:

H1a. Men in simulated interactions with women will display *higher* civic and prosocial orientations compared to those in simulated interactions with men.

H1b. Men in simulated interactions with women will display *lower* civic and prosocial orientations compared to those in simulated interactions with men.

Notably, local voices across the political spectrum appear to align with H1b, further underscoring these countries as "hard tests" for H1a. On the conservative

[2]Allport (1954, 281).

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side, gender segregation norms are often publicly justified as a means of keeping women safe. According to conservative clerics, men "may not be able to control themselves" around women, so a key safeguard is separation or "blocking of the means" (van Geel 2016, 368). They argue that relaxing segregation – or allowing for greater gender "mixing" (*ikhtilāt*), the local term for unsupervised interaction between unrelated men and women – invites corrupt and un-Islamic behavior, harming society by "liberalizing" it from traditional moral guidance.

On the liberal side, while segregation is opposed on principle, many prefer to advocate "safe spaces" where women will not be harassed and undermined. In Saudi Arabia, for example, Le Renard (2008, 619) found that "even if some . . . envision the end of sex segregation in the long term or are theoretically against this spatial organization, in the contemporary context, they would rather ask for the creation of more female institutions." As part of the qualitative field research for this paper, one Saudi student explained that "separation creates this idea of sexualizing the gender at a very young age, because you ask, well why are we separate? And then the fear comes [of men's behavior]."[3]

The fieldwork also identified some reasoning aligned with H1a. For example, a high-level administrator and professor at Kuwait University longed for less segregation, saying that "It's the nature of the genders. They learn from each other. Put the genders together, they try to behave the best around each other."[4] He further speculated that:

> When you segregate, you kill culture, and you make it boring. There is no joy, no energy, no creativity with gender segregation. With mixed environments, [youth] actually want to be in the school setting, on campus, they see each other as friends, as partners, as real world people, they really interact. They want to contribute . . . and when you insist on too much segregation, you get a perfect storm [for intolerance, incivility, low student engagement, and other negative outcomes].

Yet, with little research, such fears and policy debates unfold in what is essentially an empirical void. Arguments often rely on personal anecdotes, narrow religious interpretations, or allusions to human rights. More broadly, scholars do not know whether the benefits of gender-diverse interactions travel to gender-inegalitarian contexts.[5]

Data and methods

The experimental approach was selected for its many advantages, especially the use of random assignment to ensure treatment groups are not significantly different on important dimensions, including demographics and susceptibility to social desirability bias. Experimental research within authoritarian contexts, however,

[3]Author's interview with Saudi university student, Kuwait City, Kuwait, April 2016.

[4]Author's interview with Kuwait University administrator and professor, Kuwait City, Kuwait, April 2016.

[5]Clayton et al. (2022) make a similar point regarding "daughter effects."

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poses significant challenges (Glasius et al. 2018). In Saudi Arabia and Kuwait, due to the very regulations and taboos that support regimes of gender segregation and male guardianship, research on the dynamics of mixed-gender interactions is virtually nonexistent. Randomly assigning subjects to face-to-face interactions with an unrelated member of the opposite sex introduces considerable risk, legally and ethically, for both subjects and researchers.

Experiments therefore applied the principle of *imagined* or *simulated* contact – the "mental simulation of a social interaction with a member or members of an outgroup category" (Crisp and Turner 2009, 234). While initially envisioned as a stopgap, the strategy has proven to offer considerable independent value, helping realize the benefits of contact "when groups are highly segregated, physically or socially, or when there is little motivation to engage in contact" (Crisp and Turner 2009, 232). Studies suggest that mental simulations can lower implicit and explicit prejudice (Schuhl, Lambert, and Chatard 2019), attenuate stereotype threat (Allen and Friedman 2016), and increase openness to friendship (LaCosse and Plant 2019).

One might assume that imagined contact is a relatively weak stimulus, increasing the likelihood of null results. While that may be true in some cases, a meta-analysis of over 70 studies (Miles and Crisp 2014) found evidence that simulated interactions function similarly to real-world interactions, with a mean effect size of 0.35 (Cohen's d). It appears that mental imagery can provoke the same kinds of emotional and motivational reactions as real experience (Dadds et al. 1997), since it involves neurological mechanisms similar to those for memory, emotion, and motor control (Kosslyn, Ganis, and Thompson 2001). One study also found that a single simulated interaction was sufficient to reduce explicit and implicit prejudice over several days (Schuhl, Lambert, and Chatard 2019).

The experiments were designed to offer engaging yet differing contexts in which men and women might theoretically mix, with the gender of the interlocutor randomly assigned following the "Goldberg model" (Sapiro 1981). Different interaction types were selected to enhance generalizability, and vividness was prioritized (Husnu and Crisp 2010). Men student samples were used for two reasons beyond feasibility. First, imagined contact effects are typically higher for young subjects (Miles and Crisp 2014), and second, public debate in these countries often focuses on the presumed risks of "gender mixing" for young people, based on negative expectations about men's behavior.

Saudi Arabia and Kuwait were selected because of their theoretical case value; both are high in gender inegalitarianism, and they offer tough tests. In addition, while these neighboring countries have much in common, both resource-rich and highly conservative, they also differ in important ways. Thus, if similar results are found, the case for generalizability across different interaction types and varying national circumstances will be strengthened. Outcome variables were based on fieldwork and consultation with in-country scholars about appropriate, low-risk measures tapping civic and prosocial orientations (Appendix A). They included *openness*, *rule-following*, *tolerance*, and *egalitarianism*. A subset of the *rule-following* items that specifically assessed attitudes toward illegal activities, called *law-abidingness*, was also analyzed. (*Tolerance* could not be measured in Kuwait due to constraints.) See Appendices A, B, and G for full details.

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Medina, Saudi Arabia

One experiment was conducted with Saudi men ($n = 191$) at a large public university in Medina, a city in the western Hijaz. Subjects read a text introduction facilitating immersion into a vivid scenario – an interview for a school project. In the treatment group, students were asked to imagine that "a girl at a nearby school or university would like to interview you for her class project. Her name is Fatima, and she would like to hear your perspective and opinions about a wide range of issues." The introduction stated that "You have never met Fatima" and added a generic description for her and her school. Names were selected on the basis of qualitative fieldwork, especially input from local scholars about the frequency of names by generation and their potential connotations.

For the control group, the student was named "Ahmad," and male pronouns were used. Throughout the survey, questions were introduced as if Fatima or Ahmad were asking them in the context of a real interaction (e.g., "Fatima replies, 'Thank you. Here are some actions that people sometimes do. How justifiable do you, personally, think they are?'") The scenario ended with "Fatima" or "Ahmad" thanking the student for the interview and leaving.

Kuwait City, Kuwait

The second experiment was conducted at a large public university ($n = 198$) in Kuwait City (with some additional students surveyed at a nearby Arab private university). Here, subjects were invited to imagine solving a mystery, shown to be an engaging workplace task within experiments on diverse interactions (Loyd et al. 2013; Phillips 2003; Phillips, Liljenquist, and Neale 2009). Subjects were instructed to "Imagine you're a detective investigating a crime. Suppose someone broke into a bank last night about 3 AM and stole thousands of Kuwaiti dinars in two black briefcases. The police have three suspects." To facilitate engagement, students read three short suspect bios, along with clues such as the suspect's whereabouts at the time of the crime, and asked which suspect was most likely responsible.

In the treatment group, students then read as follows: "Now, suppose you're preparing for your first meeting with another detective. The other detective is Maryam. She is a woman who has been working the same number of years as you as a detective. She has studied the same materials on the three suspects above and has also selected a suspect for further investigation. Together, you and Maryam will put all the pieces together and solve the crime." The students were instructed to describe why they chose the suspect they did, answer some questions about their reasoning, and then read as follows: "Your meeting with the other detective, Maryam, was a success. After discussing several possibilities, you agree on which suspect to investigate, and you solve the crime together." In the control version, the wording was identical, except the other detective was a man named "Fahad." Unlike the interview setting, in which outcome questions were part of the interview itself, the dependent variables were assessed after the interaction to avoid interrupting the simulation's flow.

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Results

As expected, no significant differences appeared between treatment and control groups across demographic characteristics, including age, religiosity, and self-reported income (Appendix C). The samples were similar across research sites as well, though Saudi participants were somewhat younger.

Table 1 shows that H1a received considerable support; statistically significant results are shaded for ease of reference. Results are less consistent in Saudi Arabia, perhaps due to stronger patriarchal norms, or a less vivid simulation experience. Still, in both countries, interacting with women was associated with heightened *openness*. In Kuwait, it was also associated with greater *rule-following* (and the *law-abidingness* subset*)* and *egalitarianism*. In Saudi Arabia, it was associated with greater *tolerance* in addition to *openness*.

All effects span approximately 1/3 of a standard deviation – an effect similar in magnitude to that estimated in many survey experiments, and also comparable to mean effects across other simulated contact studies (Miles and Crisp 2014).

It is worth noting that some ultraconservative clerics view these very attitudes, including aspects of openness, tolerance, and egalitarianism, as themselves manifestations of moral lassitude and civic decay. Thus – and with the important exception of results for rule-following and law-abidingness, which cannot be equated with "liberalism," "godlessness," or "Westernization" – the findings may be interpreted as confirming some of the clerics' worst fears. Gender mixing may indeed be a "liberalizing" force, dulling traditional clerical authority and pushing young men to be more open and flexible.[6]

Despite publicly voiced concerns about gender mixing – from both conservative supporters of segregation and critics who oppose it in principle, but call for more "safe spaces" for women in the short term – no support appeared for the alternative hypothesis based on social dominance theory (H1b).

Discussion

If we view Saudi Arabia and Kuwait as "hard cases," as seems reasonable given relatively high levels of patriarchy and local perspectives on gender dynamics, then these results are striking. They suggest that men's incentives for civic and prosocial behavior around women may be quite robust, and at least capable of overriding systemic incentives for dominance. Why might that be?

While the mechanisms underlying the benefits of diverse interactions are not well understood, and not directly tested in the current study, one candidate is simply a positive effect on men's affective state. In their meta-analytic review of why contact can reduce intergroup prejudice, Pettigrew and Tropp (2008) find considerable support for affective processes, such as reducing anxiety. However, in research focusing specifically on the implications for men of mixed-gender interactions, the most commonly proposed mechanism is impression management – that is, men's

[6]Note that the survey did not (and likely would not have been permitted to) include "liberal" political attitudes about specific policy issues. Nevertheless, some outcomes may align with those, or reflect the controversial concept of "liberal political character" (Jones 2015).

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Table 1. Effects of interacting with a woman (compared to a man)

		Kuwait		Saudi Arabia		Pooled data	
	Interaction with:	***Means(SD)***	***Difference(SE)***	***Means(SD)***	***Difference(SE)***	***Means(SD)***	***Difference(SE)***
Openness	**Woman**	5.15(1.31)	.48(.19) $p = .014$	5.01(1.15)	.43(.19) $p = .022$	5.08(1.24)	.46(.13) $p < .001$
	Man	4.68(1.33)		4.58(1.39)		4.63(1.35)	
Egalitarianism	**Woman**	4.14(1.76)	.63(.24) $p = .009$	3.52(1.59)	.09(.23)	3.84(1.71)	.37(.17) $p = .024$
	Man	3.51(1.46)		3.42(1.47)		3.47(1.47)	
Rule-following	**Woman**	5.55(.90)	.27(.14) $p = .046$	5.56(.73)	−.09(.11)	5.55(.82)	.08(.09)
	Man	5.28(.94)		5.65(.84)		5.47(.90)	
Law-abidingness (subset)	**Woman**	5.81(1.02)	.32(.16) $p = .051$	5.89(.95)	.08(.15)	5.85(.98)	.19(.11) $p = .089$
	Man	5.49(1.19)		5.81(1.13)		5.66(1.17)	
Tolerance	**Woman**	Not administered		4.33(1.16)	.32(.16) $p = .050$		
	Man			4.01(1.05)			

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efforts to make a positive impression to women based on assumptions about what women value, or what society in general values.

Thus, one explanation highlights the strength of stereotypes. In less gender-egalitarian societies, gender stereotypes tend to be stronger, particularly those based on the "women are wonderful" effect (Glick et al. 2000; Jones, Mitchell, and Martin 2021; Krys et al. 2018). According to the theory, the reason is that both hostile and benevolent sexist stereotypes – that is, "ambivalent" sexism – serve to legitimize patriarchal institutions. For instance, Al-Rasheed (2013, 25) argues that Saudi women have been made into "symbols of the piety of state and nation," even as they remain second-class citizens. Yet do young men in these countries actually hold strongly "benevolent sexist" stereotypes, which might then tip the balance toward civic and prosocial outcomes in their interactions with women?

To help answer this question, a matrix of gender stereotypes appeared in the Saudi survey after the simulated interview. Appendix D shows that participants did indeed view women as warmer and more truthful – "benevolent sexist" stereotypes – while they viewed men as more decisive and powerful. Although not directly indicative of causal mechanisms, these results are at least consistent with the idea that men in patriarchal contexts may aspire to higher standards around women due to heightened "benevolent sexism." Social dominance incentives may still sometimes prevail, but civic and prosocial ones may be stronger when benevolent sexist stereotypes are salient.

The results might also reflect growing demands for egalitarianism, stirred by reformist leaders and increasingly vocal feminist movements (Appendix F). College men may be especially attuned to changing social norms and motivated to avoid confirming negative stereotypes about themselves. As Thompson (2019, 6) argues, in contrast to the international community's positive focus on women, Saudi men are often "deemed to be irresponsible and in consequence are blamed for social ills," fostering a "sense of not being able to participate constructively either in the workplace or in society." Aligned with this possibility, a young Kuwaiti woman indicated in an interview that "if they want us, they will have to change," implying that Kuwaiti men must become more open-minded, tolerant, and egalitarian if they wish to marry local women.[7] The results could therefore reflect aspects of stereotype threat (Steele and Aronson 1995) in an evolving normative environment.

Digging deeper into the experimental data to investigate demographic moderators (in an exploratory manner) provides an additional insight. As Fig. 1 shows, higher levels of self-reported religiosity appeared to counteract the positive effects of interacting with women in the pooled sample.

While the "somewhat" and "not" religious men showed greater *egalitarianism* when interacting with a woman, those identifying as "religious" showed the opposite pattern; the interaction was significant at $p = .049$ (see Appendix E for details). It is certainly plausible that religiosity bolsters the tendency to assert dominance, perhaps unsurprisingly given that highly conservative interpretations of Islam (as is true in other religions) are often used to justify patriarchal institutions. This pattern also aligns with Bush and Prather's experiment in Tunisia (2021) highlighting a

[7]Author's interview with Kuwaiti university student, Kuwait City, Kuwait, April 2016.

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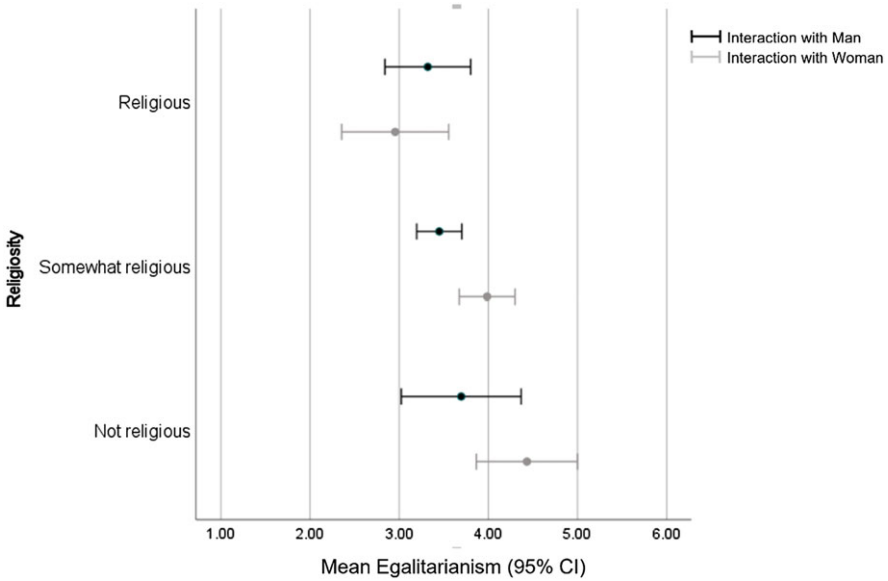

Figure 1. Interaction between religiosity and egalitarianism.

"negative reaction to gender mixing" in public life, an effect that was particularly driven by those with conservative Islamist views.

Implications and conclusions

A growing literature finds that "people work harder in diverse environments both cognitively and socially."[8] Results from first-of-kind experiments in Saudi Arabia and Kuwait contribute by providing evidence from "hard cases." In more patriarchal societies, incentives for men to assert social dominance around women are plainly strong, as many local perspectives attest. Yet the results demonstrate that simply imagining an interaction with a woman can encourage civic and prosocial orientations, consistent with broader work suggesting that Arab men's attitudes in these areas may be amenable to change with relatively small interventions.[9]

Would such outcomes emerge in face-to-face interactions with women? The fact that, neurologically, simulated interactions appear to function similarly to "actual" ones suggests we might observe similar results in face-to-face lab experiments. Larger effects might even appear because in-person interactions would naturally be more vivid (Husnu and Crisp 2010). These points are encouraging for desegregation campaigns in the two countries and also broader efforts to include women in institutions traditionally dominated by men. Consider a striking recent study suggesting that Moroccan Islamists' efforts at mixed-gender teamwork have been successful, enhancing representation and access for women citizens (Benstead

[8]See Phillips (2014).

[9]For example, see Bursztyn, González and Yanagizawa-Drott (2020).

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2022). The findings in the present study may shed light on the micro-politics involved in the mixed-gender interactions underlying that success. At the same time, limits of the current study must be emphasized – real-world interactions involve far more complexity than lab-based or simulated ones.

At a minimum, the results testify to the power of mental stimulation. This approach provides a rare opportunity to test hypotheses about the effects of gender-diverse interactions in contexts where face-to-face interactions would be problematic. It also may help inform the development of low-cost educational strategies (e.g., simulation exercises) to improve gender relations and accustom communities more generally to intensifying diversity. Why and when men may discard politically deep-rooted incentives for dominance is an important question for future research and policy development. Future research should also investigate implications for women, including professional ambition, leadership aspirations, and political interest (AlMatrouk 2016; Karpowitz and Mendelberg 2014; Roula 2004). Such studies can extend our understanding of the many-faceted roles that diversity can play in human interactions.

Supplementary Material. The supplementary material for this article can be found at https://doi.org/10.1017/XPS.2023.15.

Data availability statement. The data, code, and any additional materials (Jones 2023) required to replicate all analyses in this article are available at the Journal of Experimental Political Science Dataverse within the Harvard Dataverse Network, at: https://doi.org/10.7910/DVN/9RU8WI, Harvard Dataverse, V1.

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Ethics statement. This research was approved by the Institutional Review Board at the University of Maryland (864539-1) and also adheres to APSA's Principles and Guidance for Human Subjects Research. More information can be found in the appendix (A1).

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