Curbing journalistic gender bias: How activating awareness of gender bias in Indian journalists affects their reporting

Kalra, P.; Boukes, M.

[Link to publication](#)

Curbing Journalistic Gender Bias: How Activating Awareness of Gender Bias in Indian Journalists Affects Their Reporting

Priyanka Kalra & Mark Boukes

Routledge
Taylor & Francis Group

Curbing Journalistic Gender Bias: How Activating Awareness of Gender Bias in Indian Journalists Affects Their Reporting

Priyanka Kalra[a] and Mark Boukes [b]

Graduate School of Communication, University of Amsterdam, Amsterdam, Netherlands; Amsterdam School of Communication Research, University of Amsterdam, Amsterdam, Netherlands

ABSTRACT

This study examines the effect of gender bias awareness on journalistic decision-making. The study establishes a link between activating journalists' awareness of their implicit gender bias and objective decision making. Using a randomised experimental setup, journalists were (or were not) administered an Implicit Association Test (IAT) to ascertain their implicit gender bias, followed by decision-making vignettes to measure their explicit gender bias in journalistic reporting. Results indicate that inducing awareness of implicit gender bias through the IAT strongly reduces the production of biased journalistic content. The experiment highlights that journalists who are made aware of their implicit cognitive biases before making the journalistic decisions are more sensitive to avoid cognitive bias errors as compared to the control group of journalists who are not made aware of them. While offering a novel experimental framework for exposing journalistic bias, these results help ascertain solutions for curbing bias in journalism.

In today's time with the trust in media at an all-time low and journalism being repeatedly accused of bias (Nicolaou and Giles 2017), research needs to do more than just highlight the prevalence of the said bias through content analysis studies. Once established that reportage is not always objective, scholarly attention could be shifted to the manifestation of bias *and* how to reduce it. This study aims to enable exactly that, by exposing the prevalence of implicit and journalistic gender bias in Indian journalists and then ascertaining concrete, empirical solutions to the problem.[1]

Journalistic decision-making has been studied from various angles. Whereas prior studies examined the role of organisational and environmental factors (Van Aelst and Vliegenthart 2013; Domingo 2008; McManus 1995; Hilgartner and Bosk 1988), the focus has usually delineated the final product (the news) from its creator (the journalist). The scholarly focus on organisational factors as the main influence on journalistic production has been referred to as organisational functionalism (Cottle 2007). According to Cottle (2007), this emphasis on theorisation of professional norms and practices has encroached

CONTACT Priyanka Kalra ✉ kalrapriyanka93@gmail.com; Mark Boukes ✉ M.Boukes@uva.nl

on the idea of individual journalistic agency and how personal journalistic decisions affect the news product. Due to the lack of a "comprehensive set of data on how journalists think on the job" (Christian 2013, 172), the relationship between an individual's cognitive biases and the faulty journalistic decisions has rarely been explored.

This lack of acknowledgement of the individual-level influence (Reese and Shoemaker 2016) in news decisions overlooks the current journalism scenario where individual journalists hold a lot of agency over what is published, for example, breaking news and online stories (Pavlik 2013). Also, the lacking focus on individual influence in media research is problematic when read next to psychology studies that explicate human cognition and information processing failures on an individual level (e.g., Bakker, Rooduijn, and Schumacher 2016; De Martino et al. 2006; Caprara and Zimbardo 2004). Psychologists have stressed the influence of emotions, heuristics and personality on information processing and decisions making in citizens. Yet, the effect of these influences on journalists, one of the primary sources of information for citizens, has hardly been investigated.

The primary aim of this study is to expose the possibility of implicit and journalistic gender biases in journalists. Secondly, we aim to find solutions for curbing these biases in journalistic work through *awareness*. According to Rachlinski et al. (2008), if individuals are internally motivated to suppress their biases, they can make judgements free from them. Hence, results of this study have implications on how journalists can be trained to maintain objectivity in journalism. By performing an experiment on practicing and forthcoming Indian journalists, this study aims to offer unique empirical data on the prevalence of implicit and journalistic gender biases and how the awareness of these biases can help control them.

Cultivation Theory and the Case of Gender Bias and India

Media may influence people's behaviour and attitudes about various issues, including those regarding gender roles for men and women (Wood 1994). At the same time, journalists are also a part of the same society, and may thus be equally susceptible to societal ideology and characteristics. This idea becomes imperative to explore in societies that are traditionally characterised as being biased. India is a prominent case, which has been investigated and pegged for gender-bias at every stage of a woman's life (Rajan, Sudha, and Mohanachandran 2000). From female foeticide and infanticide, to denial of education and care to the girl child, a thick glass ceiling for workingwomen, and deep insecurity in terms of rape, sexual harassment and violence (Yadav and Khanna 2014; Malhotra, Vanneman, and Kishor 1995; Vishwanath and Palakonda 2011), women in India face inequality at every step of their lives.

While the media cannot solely be attributed for the prevalence of gender-bias in India, it is a proven reinforcer of the patriarchal ideology (Sharda 2014). *Cultivation theory*, as proposed by Gerbner (1984) explains how news coverage reinforces gender bias in an already biased society. The theory predicts that mass media tend to strengthen and reinforce the prevailing ideas and attitudes in society rather than weakening them: "television cultivates common perspectives" (Gerbner et al. 1986, 31).

Sharda (2014) elaborates cultivation theory in the Indian context. She explains that through various processes like perpetuation of inequalities, distorting images and echoing societal gender norms, the Indian media have become an influencer and contributor to the gender

imbalance in the society. According to her, while the Indian media have immense capability of reversing gender stereotyping, they actually strengthen it.

In such a scenario where research has solidified the claim of prevailing gender bias in Indian media (Patil 2018; Sharda 2014), it becomes pertinent to find *why* the bias prevails, *how* it instrumentalises itself, and—most importantly—what can be done to stop it. While looking into the why and how question, this research dives deep into the "*what can be done*"-quotient. Focusing on the prime producers of news reports (i.e., journalists), the current study explores the need for journalists to be aware of their cognitive failures, so that they can consciously avoid them. While the study focuses on gender bias in the Indian context, the results are relevant to journalists globally in terms of how they perform and how journalism education functions.

Cognitive Biases in Journalism

Before we get into the specifics of gender bias, India and journalism, it is important to understand how researchers have defined cognitive bias. Trumbo, Dunwoody, and Griffin (1998, 240) define cognitive biases as "a normal consequence of human cognition (…) without conscious intention to distort." By highlighting that the nature of cognitive bias is *unintentional*, this definition separates cognitive bias from the general usage of the term "bias" which implies intentional malpractice. Stocking and Gross (1989, 4) define cognitive bias as "variety of ways of thinking that constrain one's perceptions and interpretations of the world" while pertinently adding that "people do not have to have any conscious intent to bias information; nor do they have to harbour an attitude or opinion to exhibit these biases and errors" (Stocking and Gross 1989, 4).

Some researchers consider journalists as rational individuals who are constantly seeking information (Donsbach 2004) and, therefore, should not be prone to generic cognitive errors. Another reason journalists are considered to not fall prey to such implicit biases is because of the professional norms they are bound to (Boyer 1981). Yet, a number of studies have exposed implicit and explicit biases in other ethics-bound-professions (e.g., surgeons and judges; see Green et al. 2007; Vidmar 2011; Bennett 2010); thus, there is little reason to believe that moral *codes* will inherently lead to moral *behaviour.* In fact, since different environmental factors can affect the strength and value of cognitive biases (Stocking and Gross 1989), the nature of journalistic work makes journalists potentially even more susceptible to these biases (Boscardin 2015).

The nature of journalistic work where "journalists have to decide what is true, what is relevant and what is, in a moral sense, good or bad" (Donsbach 2004, 137) under serious time pressures, increases the probability of bias seeping into their work. Critical time pressures that journalists are subjected to can enhance the impact of these biases (Stocking and Gross 1989). Other than time pressure, cognitive overload and stressful environments are considered catalysts that might foster a conducive environment for implicit biases (Boscardin 2015).

Gender Bias

Gender bias in media has been studied extensively, especially in the West (Wood 1994; Kinnick 1998; Devitt 2002). Yet, exploring gender bias in journalism poses a challenge.

Since journalists in practice are bound by ethical standards designed to fight such biases, explicit gender bias is mostly not evident in journalism in obvious ways. Hence, in order to explore gender bias, researchers have predominantly applied two implicit criterions outlined by Clark (1972): first, "the quantitative presence of the group of interest"; and second, "respect, the treatment and status accorded to this group" (Kinnick 1998, 214). To summarise, the number of women in journalistic products and how they are described or framed together can indicate gender bias in the industry.

Wood (1994) solidifies this framework and outlines three ways through which gender bias can be operationalised in media content, specifically. Firstly, women are *underrepresented* in media productions, which reflects the cultural norm of their unimportance and invisibility. Secondly, when being represented in the media, *gender-normative stereotypes* are applied on both men and women that correspond with the social expectations. Thirdly, relationships between men and women are depicted in a manner that *re-establishes traditional gender roles*. Wood's third criterion is an extension of the second criterion which showcases the pre-set notions used to impose societal roles upon women.

The criteria outlined above encapsulates the way in which gender imbalance takes form in journalism. Numerous studies in media research have found that men significantly outnumber women in representation in terms of sources used, coverage given (especially in science, business and sports fields) and expert panel presence. In their large-scale study, Sen et al. (2016) analysed over 2.3 million articles by 950 news organisations globally and found that men were represented much more than women in both text and images in news pieces. In another research on Indian debate and opinion news shows, male panellists were found to outnumber women panellists by five times (Patil 2018). A Reuters's study also highlighted the complete absence and overwhelming under-representation of women commentators on Indian primetime news debates (Patil 2018).

In the Indian context, it has often been argued that the gender imbalance in journalism is just a representation of the societal milieu and not an outcome of a biased journalism industry. Scholars, however, contend that the uneven media representation of men and women is not representative of the gender inequities in the society, but actually, an even further intensified version of it, which artificially amplifies this inequality (Shor et al. 2015). The following two sections discuss the ways through which journalism exacerbates and magnifies this inequality.

Selection Bias

The stark underrepresentation of women in the media can be explained through selection bias. Past research has mostly focused on selection bias in terms of what stories make it into the news versus the stories that do not (McCarthy, McPhail, and Smith 1996; Smith 1997). The nature of news, however, does not just involve which story is chosen over the other, but also which individuals are invited to add their perspective to them (Ross 2007). This bias becomes evident in what sources journalists use for their stories, which panellists they invite to participate in debates, and what expert commentators they highlight. For example, Ross' investigation (2007) of three regional UK newspapers finds that women are starkly underrepresented as sources in the news. This source selection bias has been supported by numerous content analyses, like the Global Media Monitoring Project 2010 report, which showed that only 18% of women spokespersons were

quoted on behalf of organisations in the Indian media in 2010 and only one out of five authoritative sources interviewed by journalists were women (Sharda 2014).

Most literature consider these biases as active decisions. Ross (2007, 449) characterises source selection bias as "the sly deceit concealed within journalists' use of sources" which is used to convey their own beliefs and ideas. While this active bias might be a part of the reason for under representation of women in the news, it should not be considered the only reason. Even when journalists believe that they are balanced and objective, they might unknowingly seek and select information that confirms their ideas and beliefs (Stocking and Gross 1989). Patil (2018) resonates with this view by mentioning that gender stereotypes do not only impact gender roles for journalists but will also affect the selection of panellists in news debates and discussions.

Stereotypes

The underrepresentation of women as sources and experts is not the only way through which gender bias appears in journalism. Media researchers have also focused on misrepresentation of women through the cognitive bias process of *stereotyping*. Donsbach (2004) explains stereotypes as existing biases and attitudes, and concludes that by using techniques like news-framing, journalists apply their predispositions and perceptions on the news they produce. Christian (2013, 162) solidifies the impact of stereotypes on news decisions by focusing on how categorisation "helps people store prior generalized knowledge that can serve as guides for subsequent similar interactions."

In terms of gender bias, multiple studies, especially in the fields of sports and political journalism, expose the stereotypical manner in which women are presented in media. Past literature has pointed out that media focuses much more on *personal* information in regard to family, clothing, personality and marital status for women than for men, who are covered more with regards to their policy stances (Devitt 2002). Whitlow (1977) found that male and female journalists were prone to assigning gender-normative characteristics, including insecurity to women. The gender skew was also visible in the fact that women were more likely to be quoted in education and voluntary work sectors while men were quoted in stories relating to business, reiterating the caring and nurturing image of women while dissociating them from the business sector. Norris (1996) also found that the American public's view of economics and foreign policy being more a masculine field versus education and welfare being feminine fields was strongly aligned with the American news coverage. Eventually, this may inhibit women from venturing into male-dominated fields like economics, sports, politics and business, thus re-establishing the perpetuating stereotypes (Desmond and Danilewicz 2010).

Groupthink: Female versus Male Reporters

Having established that there is a bias against women in the media (either through selection preferences or stereotypes), the theory of *Groupthink* helps explain why these biases are still prevalent in journalism. Groupthink is a "mode of thinking that people engage in when they are deeply involved in a cohesive in-group, when the members' striving for unanimity overrides their motivation to realistically appraise alternative courses of action" (Janis 1972, 6). When explored further, groupthink offers an explanation to the

prevalence of gender bias in the journalism industry, which is both male dominated and has a strong glass ceiling (York 2017).

In their research on homophily in journalism, Hanusch and Nölleke (2018) concluded that Australian male journalists predominantly interacted with other male journalists on Twitter while women too interacted more with their own gender; yet, the effect of this homophily was less for women when compared to men. The homophily is the basis of common thinking where like-minded individuals maintain pre-existing beliefs and secure them by not socialising with people of differing characteristics. In case of gender, male journalists predominantly conversing with other male journalists inhibits them from comprehending viewpoints of the other gender.

Contrarily, evidence points to women being less affected by groupthink and homophily as their stories are equally representative of both genders in terms of source selection, expert comments and even the content of the story (Devitt 2002). According to a Global Media Monitoring Project report (2015), female reporters produce more stories with women as central subjects compared to male journalists. Moreover, studies have reported that women are more likely to quote other women in their stories and have significantly less gender framing bias in their work compared to male journalists (Artwick 2013; Weaver and Wilhoit 1996; Devitt 2002).

So when compared, women tend to show less gender bias in their journalistic work than men. Hence, it could be argued that the prevalent gender bias in journalism could be a result of groupthink in male-dominated newsrooms. For instance, even though there are a significant number of women in the Indian media, their reportage is limited to gender issues, health and human rights, while men dominate sports, business, economics (International Federation of Journalists 2015). To explore this, the study investigates whether women make less gender-biased decisions when compared to men.

> H_{1a}: Female journalists will exhibit less implicit bias in an implicit association gender-career bias test than male journalists.

> H_{1b}: Female journalists produce less gender biased work compared to their male counterparts.

A Possible Solution

Although these biases are implicit, research in psychology suggests ways through which humans can overcome them. While researching strategies for cognitive *debiasing*, psychologists listed the following stages: "a state of lack of awareness of bias, to awareness, to the ability to detect bias, to considering a change, to deciding to change, then initiating strategies to accomplish change, and finally, maintaining the change" (Croskerry, Singhal, and Mamede 2013, 65). Psychologists have reasons to believe that in order for people to reduce their biased decisions, they *first* need to be aware of it (Croskerry, Singhal, and Mamede 2013).

One of the strategies highlighted by psychologists for cognitive debiasing is educational strategy. According to researchers, awareness through education can help mitigate these biases (Croskerry, Singhal, and Mamede 2013). Donsbach (2004) resonates this view by adding that journalists must be aware of their own cognitive influences in order to actively refute them from their work. Lasorsa and Dai (2007) also found strong support for automaticity of stereotyping by demotivated reporters to produce accurate

stories compared to more aware and engaged journalists. Urging for introducing more awareness strategies about their cognition failures, researchers stress the need for journalists to be taught about their cognitive biases just like they are taught ethics, in order to help them consciously avoid biased decisions (Stocking and Gross 1989; Christian 2013; Trumbo, Dunwoody, and Griffin 1998). Explaining to journalists how their own minds work is an important need of journalism pedagogy in the challenging atmosphere of journalism (Christian 2013).

Boscardin (2015) also highlights the need for increasing self-awareness in students' curriculums as a concrete method towards reducing the undesirable influence of implicit bias. According to him, "inclusion of self-reflection exercises, including participation in implicit bias tests (IAT) as part of the curriculum (…) may improve self-awareness and self-monitoring" (Boscardin 2015, 1726). By consciously acknowledging their implicit biases, one can actively avoid these from having an influence (Boscardin 2015). Therefore, based on past literature, another hypothesis is that journalists who are made aware of their implicit biases would be less susceptible to them as they would put more efforts into avoiding their influence.

> H_2: Journalists made aware of their cognitive biases produce less gender biased work compared to journalists who lack this awareness.

Method

Interested in the causal relationship between generating awareness of journalists about their implicit cognitive biases and subsequent gender bias in journalistic reporting, we conducted an experimental study. A 2-between subjects experimental design was used for the multi-part study where the sample was randomised into two conditions. To investigate whether awareness of their implicit gender bias (independent variable) affects journalistic decision-making (dependent variable), half of the sample was asked to complete a Gender-Career Implicit Association Test (IAT). Afterwards, the participants proceeded with ten vignette tasks that reflected everyday journalistic decision-making processes. The vignette tasks, thereby, increased the external validity of the dependent variables' measurement compared to standard survey questions and decreased the likelihood of socially desirable answers. Subject to the experimental design, the other half of the sample was assigned to the control condition in which they only participated in the journalistic vignette task of the study (i.e., thus not being made aware of their implicit bias).

Sample Description

Hundred Indian early career and future journalists were contacted for the study of which 81 participated (response rate: 81%). The sample was determined as early career (0–4 years) journalists and future journalists who had finished their Master's in Journalism. It was assumed that a sample with recent journalism training will be more aware of ethics and biases in journalism, since that's what journalism institutions are expected to teach journalists. If this group of people performed badly on the bias test, it would also expectedly cover senior journalists who have not had any recent formal journalism education.

The top Indian journalism institute Indian Institute of Mass Communication was contacted and most of the future journalist sample was recruited from there. The entire

future journalist sample was about to join the workforce in various national newsrooms of the country. The working journalists were recruited through the researcher's personal journalism network, which then snowballed into journalists referring their colleagues for the study. All of the working journalists were full-time employees (i.e., no freelancers) working only in national English news organisations of all mediums (print, broadcast and radio). A majority of the sample was final-year journalism students (74%) and the rest were full-time journalists. The sample consisted of 38 male and 43 female journalists. Majority of the sample (74%) was born and brought up in metropolitan cities of India, while the rest came from smaller towns.

Research Design

The sample was randomised into two conditions: The IAT group ($n = 40$) and the non-IAT group ($n = 41$; i.e., the latter being a control condition). The two conditions were divided by the independent variable—i.e., awareness of implicit bias, which the IAT group was subjected to and the non-IAT group was not subjected to. Randomisation was successful with statistically insignificant differences between the two groups in terms of gender, $\chi^2(1) = 0.30$, $p = .582$, age, $\chi^2(1) = 0.72$, $p = .396$, having grown up in a smaller versus bigger city, $\chi^2(1) = .04$, $p = 0.851$, and being a student versus full-time journalist, $\chi^2(1) = 3.38$, $p = .066$. Half of the sample, primarily the student sample, performed the experiment in the premises of Indian Institute of Mass Communication with the principal investigator (PI) present. The rest of the sample, mainly the early career journalists, performed the experiment online, but with the PI virtually present through *Skype* to ensure similarity of setting between the physically present group and the online one. During the Skype session, the PI was present via video and could watch the participants taking the IAT (those that were in the IAT group) and then fill out the vignette test. The same design was observed during the in-person experiment as the PI could witness the journalists taking the IAT and taking the vignette test. The knowledge of the presence of the PI for the participants, thereby, was consistent while the PI being able to ensure that the participants wholly focus on the experiment.

Operationalisation and Key Variables

Independent Variable

The group that was *not* given the IAT was dealing with the control condition of "unawareness" of implicit gender bias. They immediately proceeded to the experimental vignette questionnaire that all participants took to measure the dependent variable. The IAT group, by contrast, participated in the Gender-career Implicit Association Test. In this test, the participants were asked to categorise items into groups as fast as they could using the I and the E keys on their keyboard (standard practice for IATs): The four groups being male, female, career and family. In the seven-part test, the participants were first asked to group these items in gender-normative manner, that is, use the E key for male and career terms like Ben, John, briefcase, office, career salary and use the I key for female and family terms like Rebecca, Emily, Julia, marriage, wedding, relatives, home, etc. In the later parts, the test reversed these groupings to the key E for male and family and key I for female and career. Depending on the time it took for people to

make these associations in gender-normative manner versus gender-incongruent manner ascertained whether an individual participant was biased or not. The participants received their personal IAT result right after their test and were told whether they had implicit bias or not. Directly afterwards, they were asked to participate in the vignette part of the study similar to the control condition.

The IAT was developed by three scientists (Greenwald, McGhee, and Schwartz 1998) and has been used to test implicit cognitive biases in several research fields. The IAT has not been applied on journalists to study their biases, which is in line with the general lack of experiments performed directly on journalists. The IAT has been widely used by social psychologists especially because of its ease of use in investigating group bias (McConnell and Leibold 2001). Studies have also emphasised the *non-fakability* factor of an IAT even on people who know what they are being tested for; hence, avoiding the social desirability factor (Steffens 2004). This specific test has been used widely for two decades, it offers more validity than any other implicit cognitive bias measure.

The IAT was used to operationalise the independent variable, which is *awareness of one's gender bias*. This awareness was induced in participants through taking the IAT and being told their result. The computer-based test subjected the participants to the task of making quick associations between gender and career, which will have primed the IAT group in thinking about these gender associations. As a manipulation check, the relationship between taking the IAT test and awareness of implicit bias while performing journalistic tasks (yes *vs.* no) was examined by the end of the experiment (i.e., after measuring the dependent variable). The relationship between these variables was significant, $\chi^2(1) = 12.79$, $p < .001$. A smaller proportion of the non-IAT group (67.5%) indicated to have been aware of their implicit gender bias when doing the vignette task compared to the IAT group (97.5%): The manipulation was successful.

Dependent Variable

The dependent variable of gender bias in journalistic reporting was measured by applying an experimental vignette methodology (EVM). The specific vignette experiment used was the *Policy Capturing and Conjoint Analysis* under which participants' implicit judgements were exposed by asking them to choose between various scenarios presented in true-to-life vignettes (Aguinis and Bradley 2014). This technique is the key method under EVM to analyse participants' implicit behaviours, which allows capturing real-time processes that the participants may not be conscious of (Aguinis and Bradley 2014). Based on the decisions people make in the vignette tasks, one can estimate how people would behave in a real-world setting in a more valid manner than using regular survey items that can be heavily influenced by socially desirable answering (Steiner, Atzmüller, and Su 2016). Support forthis experimental methodology vis-à-vis surveys is resonated in Régner et al.'s (2019) study, which examines how gender bias contributes to women's under-representation in scientific fields. They also use IAT and an experiment based methodology, while highlighting past research on the subject to be "as limited by relying on explicit questionnaire ratings in mock-hiring scenarios, thereby ignoring the potential role of implicit gender bias in the real world" (Régner et al. 2019, 1).

As discussed in the theoretical framework, gender bias majorly shows up in journalism through (a) selection bias and the accompanying underrepresentation of women as sources or experts in specialised fields like science and business, (b) through reiteration

of stereotypical images of women as caregivers, or mothers, and (c) through imposition of gender norms. By combining these dimensions of gender bias as ascertained in the litera-ture review, the vignettes either exhibited gender bias by asking respondents to select amongst different source options (female vs. male) or by vignettes that contained gender bias in terms of stereotypical information (which the participants could choose to correct or not).

This questionnaire involved ten vignettes characterising different forms of bias. Partici-pants in both conditions were informed that they were participating in an editorial efficiency study to avoid the social desirability quotient, which surveys usually struggle with (Steiner, Atzmüller, and Su 2016). The sample was informed that they have the liberty to edit the story as they deem fit and to treat the story as they would in their news-room. The vignettes in this experiment were designed as real-life scenarios that journalists face in everyday work. The ten vignettes asked journalists to make common journalistic decisions, for example, select a panel expert or a lead source, edit a headline, or select a story angle. The vignettes were designed using real-life news reports that have been characterised as gender-biased in previous content analysis studies. This helped bring a sense of reality to the whole experiment, a property that abstract survey questions nor-mally lack (Steiner, Atzmüller, and Su 2016). The real-life reportage increased the exper-imental realism of the study and, hence, enhanced external validity (Aguinis and Bradley 2014); in particular, ecological validity. At the end of the experiment, the partici-pants were debriefed about the actual scope of the experiment and thanked for their participation.

The vignettes were divided factorially, involving stereotypes as well as selection bias. According to the literature studied, there is a proven bias in source selection and expert comments with favourability towards men (Shor et al. 2015). Hence, to operationalise selection bias, in three out of ten vignettes, participants were asked to choose between two exactly same candidates in terms of their professional credentials, with the only differ-ence being their gender; a choice had to be made, and there was no option to select neither or both sources. The participants were able to identify gender by the names and the pronouns used in the fictive characters' descriptions. The answers were trans-formed into dummy variables, with 0 indicating no bias (choice for female source) and 1 indicating bias (choice for male source). Topics especially like politics, science, business and sports have been found sensitive for this bias (Kinnick 1998; Devitt 2002). Therefore, the selection scenarios were limited to these topics to garner a stronger effect. As people selected more male sources than female sources to quote, they scored higher on the measurement scale of gender bias in journalistic reporting.

The remainder of this scale was composed of vignettes targeting stereotypes in journal-istic reporting, the literature highlighted that news stories characterise women's personal-ity more than men's and focus on their clothing over their career or work (Sharda 2014; Patil 2018). Moreover, women's success is often attributed to their family and cultural support rather than their work (Patil 2018). These observations were used in making the vignettes for the stereotype factor. In the remaining seven (out of ten) vignettes, the par-ticipants were asked to edit stories that included gender stereotypes. Their decision to edit the stereotypes could expose whether they recognised these stereotypes and were willing to act (score 0; no bias). Participants could also choose to *not* edit (score 1; bias), if they felt that everything was fine.

Depending on the structure of the vignette, whether and how the participant edited the story or whom they selected for lead source or a panel decided their total bias score. For example, a participant who edited a news copy discussing a female politician's credentials solely in terms of her pregnancy: "Pregnancy plays no part in the political capability" was given a score of 0, while another participant who edited the same copy with "while. - inspite - Circulating in the media" was given a 1 since the editing was not about the bias, but about the wording of the copy. The average intercoder reliability score of recognising bias was satisfactory, Cronbach's α = .97 with a minimum of α = .94.

The total bias score was calculated on a scale running from 0 to 10. The vignettes were weighted equally. A higher score indicated higher journalistic bias(i.e., more decisions to use male sources or not to correct stereotypical reporting)and a lower score indicated a lower bias. By adding the score of each of the participant's performance on every vignette, a continuous total score variable was created which was then used to compare the two groups. The overall sample had a mean bias score of 5.84 (M = 5.84, SD = 2.25). By having ten different vignette tasks(available in the appendix)in combination with the experimental structure, a nuanced and precise measurement instrument was created to operationalise the bias journalists may show in their reporting.

Results

Exploratory Analysis and Descriptive Results of the Implicit Association Test

Before going to the actual tests of our hypotheses, we provide some more information about the outcome of the implicit association tests. Within our sample, we found that 61.0% of the IAT group showed gender bias in their test results, which ascertained that the journalists do associate family more strongly with female rather than with male, and vice versa for career (i.e., career more strongly associated with male than female). It, thus, seems that a large share of Indian journalists exhibit an implicit gender bias in the implicit association gender-career bias test, which further strengthens the need for research on ways to curb this bias from appearing in their journalistic product.

To get more insight on which journalists actually exhibit this implicit bias, alogistic regression analysis tested whether several demographic factors predicted a higher or lower likelihood of exhibiting implicit bias (score: 1) compared to not exhibiting an implicit gender bias (score: 0) in the IAT test. Table 1 shows the results. None of the independent variables had a statistically significant effect on the occurrence of implicit gender bias. Hence, gender bias is a universal phenomenon to which all journalists are susceptible. This also means H_{1a} must be rejected: Female journalists did not exhibit less implicit bias in an implicit association gender-career bias test, b = −1.04, SE = 0.74, p = .163.

Table 1. Logistic regression model predicting implicit gender bias in the IAT.

	B	SE	Odds Ratio	p
Intercept	0.45	(0.83)	1.56	0.591
Age	0.86	(0.55)	2.36	0.119
Female	−1.04	(0.74)	0.35	0.163
City	−0.39	(0.81)	0.68	0.634
Student vs. Professional	1.45	(1.21)	4.24	0.232

Note. Cells contain unstandardised coefficients (b) with standard errors (SE) in parentheses, odds ratios (O.R.) and probabilities (p).

Explicit Bias in in Journalists' Reporting

The Role of Gender

Hypothesis H_{1b} predicted that female journalists would produce less gender-biased work compared to their male counterparts. An independent-samples t-test was conducted to compare the journalistic bias score in the vignette test between the female and male journalists. No significant difference emerged between the journalistic bias scores for the male journalists ($M = 5.68$, $SD = 1.96$) and the female journalists ($M = 5.98$, $SD = 2.49$), $t(79) = -0.58$, $p = .562$. H_{1b}, therefore, should be rejected. In the Discussion, we reflect further upon the lack of difference between the bias of female and male reporters.

The Role of Awareness

The main hypothesis investigated whether journalists who are made aware of their implicit gender biases will make less gender-biased journalistic decisions when compared to the control group that was not made aware of their implicit biases. Strong support was found for Hypothesis 2 as a negative association was yielded between being randomly assigned to the experimental IAT condition (versus the control condition) and biases in journalistic decision making.

An independent samples t-test showed that the respondents who participated in the IAT and were then made aware of their biases completed the vignette task with fewer journalistic decisions that were identified as being gender-biased ($M = 5.15$, $SD = 2.44$) than the control condition without IAT activities ($M = 6.55$, $SD = 1.79$), $t(79) = 2.94$, $p = .004$. Figure 1 visualises the difference in means: It shows that the control group made significantly more gender-biased decisions than the group that was made aware of their bias with the IAT. Furthermore, Cohen's effect size value ($d = .65$) shows that this is a strong
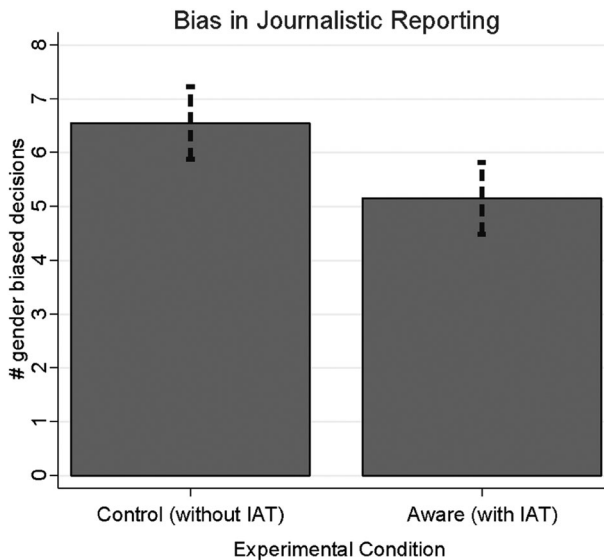

Figure 1. The mean number of journalistic decisions that are identified as being gender biased for the control group and the experimental group that was made aware their implicit bias (with 95% confidence interval).

effect, which suggests that the IAT proves to be a strong antidote to gender bias in actual journalistic reporting. Thus, evidence is presented in line with H_2. Results are robust and do not change when controlling for gender, age, the place where one had grown up (small vs. big city), and occupation (student vs. professional).

Discussion

This study supports three conclusions. First, journalists carry implicit gender biases. Second, these implicit biases are *not* less prominent among female journalists than among male ones. Third and most importantly, on being made aware of these implicit biases, journalists produce less biased work.

While the first conclusion seems fairly obvious, it had not been tested in the past. The current study shows that more than sixty percent of the (future) Indian journalists showed gender bias in IAT test results, which ascertained that these journalists do associate family with female and career with male more strongly than vice versa. Arguably, this is an indication that Indian journalists have a general tendency to think in terms of gender stereotypes. This result also questions the normative value attached to journalists and journalism. Given the ethical norms that journalists are bound to, they are expected to be objective and free of biases (Boyer 1981). Yet, given the high percentage of journalists in this study who showed implicit bias in the gender-career IAT, a conclusion can be drawn that these professional norms and ethics have little impact on gender associations, at least on the Indian journalists in this study. This study locates, discloses and refines the normative assumptions of a "bias-free" journalist, often used by media researchers to justify the importance of their findings based on normative grounds (Althaus 2012).

Future research is needed to generalise these results in countries that differ with regards to female rights and gender equality. As explained earlier in the manuscript, India has historically proven to be a difficult country for women in every stage of their lives. For example, a comparably low percentage of women (23.6%) aged 15 and above participates in the current labour force (Catalyst 2019). It would be interesting to see the results of this study in more gender-equitable states, such as the Scandinavian countries (World Economic Forum 2017). Journalists may either have less implicit gender bias in these countries and the IAT may, therefore, produce less of an effect, yet alternatively these journalists may also be more willing to correct their bias and therefore respond more strongly.

The second conclusion exposes the strength of the problem by disputing previous studies, which claimed that gender affects journalistic gender bias. According to the literature surrounding the theory of Groupthink discussed in our theoretical framework women were expected to show less gender bias in their journalistic work than men (Hanusch and Nölleke 2018; Devitt 2002). However, the results of the current study are not in line with these findings. Contrary to the theoretical assumption that women would be less susceptible to Groupthink and homophily compared to men (Artwick 2013; Weaver and Wilhoit 1996; Devitt 2002), the female journalists were as biased in their journalistic decisions as the male journalists. In the context of India, this finding can be explained through the patriarchal nature of the society, in which both men and women reside (Ahmad et al. 2004). This indicates that while women are the major victim of gender bias, they also seem to be complicit in it. Moreover, these results signify that journalists are susceptible to journalistic biases, despite their gender. Hence, the current study disproves the

suggestion that the solution to journalistic gender bias is to fill newsrooms with women, something suggested by prior research (Desmond and Danilewicz 2010). So what is the solution?

Silver Lining

The study results offer a solution to this drawback in journalistic decision making. The remarkably strong difference between the journalistic bias scores of the group made aware of their implicit biases versus the unaware group, highlights the role of *awareness* in inhibiting biases from seeping into the journalist's work. Journalists who were made aware of their implicit gender bias made efforts to overcome this by actively taking biased decisions out of their journalistic work. The unaware journalists overlooked these biases more frequently and let them persist in their journalistic product.

This result adds to our hypothesis of awareness being the key variable in decreasing journalistic gender bias. Corresponding to the theory discussed and the empirical data presented, awareness seems to be one answer for avoiding journalistic gender bias. However, due to the negativity attached to the word "bias," most people assert themselves as not being biased and try to suppress or not acknowledge themselves as biased (Stocking and Gross 1989). This is counterproductive as suppressing these biases can lead to an increase in their prevalence (Boscardin 2015). It is necessary to acknowledge this implicit response, since it is critical to objective decision making, especially for those whose work involves the principles of fairness and justice (Gladwell 2007). Hence, to make journalists acknowledge these implicit responses to benefit their reporting, awareness must be introduced prominently in their education but also be reintroduced to journalists throughout their careers.

By including self-awareness exercises in journalism training and awareness workshops in newsrooms, journalists can self-monitor and remind themselves of these natural pitfalls they need to actively avoid. Studies have previously ascertained that a conscious acknowledgement of implicit biases can have a positive effect in curbing these biases rather than ignoring and suppressing them, which proves to be counterproductive (Boscardin 2015). Adding IAT tests to the journalistic curriculum and introducing explicit strategies like cognitive restructuring can reduce the stress of a busy newsroom and mitigate the bias from showing up in journalistic work.

Conclusion

Media researchers have rarely experimentally investigated the reasons for journalistic biases in the past. While there have been many studies explicating the presence of different types of bias in media reports (i.e., using content analysis), a thorough examination of the manifestation of the biases has been missing. By pointing out unawareness of implicit bias as a cause of journalistic bias, this study fills a gap in the literature but also introduces a technique to bring more objectivity into journalism.

Just as any empirical study, the current investigation has limitations. While the researchers took measures to maintain both external and internal validity by drawing the experiment from previously established techniques, not everything could possibly be controlled for. For example, the experiment could be impacted by our own biases. In

developing the experiment, what we considered to be gender biased, might be an objective way of reporting in the eyes of the participants. Even though we attempted to control for this by using published news stories that were pegged for bias, it cannot be established that the participants saw them in the same light. Also, the sample was selected on the assumption that new journalists should be more aware of implicit biases given their recent journalism training. However, maybe senior journalists, by the virtue of working in the industry for longer, could be more critical of such biases than early-career journalists. Other than the career age, increasing the sample size for the experiment could also result in stronger inference. Considering the strong effect size ($d = .65$) our sample size was sufficient to reveal significant results; yet, future research would benefit from larger and more representative samples of working journalists. Additionally, future research might want to investigate the long-term effects of (repeated) exposure to information that makes them aware of their implicit gender bias: Does this even further reduce the bias? Finally, the experimental method assured a high internal validity of our findings. However, additional studies using different methods will be necessary to acquire more in-depth insights why and how journalists responded to the IAT (qualitative interviews) or how prevalent gender bias is in the Indian journalism context more generally (representative survey).

This study pinpoints the prevalence of journalistic gender bias, while ascertaining the potential of washing these biases out of journalistic products. The results indicate that to avoid biased work, journalists should be made conscious of implicit biases. With a more active understanding of these cognitive failures which all humans are subject to, journalists can make conscious efforts to double check their work to avoid unintended biases from seeping in. Small awareness-raising measures can help improve the objectivity in news media. In order to restore faith in journalism, these solutions ought to be considered.

Note

1. As scholars are not free of biases (Régner et al. 2019), it is important to disclose the identity of both authors of this manuscript. The first author (Priyanka Kalra) identifies as a female with higher education in journalism and professional journalism experience; the second author (Mark Boukes) identifies as a male and is a communications and media researcher.

Disclosure Statement

No potential conflict of interest was reported by the author(s).

ORCID

Mark Boukes http://orcid.org/0000-0002-3377-6281

References

Aguinis, Herman, and Kyle J. Bradley. 2014. "Best Practice Recommendations for Designing and Implementing Experimental Vignette Methodology Studies." *Organizational Research Methods* 17 (4): 351–371. doi:10.1177/1094428114547952.

Ahmad, Farah, Sarah Riaz, Paula Barata, and Donna E. Stewart. 2004. "Patriarchal Beliefs and Perceptions of Abuse Among South Asian Immigrant Women." *Violence Against Women* 10 (3): 262–282. doi:10.1177/1077801203256000.

Althaus, Scott L. 2012. "What's Good and Bad in Political Communication Research? Normative Standards for Evaluating Media and Citizen Performance." *The SAGE Handbook of Political Communication* 2012: 97–112.

Artwick, Claudette G. 2013. "Reporters on Twitter: Product or Service?" *Digital Journalism* 1 (2): 212–228. doi:10.1080/21670811.2012.744555.

Bakker, Bert N., Matthijs Rooduijn, and Gijs Schumacher. 2016. "The Psychological Roots of Populist Voting: Evidence From the United States, the Netherlands and Germany." *European Journal of Political Research* 55 (2): 302–320. doi:10.1111/1475-6765.12121.

Bennett, Mark W. 2010. "Unraveling the Gordian Knot of Implicit Bias in Jury Selection: The Problems of Judge-Dominated Voir Dire, the Failed Promise of Batson, and Proposed Solutions." *Harvard Law & Policy Review* 4: 149.

Boscardin, Christy K. 2015. "Reducing Implicit Bias Through Curricular Interventions." *Journal of General Internal Medicine* 30: 1726–1728. doi:10.1007/s11606-015-3496-y.

Boyer, John H. 1981. "How Editors View Objectivity." *Journalism Quarterly* 58 (1): 24–28.

Caprara, Gian V., and Philip G. Zimbardo. 2004. "Personalizing Politics. A Congruency Model of Political Preference." *The American Psychologist* 59 (7): 581–594. doi:10.1037/0003-066X.59.7.581.

Catalyst. 2019. "*Women in the Workforce – India: Quick Take*." https://www.catalyst.org/research/women-in-the-workforce-india/.

Christian, Sue. 2013. "Cognitive Biases and Errors as Cause—and Journalistic Best Practices as Effect." *Journal of Mass Media Ethics* 28 (3): 160–174. doi:10.1080/08900523.2013.794674.

Clark, C. C. 1972. "Race, Identification and Television Violence." In *Television and Social Behavior*. Vol. 5. Television's Effects: Further Exploration, edited by G. A. Comstock, E. A. Rubenstein, and J. P. Murray. Washington, DC: U.S. Government Printing Office.

Cottle, Simon. 2007. "Ethnography and News Production: New(s) Developments in the Field." *Sociology Compass* 1: 1–16. doi:10.1111/j.1751-9020.2007.00002.x.

Croskerry, Pat, Geeta Singhal, and Sylvia Mamede. 2013. "Cognitive Debiasing 2: Impediments to and Strategies for Change." *BMJ Quality & Safety* 22 (Suppl. 2): ii65–ii72. doi:10.1136/bmjqs-2012-001713.

De Martino, Benedetto, Dharshan Kumaran, Ben Seymour, and Raymond J. Dolan. 2006. "Frames, Biases, and Rational Decision-Making in the Human Brain." *Science* 313 (5787): 684–687. doi:10.1126/science.1128356.

Desmond, Roger, and Anna Danilewicz. 2010. "Women are on, but not in, the News: Gender Roles in Local Television News." *Sex Roles* 62: 822–829. doi:10.1007/s11199-009-9686-5.

Devitt, James. 2002. "Framing Gender on the Campaign Trail: Female Gubernatorial Candidates and the Press." *Journalism & Mass Communication Quarterly* 79 (2): 445–463. doi:10.1177/107769900207900212.

Domingo, David. 2008. "Interactivity in the Daily Routines of Online Newsrooms: Dealing with an Uncomfortable Myth." *Journal of Computer-Mediated Communication* 13 (3): 680–704. doi:10.1111/j.1083-6101.2008.00415.x.

Donsbach, Wolfgang. 2004. "Psychology of News Decisions Factors Behind Journalists' Professional Behavior." *SAGE Publications* 5 (2): 131–157. doi:10.1177/146488490452002.

Gerbner, George. 1984. "Political Functions of Television Viewing: A Cultivation Analysis." In *In Cultural Indicators: An International Symposium*, edited by Rosengren Karl Erik, Melischek Gabriele, and James Stappers, 329–343. Vienna: Akademie der Wissenschaften.

Gerbner, George, Larry Gross, Michael Morgan, and Nancy Signorielli. 1986. "Living with Television: The Dynamics of the Cultivation Process." *Perspectives on Media Effects*, 17–40. doi:10.1086/268826.

Gladwell, Malcolm. 2007. *Blink: The Power of Thinking Without Thinking*. New York City: Back Bay Books.

Global Media Monitoring Project. 2015. *Country Reports*. http://whomakesthenews.org/gmmp-2015.

Green, Alexander R., Dana R. Carney, Daniel J. Pallin, Long H. Ngo, Kristal L. Raymond, Lisa I. Iezzoni, and Mahzarin R. Banaji. 2007. "Implicit Bias Among Physicians and its Prediction of Thrombolysis Decisions for Black and White Patients." *Journal of General Internal Medicine* 22 (9): 1231–1238. doi:10.1007%2Fs11606-007-0258-5.

Greenwald, A. G., D. E. McGhee, and J. L. Schwartz. 1998. "Measuring Individual Differences in Implicit Cognition: The Implicit Association Test." *Journal of Personality and Social Psychology* 74 (6): 1464–1480. doi:10.1037/0022-3514.74.6.1464.

Hanusch, Folker, and Daniel Nölleke. 2018. "Journalistic Homophily on Social Media." *Digital Journalism* 7 (1): 22–44. doi:10.1080/21670811.2018.1436977.

Hilgartner, Stephen, and Charles L. Bosk. 1988. "The Rise and Fall of Social Problems: A Public Arenas Model." *American Journal of Sociology* 94 (1): 53–78. doi:10.1086/228951.

Janis, Irving L. 1972. *Victims of Groupthink: A Psychological Study of Foreign-Policy Decisions and Fiascoes*. Boston, MA: Houghton Mifflin.

Kinnick, Katherine N. 1998. "Gender Bias in Newspaper Profiles of 1996 Olympic Athletes: A Content Analysis of Five Major Dailies." *Women's Studies in Communication* 21: 212–237. doi:10.1080/07491409.1998.10162557.

Lasorsa, Dominic, and Jia Dai. 2007. "When News Reporters Deceive: The Production of Stereotypes." *Journalism & Mass Communication Quarterly* 84 (2): 281–298. doi:10.1177/107769900708400206.

Malhotra, Anju, Reeve Vanneman, and Sunita Kishor. 1995. "Fertility, Dimensions of Patriarchy, and Development in India." *Population and Development Review* 21 (2): 281–305. doi:10.2307/2137495.

"Media and Gender in the Asia Pacific Region." *The International Federation of Journalists (Asia-Pacific)*. March 2015. http://www.ifj.org/uploads/media/INDIA.pdf.

McCarthy, John D., Clark McPhail, and Jackie Smith. 1996. "Images of Protest: Dimensions of Selection Bias in Media Coverage of Washington Demonstrations, 1982 and 1991." *American Sociological Review* 61: 478–499. doi:10.2307/2096360.

McConnell, Allen R., and Jill M. Leibold. 2001. "Relations Among the Implicit Association Test, Discriminatory Behavior, and Explicit Measures of Racial Attitudes." *Journal of Experimental Social Psychology* 37 (5): 435–442. doi:10.1006/jesp.2000.1470.

McManus, John. 1995. "A Market-Based Model of News Production." *Communication Theory* 5 (4): 301–338. doi:10.1111/j.1468-2885.1995.tb00113.x.

Nicolaou, Anna, and Chris Giles. 2017. "Public Trust in Media at All Time Low, Research Shows." *Financial Times*. https://www.ft.com/content/fa332f58-d9bf-11e6-944b-e7eb37a6aa8e.

Norris, Pippa. 1996. "Does Television Erode Social Capital? A Reply to Putnam." *PS: Political Science & Politics* 29 (3): 474–480. doi:10.2307/420827.

Patil, Reshma. 2018. "Breaking News and Missing Views." *University of Oxford 1* (2): 1–17.

Pavlik, John V. 2013. "Innovation and the Future of Journalism." *Digital Journalism* 1 (2): 181–193. doi:10.1080/21670811.2012.756666.

Rachlinski, Jeffrey J., Sheri L. Johnson, Andrew J. Wistrich, and Chris Guthrie. 2008. "Does Unconscious Racial Bias Affect Trial Judges." *Notre Dame Law Review* 84: 1195. doi:10.2139/ssrn.999490.

Rajan, S. I., S. Sudha, and P. Mohanachandran. 2000. "Fertility Decline and Worsening Gender Bias in India: Is Kerala no Longer an Exception?" *Development and Change* 31 (5): 1085–1092. doi:10.1111/1467-7660.00190.

Reese, Stephen D., and Pamela J. Shoemaker. 2016. "A Media Sociology for the Networked Public Sphere: The Hierarchy of Influences Model." *Mass Communication and Society* 19 (4): 389–410. doi:10.1080/15205436.2016.1174268.

Régner, Isabelle, Catherine Thinus-Blanc, Agnes Netter, Toni Schmader, and Pascual Huguet. 2019. "Committees with Implicit Biases Promote Fewer Women When They do not Believe Gender Bias Exists." *Nature Human Behaviour* 3 (11): 1–9. doi:10.1038/s41562-019-0686-3.

Ross, Karen. 2007. "The Journalist, the Housewife, the Citizen and the Press: Women and Men as Sources in Local News Narratives." *Journalism* 8 (4): 449–473. doi:10.1177/1464884907078659.

Sen, Jia, Thomas Lansdall-Welfare, Saatviga Sudhahar, Cynthia Carter, and Nello Cristianini. 2016. "Women are Seen More Than Heard in Online Newspapers." *PLoS ONE* 11 (2): e0148434. doi:10.1371/journal.pone.0148434.

Sharda, Adhikari. 2014. "Media and Gender Stereotyping: The Need for Media Literacy." *International Research Journal of Social Sciences* 3 (8): 43–49.

Shor, Eran, A. van de Rijt, Arnout Miltsov, Vivek Kulkarni, and Steven Skiena. 2015. "A Paper Ceiling: Explaining the Persistent Underrepresentation of Women in Printed News." *American Sociological Review* 80 (5): 960–984. doi:10.1177/0003122415596999.

Smith, Kevin B. 1997. "When All's Fair: Signs of Parity in Media Coverage of Female Candidates." *Political Communication* 14 (1): 71–82. doi:10.1080/105846097199542.

Steffens, Melanie C. 2004. "Is the Implicit Association Test Immune to Faking?" *Experimental Psychology* 51 (3): 165–179. doi:10.1027/1618-3169.51.3.165.

Steiner, Peter M., Christiane Atzmüller, and Dan Su. 2016. "Designing Valid and Reliable Vignette Experiments for Survey Research: A Case Study on the Fair Gender Income Gap." *Journal of Methods and Measurement in the Social Sciences* 7 (2): 52–94.

Stocking, Holly S., and Paget H. Gross. 1989. *How Do Journalists Think? A Proposal for the Study of Cognitive Bias in Newsmaking*. Bloomington: ERIC Clearinghouse on Reading and Communication Skills.

Trumbo, Craig. W., Sharon Dunwoody, and Robert Griffin. 1998. "Journalists, Cognition, and the Presentation of an Epidemiologic Study." *Science Communication* 19 (3): 238–265. doi:10.1177/107554709801900300.

Van Aelst, Peter, and Rens Vliegenthart. 2013. "Studying the Tango. An Analysis of Parliamentary Questions and Press Coverage in the Netherlands." *Journalism Studies* 15 (4): 392–410. doi:10.1080/1461670X.2013.831228.

Vidmar, Neil. 2011. "The Psychology of Trial Judging." *Current Directions in Psychological Science* 20 (1): 58–62. doi:10.1177/0963721410397283.

Vishwanath, Jyothi, and Srinivas C. Palakonda. 2011. "Patriarchal Ideology of Honour and Honour Crimes in India." *International Journal of Criminal Justice Sciences* 6 (1/2): 386.

Weaver, David H., and Cleveland G. Wilhoit. 1996. *The American Journalist in the 1990s: US News People at the End of an Era*. Mahwah, NJ: Lawrence Erlbaum.

Whitlow, Scott S. 1977. "How Male and Female Gatekeepers Respond to News Stories of Women." *Journalism Quarterly* 54 (3): 573–609. doi:10.1177/107769907705400318.

Wood, Julia T. 1994. "Gendered Media: The Influence of Media on Views of Gender." *Gendered Lives: Communication, Gender and Culture* 9: 231–244.

World Economic Forum. 2017. *The Global Gender Gap Report 2017: World Economic Forum*. Geneva: World Economic Forum.

Yadav, Radha, and Ashu Khanna. 2014. "Existence of Glass Ceiling in India." *Research Journal of Indian Cultural, Social & Philosophical Stream* 142–148.

York, Catherin. 2017, September 18. "Women Dominate Journalism Schools, but Newsrooms are Still a Different Story." *Poynter*. https://www.poynter.org/news/women-dominate-journalism-schools-newsrooms-are-still-different-story.