

QUERYING THE GENDER DYNAMICS OF INTERRUPTIONS AT AUSTRALIAN ORAL ARGUMENT

TONJA JACOBI,* ZOË ROBINSON,** & PATRICK LESLIE***

In a recent study, ‘Female Judges, Interrupted: A Study of Interruption Behaviour during Oral Argument in the High Court of Australia’, Amelia Loughland presents findings that interruptions during oral argument in the High Court of Australia show gendered patterns, with female justices interrupted more often than male justices.¹ Loughland finds that over 90% of interruptions were committed by male advocates, with female advocates very seldom interrupting.² The study replicates findings by one of us that female justices at United States (‘US’) Supreme Court oral arguments are interrupted between two and three times as often as the male justices,³ by both male justices and male advocates; in contrast, female advocates interruption rates were undifferentiable from zero.⁴

Examining gender dynamics in the High Court of Australia is important for many reasons. Given the importance of oral arguments in the High Court’s decision-making process,⁵ the opportunity for a justice to be heard at oral argument

* Stanford Clinton and Zylpha Kilbride Clinton Research Professor, Northwestern University Pritzker School of Law.

** Professor of Political Science, School of Politics and International Relations, Australian National University.

*** Lecturer and Research Fellow, School of Politics and International Relations, Australian National University.

We are grateful for the financial support of the Australian National University Future Fellowship Scheme. Thanks to Russell Smyth for helpful comments. We thank Benjamin Durkin, Kate Johnston, Matthew Putt, Jonathan Tjandra and Indira Wrigley for their outstanding research assistance.

1 Amelia Loughland, ‘Female Judges, Interrupted: A Study of Interruption Behaviour during Oral Argument in the High Court of Australia’ (2019) 43(2) *Melbourne University Law Review* 822, 826.

2 Ibid 825 n 9. See also Russell Smyth and Vinod Mishra, ‘Barrister Gender and Litigant Success in the High Court of Australia’ (2014) 49(1) *Australian Journal of Political Science* 1, 13 (finding that when the appellant is represented by a female advocate in the High Court of Australia, the appellant is between 38.3% and 42.3% less likely to receive the vote of a justice in the majority).

3 Tonja Jacobi and Dylan Schweers, ‘Justice Interrupted: The Effect of Gender, Ideology and Seniority at Supreme Court Oral Arguments’ (2017) 103(7) *Virginia Law Review* 1379, 1440.

4 Ibid 1437.

5 See, eg, Michael Kirby, ‘Rules of Appellate Advocacy: An Australian Perspective’ (1999) 1(2) *Journal of Appellate Practice and Process* 227, 241 (‘[Orality] was the tradition that we all originally inherited from England’); Anthony Mason, ‘The Role of Counsel and Appellate Advocacy’ (1984) 58(10) *Australian Law Journal* 537, 539 (‘The Court expects the oral argument, conforming to the written outline of submissions, to be presented succinctly, and in a lengthy case ... will require the presentation of detailed written submissions’) (citations omitted).

is particularly important.⁶ If women are being systematically interrupted at oral argument, that will affect their relative degree of influence on the Court. As others have noted, the discussions at oral argument serve many purposes, including: focusing the justices' minds,⁷ helping them gather information to reach decisions as close as possible to their desired outcomes,⁸ helping them make informed decisions,⁹ and providing an opportunity to communicate and persuade their colleagues.¹⁰ As Jacobi and Schweers explained:

When a justice is interrupted during her questioning, her point is often left unaddressed. Without being able to ask her question, and without receiving an answer, the interruptee may be inhibited from using this point to persuade her colleagues ... At the very least, a woman's unequal opportunity to ask questions and complete statements during oral arguments could make it far more difficult for women to gather their thoughts, engage with the advocates, and clarify points that were disputed in the briefs.¹¹

Showing that the same dynamics exist in Australia's apex court as in the US Supreme Court contributes to the mounting evidence that even women in high positions of power remain subject to gendered expectations and gendered behaviours,¹² and counters some studies suggesting that positions of authority diminish gender effects.¹³ As some of the intense media response to the initial US

6 Oral arguments have been shown to influence outcomes in the American context also: see Timothy R Johnson, Paul J Wahlbeck and James F Spriggs II, 'The Influence of Oral Arguments on the US Supreme Court' (2006) 100(1) *American Political Science Review* 99, 107–8; Timothy R Johnson, 'Information, Oral Arguments, and Supreme Court Decision Making' (2001) 29(4) *American Politics Research* 331.

7 See, eg, David M O'Brien, *Storm Center: The Supreme Court in American Politics* (W W Norton, 7th ed, 2005) 241.

8 See, eg, Stephen L Wasby, Anthony A D'Amato and Rosemary Mettrailer, 'The Functions of Oral Argument in the US Supreme Court' (1976) 62(4) *Quarterly Journal of Speech* 410, 418–19.

9 See, eg, Barry Sullivan and Megan Canty, 'Interruptions in Search of a Purpose: Oral Argument in the Supreme Court, October Terms 1958–60 and 2010–12' [2015] (5) *Utah Law Review* 1005, 1025–7.

10 Ibid.

11 Jacobi and Schweers (n 3) 1483–4.

12 See, eg, Lyn Kathlene, 'Power and Influence in State Legislative Policymaking: The Interaction of Gender and Position in Committee Hearing Debates' (1994) 88(3) *American Political Science Review* 560, 573 (showing that interruption rates are gendered in the state legislative context, despite the relatively powerful position of female state legislators, and finding that as the proportion of women increases in a legislative body, men become more verbally aggressive with interruptions and tend to control the hearings); Hanna Bäck, Marc Debus and Jochen Müller, 'Who Takes the Parliamentary Floor? The Role of Gender in Speech-Making in the Swedish Riksdag' (2014) 67(3) *Political Research Quarterly* 504, 514 (arguing that women are expected to focus on 'softer' policy issues that receive less debating time, leading to their marginalisation in legislative debate); Hanna Bäck and Marc Debus, 'When Do Women Speak? A Comparative Analysis of the Role of Gender in Legislative Debates' (2019) 67(3) *Political Studies* 576 (using role incongruity theory to argue that 'women take the parliamentary floor less often because of the gender stereotypes that are likely to guide the behaviour of party representatives': at 576).

13 See, eg, William M O'Barr and Bowman K Atkins, "'Women's Language' or 'Powerless Language'" in Sally McConnell-Ginet, Ruth Borker and Nelly Furman (eds), *Women and Language in Literature and Society* (Praeger, 1980) 93, 94 (arguing that women are interrupted more because of their position of relative powerlessness in society at large); Janet E Ainsworth, 'In a Different Register: The Pragmatics of Powerlessness in Police Interrogation' (1993) 103(2) *Yale Law Journal* 259, 284 ('Women's language developed as a way of surviving and even flourishing without control over economic, physical, or social

study on gendered interruptions expressed the matter: ‘It Doesn’t Get Better – Women Supreme Court Justices Get Interrupted Too’.¹⁴ If this phenomenon of gendered engagement with apex judges is international, then this adds to the growing body of evidence of institutionalised and robust gender discrimination. Further, evidence of gendered behaviour on the High Court may demonstrate that gendered dynamics transcend differences in institutional design. The Australian and American apex courts are different in many ways: the High Court’s oral argument last for days, rather than the single hour of Supreme Court arguments; the High Court sits with panels that vary in both size and personnel, ranging from between three and seven justices, whereas the US Supreme Court always sits with its full complement of nine justices; and the two Chief Justices have markedly different powers.¹⁵ If, despite these institutional differences, the same gender dynamic continues to rear its head, then the problem is cross-institutional as well as international.

Loughland describes her findings as evidence of ‘an embedded bias towards male judicial authority’ on the High Court of Australia.¹⁶ She proposes solutions that include implicit bias training and, more controversially, equipping ‘male judges as agents of change’, suggesting that male Chief Justices may be preferable to female Chief Justices, given ‘[t]he challenges that would face a female Chief Justice in addressing gendered interruption behaviour’.¹⁷ Understandably then, Loughland’s findings and her conclusions have garnered significant attention amongst commentators and the legal community.¹⁸

reality’: at 284, quoting Robin T Lakoff, *Talking Power: The Politics of Language in Our Lives* (BasicBooks, 1990) 205).

- 14 Kathryn Rubino, ‘It Doesn’t Get Better: Women Supreme Court Justices Get Interrupted Too’, *Above the Law* (Blog Post, 6 April 2017) <<http://abovethelaw.com/2017/04/it-doesnt-get-better-women-supreme-court-justices-get-interrupted-too/>>. Similarly, Prachi Gupta, ‘Even Ruth Bader Ginsburg Gets Interrupted by Men’, *Jezebel* (Blog Post, 5 April 2017) <<https://theslot.jezebel.com/even-ruth-bader-ginsburg-gets-interrupted-by-men-1794051337>>. The study itself concluded: ‘Our findings that female Justices are consistently interrupted more than their male counterparts in this setting show that gender dynamics are robust enough to persist even in the face of high levels of power achieved by women’: Jacobi and Schweers (n 3) 1484.
- 15 On the institutional difference in oral argument between Australia and the US see Tonja Jacobi, Zoë Robinson and Patrick Leslie, ‘Comparative Oral Argument: What Australia Can Teach Us about the US Supreme Court (and Vice-Versa)’ (Working Paper, 5 May 2020) (‘Comparative Oral Argument’), available from the authors. See also David Bennett, ‘Argument Before the Court’ in Michael Coper, Tony Blackshield and George Williams (eds), *The Oxford Companion to the High Court of Australia* (Oxford University Press, 2001) 31; Sir Anthony Mason, ‘Chief Justice, Role of’ in Michael Coper, Tony Blackshield and George Williams (eds), *The Oxford Companion to the High Court of Australia* (Oxford University Press, 2001) 91; Benjamin Alarie and Andrew J Green, *Commitment and Cooperation On High Courts: A Cross-Country Examination Of Institutional Constraints On Judges* (Oxford University Press, 2017).
- 16 Loughland (n 1) 822.
- 17 Ibid 844.
- 18 See, eg, Julia Hare, ‘Girl Interrupted: Talking over the Top of Female Judges’, *BroadAgenda* (Blog Post, 12 February 2020) <<http://www.broadagenda.com.au/home/girl-interrupted-if-it-happens-to-high-court-judges-rude/>>; Michaela Whitburn, ‘Female High Court Judges “Far More Likely” to Be Interrupted than Male Peers: Study’, *The Sydney Morning Herald* (online, 5 February 2020) <<https://www.smh.com.au/national/female-high-court-judges-far-more-likely-to-be-interrupted-than->

Loughland's study has a limited sample size of 45 cases across two and a half Terms of the Court. In this comment, we explore whether Loughland's conclusions hold when looking beyond her sample, and examine 25 years of oral argument in the High Court, from 1995–2019. We also employ more formal statistical methods to test whether there is a gender effect at High Court oral argument, or whether the effects that Loughland identifies may be a product of other factors relevant to interruption behaviour, such as experience, the length of oral argument, the amount that a justice speaks, and the role of the Chief Justice. Contrary to Loughland, we find that there is no bias against female High Court justices;¹⁹ we also find no support for the claim that male Chief Justices reduce the rate of interruption of female justices. We show this first using simple graphs, illustrating that the small sample that Loughland examined is not representative of the overall trends occurring at High Court oral argument. Finally, we use multivariate regression to more formally test our findings.

I THE FINDINGS AND THE BASIS FOR THE CLAIM OF THE GENDER EFFECT AT THE HIGH COURT

To determine whether female justices on the High Court of Australia are interrupted more than their male counterparts, Loughland hand codes transcripts from oral arguments where the Court sat *en banc*, from June 2015 until the end of 2017, for a total of 45 cases.²⁰ Loughland finds that in the period 2015–16, collectively the three female justices received 52% of interruptions, and in 2017 the three female justices received 69% of the interruptions.²¹ Further, she determines that over 90% of those interruptions were committed by male advocates.²² Loughland also notes that 'the Chief Justice in both periods received the highest number of interruptions ... [suggesting] that, because the Chief Justice intervenes to regulate oral argument in their "chairperson" capacity, they have a higher chance of being interrupted by advocates'.²³ Excluding the Chief Justice as 'atypical', Loughland concludes that in the period 2015–16, the three female

male-peers-study-20200204-p53xjw.html>; 'Overcoming Disproportionate Interruptions Faced by Female Judges', *The Lawyers Weekly Show* (Lawyers Weekly, 6 March 2020) <<https://www.lawyersweekly.com.au/podcast/27645-overcoming-disproportionate-interruptions-faced-by-female-judges>>.

19 Note however that Loughland examines only *en banc* cases where all seven justices sit on the panel, which are the exception at the High Court, accounting for only 33% of cases between 1995 and 2019. In a working paper, we find that panel size is an important consideration for advocate and justice behaviour at oral argument; we do find evidence of gendered interruption effects when looking beyond seven-justice panels: see Jacobi, Robinson and Leslie, 'Comparative Oral Argument' (n 15) 69, 73, 80–1. However, in order to accurately and directly respond to Loughland's claims, we present findings only relating to seven-justice panels.

20 Loughland (n 1) 825.

21 Ibid 826.

22 Ibid 825 n 9.

23 Ibid 827–8.

puisne justices received 71% of interruptions and in 2017 the two female puisne justices received 56% of interruptions.²⁴

Loughland considers possible explanations for her finding that male advocates interrupt female justices more than male justices. She considers and disregards volubility as an explanator for interruptions, presenting the percentage of speaking time for each justice and concluding that there is no ‘correlation between female justices’ volubility and their higher rate of interruption’.²⁵ This is contrary to robust findings in US literature showing that the more justices speak, the more they are likely to be interrupted, which makes sense: increased speaking time increases exposure to potential interruption.²⁶ Loughland also rejects seniority and the female register (ie, polite language) as factors that might explain the disparities she found.²⁷ Once again, this conclusion is contrary to that established in the American literature.²⁸ Loughland specifies that ‘[i]f ... we eliminate the judges’ own behaviour, the remaining explanation for these interruption patterns is that advocates perpetuate gendered norms during oral argument’.²⁹ She endeavours to validate this claim by classifying each interruption as either neutral, affirmatory, clarifying, or pre-emptive, and determines that female justices suffered more pre-emptive interruptions than male justices, concluding that is evidence of gendered patterns in oral argument.³⁰ Loughland concludes by recommending two solutions: greater regulation of oral argument by the Chief Justice and training on unconscious bias for male advocates.³¹

II HIGH COURT ORAL ARGUMENT OVER A QUARTER OF A CENTURY

Examining a small sample of cases can be a practical solution if gathering data is resource intensive, but it is vital that the sample is representative of the whole. For instance, looking only at cases in 2015–17 may allow inferences about the contemporary court, but if norms change over time, or different Chief Justices

24 Ibid 828.

25 Ibid 829.

26 Tonja Jacobi and Kyle Rozema, ‘Judicial Conflicts and Voting Agreement: Evidence from Interruptions at Oral Argument’ (2018) 59(7) *Boston College Law Review* 2259, 2297–8, 2300 (showing that ‘exposure’ through talking more is a significant predictor of being interrupted). See also Jacobi and Schweers (n 3) 1437 (showing that the claim that female Supreme Court justices are interrupted more cannot be explained by the inaccurate trope that women talk more).

27 Loughland (n 1) 830–3.

28 See Jacobi and Schweers (n 3) 1442 (showing that female justices learn to speak less politely and more like men over their tenure on the Court), 1444 (showing that seniority has a statistically significant impact on interruption rates).

29 Loughland (n 1) 833.

30 Ibid 834–6.

31 Ibid 844–5.

conduct oral arguments differently – as Chief Justices themselves say they do³² – then generalising from only 45 cases could lead to misleading results.

Jacobi and Schweers' foundational US study on the impact of gender at oral argument first closely examines three Terms of the US Supreme Court, for a total of 156 cases, with 422 interruptions.³³ The study hand codes for issues that are hard to test in large databases, such as how often a justice defers to another justice who interrupted him or her. They find not only that men are more likely to interrupt women, but they are then less likely to acknowledge the fact or to cede the floor to a woman than to a man.³⁴ To be sure that the effect is systematic, Jacobi and Schweers deploy a computational algorithm to identify all interruptions over 12 Terms, confirming the results of the smaller sample.³⁵ In a subsequent study, Jacobi and Sag expand the sample further, covering Terms 1998–2018. They confirm the gender effect, although the ratio is slightly lower farther back in time, when fewer female justices were on the Court.³⁶ The importance of the broad data sample is illustrated in Figure 1, which shows the average rate of interruptions of the justices by advocates, per case, from 1997 to 2018.³⁷

32 Bennett (n 15) 31 (providing Chief Justice Mason's account of how his Honour changed oral argument from Chief Justice Dixon's approach).

33 Jacobi and Schweers (n 3) 1457.

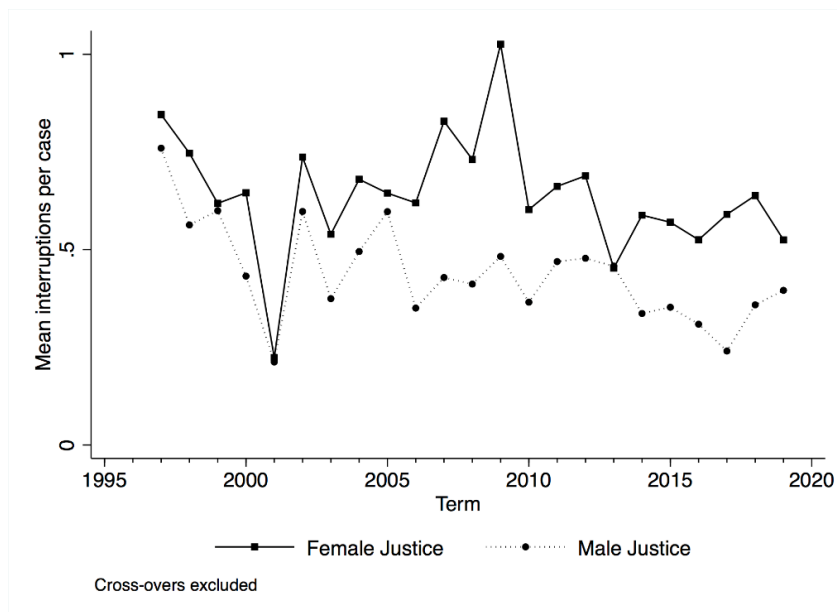
34 Ibid 1461 (showing that both men and women are significantly more likely to recognise when they have interrupted a man than a woman and almost 30% more likely to defer to a man than a woman, ceding the floor to him rather than her).

35 Ibid 1429.

36 Tonja Jacobi and Matthew Sag, 'Can Supreme Court Culture Change? Interruptions at Oral Argument, Continued' (Working Paper, 2020) available from the authors on request. See also Tonja Jacobi and Matthew Sag, 'October 2018 Term in Review: Part III (Interruptions)', *SCOTUS OA* (Blog Post, 14 May 2019) <<https://scotusoa.com/2018term-interruptions/>>.

37 All figures shown exclude 'conversational overlaps' – interruptions that happen within one second of another justice starting to speak: Jacobi and Rozema (n 26) 2307, who show that these overlaps are not associated with vote disagreement.

Figure 1: Average Interruptions of Justices by Advocates per Case, by Justice Gender, US Supreme Court 1997–2018 Terms



In Figure 1, and throughout this comment, female justices are represented by the solid line and male justices by the dotted line. The figure demonstrates the variation by Term, showing that the effects found by Jacobi and Schweers did not occur every Term; if Jacobi and Schweers had happened to choose the 2001 and 2013 Terms to examine in depth, for example, they would have concluded, incorrectly, that advocate interruptions of justices had no association with justice gender. Equally, if they selected the 2007 and 2009 Terms as their sample, the conclusion would have been that advocate interruptions of justices were gendered, but it would have overestimated the extent of that bias. By looking at more than a decade, instead the authors are able to show a quite consistent bias of advocates to interrupt female justices more than male justices, albeit with year-to-year variation as to the extent of that bias.

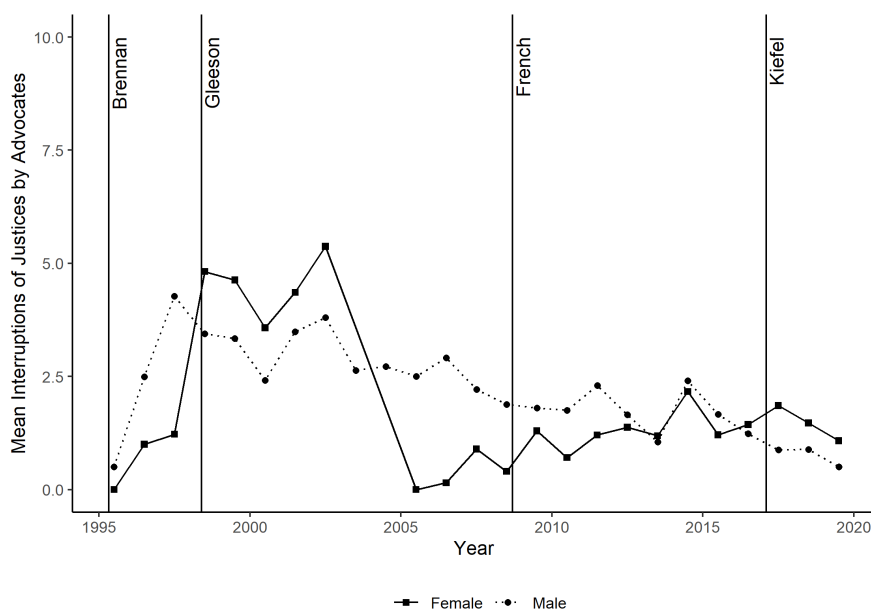
Turning to the High Court of Australia, we see how the issue of sample selection plays out in Loughland's study once we take a broader analysis of advocate interruptions of justices by gender, looking at every High Court oral argument from 1995–2019 where the argument was heard *en banc* (ie, by seven justices). The transcripts of oral arguments are freely available from both Austlii and Jade,³⁸ and are recorded and compiled by the High Court's own internal

38 'High Court of Australia Transcripts', *Austlii* (Database) <<http://www.austlii.edu.au/cgi-bin/viewdb/au/cases/cth/HCATrans/>>; 'High Court of Australia: Transcripts (HCATrans)', *Jade* (Database) <<http://jade.barnet.com.au/c/HCATRANS/>>.

reporting service.³⁹ The transcripts are consistent in format and identify the case name(s), case number(s), and participating justices.⁴⁰ Interruptions are indicated by the presence of three dashes (---) at the end of a speech episode.⁴¹

Figure 2 shows the average number of interruptions of justices by advocates, delineated by justice gender, in all High Court oral arguments with seven-justice panels between 1995–2019 inclusive.

Figure 2: Average Interruptions of Justices by Advocates per Case, by Justice Gender, High Court of Australia 1995–2019 (Seven-Justice Panels Only)



As is evident from the figure above, although female justices are indeed interrupted by advocates more frequently than male justices between 2015 and 2017 – the period of Loughland’s study – it is not the case that female justices are interrupted more than male justices in most years. In fact, there are more years in which male justices are interrupted at higher rates than female justices by

39 Lex Howard, ‘Transcripts of Argument’ in Michael Cooper, Tony Blackshield and George Williams (eds), *The Oxford Companion to the High Court of Australia* (Oxford University Press, 2001) 682, 683.

40 Using statistical and computational methods, we extracted metadata from each transcript (including case name and number, start and end times of argument) and we identify the relevant ‘chunks’ of text representing the speaking events of all speakers during oral argument, delineated both broadly (ie, between justice and advocate speaking turns) and specifically (ie, where a speaking turn is identified by speaker name).

41 Replicating the method outlined in Jacobi and Sag (n 36) n 5. An audit of the text of the transcripts, as well as a sample of the audio files of oral argument indicates that the ‘---’ accurately denotes an interruption of one speaker by another speaker rather than, for example, an abrupt end to a speech.

advocates.⁴² Indeed, if Loughland's pilot study had chosen at random any two and half Terms between 2005 and 2013 to study instead of those coming after 2014, the initial results would have suggested gender bias against male justices. That finding would be unreliable for the same reason as the conclusion that female justices are disproportionately interrupted looking only at 2015–2017.

Has Loughland nevertheless identified a recent phenomenon of bias against female justices? To answer that question, it is important to examine the scale of any effect: Loughland compared part of 2015 and all full panel cases in 2016 and 2017. Here we see that even in those Terms, where the gender difference was as predicted, with women interrupted more, it was far smaller than, for instance, the reverse effect that occurred in 2006 and 2007, when men were interrupted more than women at higher rates than women were more interrupted after 2015. The small size of the effect Loughland identifies means that it is very unlikely to be meaningful, but rather a product of natural variation. We find the same lack of a gender effect when we consider justice to justice interruptions, but of note the Terms in which the justice to justice gender difference is at its highest are 1999–2003, which all occur during the Gleeson reign – ie, under a male Chief Justice.⁴³

One natural response to our finding that there is no significant gender effect in oral argument on the High Court is that there has not been equality in representation by gender on the High Court. But if female justices are being targeted for interruptions because they are female, then we should expect to see a large disparity between the rate at which women and men are interrupted versus how much they interrupt, as was found at the US Supreme Court.⁴⁴ To address this question, Figure 3 looks at interruptions *by* the justices of both justices and advocates, to see if there is a similar gender pattern in female to male interruption rates as there is in rates of being interrupted.

42 The break in the data – the missing squares in the female interruption lines – arise because there were no women on the Court for the majority of 2003, after Gaudron J retired at the end of January 2003, and no women at all in 2004. While Crennan J took her seat on the Court on 1 November 2005, she did not participate in oral argument until 2006, thus there are no data for female interruptions in 2005.

43 Tonja Jacobi, Zoë Robinson and Patrick Leslie, 'What Explains Interruptive Behavior on the High Court of Australia?' (Working Paper) (finding no gendered propensity for justices to interrupt one another, examining all cases from 1995 to 2019). Loughland only mentions justice to justice interruptions in her appendix, as she notes, correctly, that Australian High Court justices do not interrupt each other much: Loughland (n 1) 825 n 9, 848 ('Interruptions by male advocates represented 96.8% of interruptions in 2015–16 and 90% in 2017': at 825 n 9).

44 Jacobi and Schweers (n 3) 1437; Tonja Jacobi and Matthew Sag, 'Justice-to-Justice Interruptions: Gender versus Ideology?' *SCOTUSOA*, (Blog Post, 3 August 2018) <<https://scotusoa.com/justice-to-justice-interruptions-gender-versus-ideology/>>.

Figure 3: Average Interruptions of Advocates and Justices by Justices per Case, by Justice Gender, High Court of Australia 1995–2019 (Seven-Justice Panels Only)

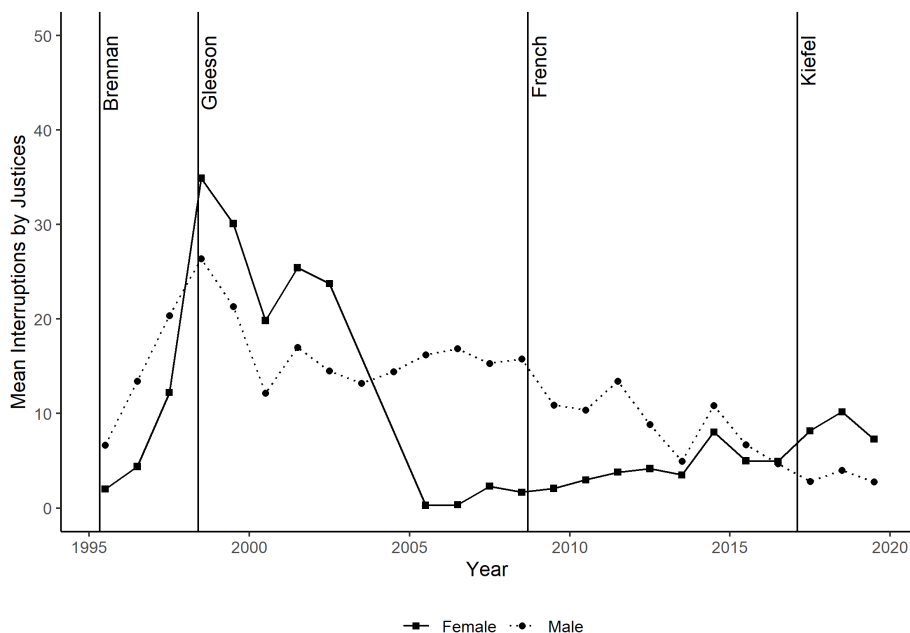
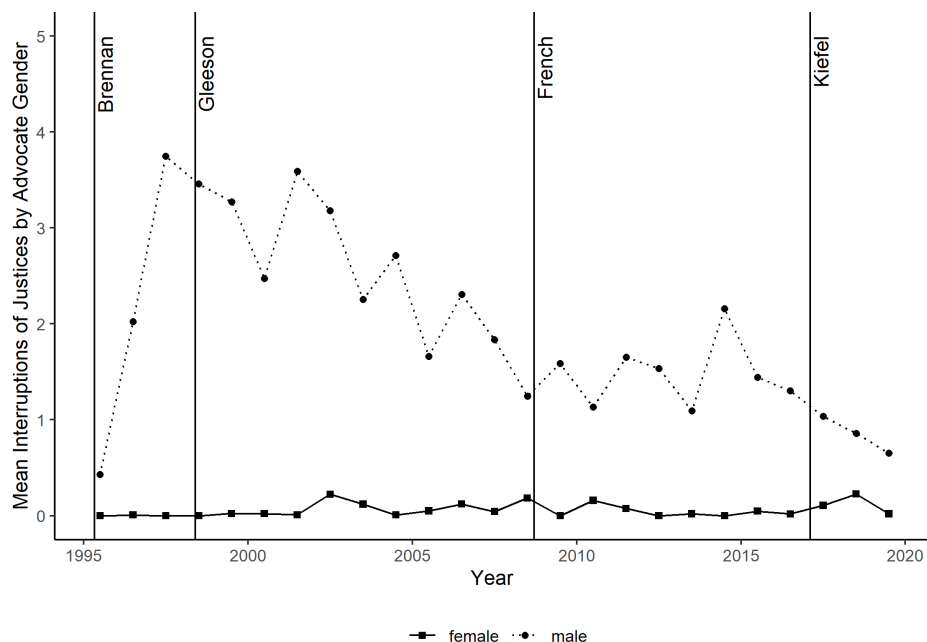


Figure 3 displays almost the identical pattern to Figure 2 above: female rates of interruption were disproportionately high during the early Gleeson years and during the Kiefel years, closely mirroring the Terms in which female justices were disproportionately interrupted. This suggests that Loughland may have been wrong to reject the ‘exposure’ thesis, whereby justices are interrupted more when they talk more, since the same gender differentials occur in terms of women being interrupted and women interrupting. We explore this possibility by controlling for the number of speech episodes by each justice in our regressions in the next section.

Finally, Figure 4 examines the effect of gender in shaping interruption behaviour among the advocates, comparing the interruptions of justices by male and female advocates.

Figure 4: Average High Court Interruptions of Justices by Advocate per Case, by Advocate Gender, High Court of Australia 1995–2019 (Seven-Justice Panels Only)



In contrast to the previous results, Figure 4 shows a clear and striking gender effect: male advocates interrupt more than female advocates in every single Term of the last 25 years.⁴⁵ Whereas female advocates consistently interrupt at almost zero in an average case, male advocates interrupt as much as between three and four interruptions per case on average in the high Terms between the late 1990s and the early 2000s. This emphatically confirms Loughland’s finding of a gender effect in the identity of interrupting advocates.

However, Figure 4 also shows, once again, that significant information can be missed by looking at just three Terms or less. While the gender effect of who interrupts is consistent in that men consistently interrupt more than women, it is importantly inconsistent in another respect: there is a very distinct downward time trend from 1997 onward. As such, while there is a clear gender effect among the advocates, it is one that is dissipating over time. And of equal note, the reduction in the gender effect plateaued during the male Chief Justice French’s reign, and then the gender difference began to reduce again during the female Chief Justice

⁴⁵ However, caution must be exercised in drawing inferences from these descriptive data. As Loughland notes, there are very few female advocates who appear in a speaking role before the High Court in oral argument on the merits: Loughland (n 1) 825 n 9. Indeed, in our dataset of oral argument before seven-justice panels, the ratio of male to female advocates is 18.8% (ie, between 1995 and 2019 9,560 male advocates appear before the court versus 1,797 female advocates).

Kiefel's reign. This is contrary to Loughland's controversial claim that male Chief Justices, as exemplified by Chief Justice French, better improve gender equality than female Chief Justices, as exemplified by Chief Justice Kiefel.⁴⁶

The next Part probes these findings more deeply, using more sophisticated statistical techniques.

III BEYOND GENDER: EXAMINING MULTIPLE CAUSES OF INTERRUPTIONS AT ORAL ARGUMENT

In this section, we utilise multivariate regression to more rigorously examine the relationship between not only gender and interruptions, but also to explore other potential explanatory factors, including seniority, volubility, length of oral argument, and the role of the Chief Justice. Regression is a statistical tool used to examine the relationship between two variables of interest – here, gender and interruptions – while holding constant (ie, 'controlling for') other factors that potentially affect the relationship between those variables (ie, other potential explanations or confounding influences).

For instance, in examining the effect of gender on interruptions at oral argument at the US Supreme Court, it is important to account for the fact that two of the three women currently serving on the Supreme Court are relatively junior.⁴⁷ Women may be interrupted more, but could that be a product of the relative lack of seniority of two thirds of the current female justices? Jacobi and Schweers use regression analysis to control for the effect of seniority on interruptions.⁴⁸ We expect experience to be significant, not just because it was in the American context but because greater expertise or seniority may increase confidence, and so a senior person might be likely to talk more, and the more a person talks the more they might be interrupted. Seniority could work the other way: more senior justices might get more deference, and so junior justices are more likely to find themselves interrupted, even if they talk less.

Loughland attempts to account for the potential for other factors, including seniority: her study compares the rate of interruption of one male and one female justice of similar seniority.⁴⁹ However, this raises the same concern about unrepresentativeness as examining a limited number of Terms; for instance, if the comparators happen to be a very disruptive senior male justice and a very quiet junior female justice, or vice versa, the results could be very misleading. And, importantly for Loughland's recommendation about male versus female Chief Justices, if seniority is important, then Loughland's comparison of the final Term

46 Loughland (n 1) 845.

47 Justice Sotomayor was appointed in 2009 and Justice Kagan was appointed in 2010. At the time of the Jacobi and Schweers study, 2017, which included data up until 2015, the average judicial tenure was more than 25 years.

48 Jacobi and Schweers (n 3) 1450, 1479–82 (showing seniority has a small but statistically significant effect, and still identify a larger gender effect).

49 Loughland also examines volubility as a possible explainer for her findings: Loughland (n 1) 828–30.

of Chief Justice French’s reign to the first Term of Chief Justice Kiefel’s rule raises similar concerns.

Like experience, we expect volubility to be an important control variable, as some justices talk more than others, even controlling for seniority, and that creates more opportunities to be interrupted. Similarly, if more speaking leads to more interruptions, then we would expect more interruptions to occur in oral arguments that last longer, so we must also account for the length of argument for any given case. And, of course, we need to account for the presence of the Chief Justice on a panel, to see if he or she influences the rate of interruptions, as Loughland’s study claims. Table 1 outlines our key variables and the related descriptive data for all oral arguments with seven-justice panels from 1995 to 2019.

Table 1: Descriptive Statistics, Oral Argument, High Court of Australia 1995–2019 (Seven-Justice Panels Only)

Variable	Definition	Mean	Std. Dev	Min	Max
Justice Case Interrupted	Number of interruptions of a justice per case	2.58	3.54	0	30
Chief Justice	If the justice is Chief Justice (yes/no)	0.14	0.35	0	1
Female	If the justice is female (yes/no)	0.25	0.43	0	1
Experience	Justice years on court at oral argument	7.09	4.39	0.01	17.56
Hours Argument	Hours of oral argument per case	6.23	4.16	1.07	27.03
Justice Case Speeches	Number of speaking turns per justice per case (ie, volubility)	56.29	62.8	0	480

Table 1 shows the means, standard deviations, minimums, and maximums of the variable we are trying to explain and predict – the occurrence of interruptions, at top – as well as our five potential explanatory variables. It shows that there is a high level of variance in many of the variables. Importantly, interruptions in a given case range between 0 and 30, suggesting that many factors might go into shaping interruptions, not just gender. Our variables for Chief Justice and Female are both dichotomous; as such, the means of those variables simply illustrate the prevalence of each – one in seven for the Chief Justice, and just under one in four for female justices since 1995. In terms of experience, the average justice serves approximately seven years, with some justices having as much as 17 years of experience on the Bench. Australia has highly variable length of oral arguments: the mean oral argument lasts 6.23 hours but ranges from approximately one hour

up to a whopping 27 hours.⁵⁰ Finally, justice speech episodes vary considerably, which is unsurprising given the high variation in the length of oral arguments.

Using these variables, we conduct multivariate poisson regression analysis to examine how (or whether) interruptions vary once we account for each of these factors in all cases with a full seven-justice panel.⁵¹ Table 2 shows our results. It provides five different models to predict interruptions, with each model including a different subset of variables to enable us to test different theories of what drives interruptions at oral argument.

Table 2: Poisson Regression of Interruptions per Justice per Case, by Justices and Advocates, High Court of Australia 1995-2019 (Seven-Justice Panels Only)

	Model 1	Model 2	Model 3	Model 4	Model 5
Female	-0.322 (0.431)	-0.229 (0.424)	-0.697* (0.297)	0.049 (0.245)	-0.439 (0.261)
Chief Justice		0.512 (0.514)		-0.080 (0.296)	-0.256* (0.125)
Female × Chief Justice		-0.260 (0.534)		-0.049 (0.326)	
Experience			0.042*** (0.011)	0.026** (0.008)	0.012 (0.008)
Female × Experience			0.093*** (0.015)		0.063*** (0.015)
Justice Speeches				0.006*** (0.0002)	0.006*** (0.0002)
Hours Argument				0.015*** (0.004)	0.016*** (0.004)
Constant	0.642** (0.227)	0.546* (0.240)	0.283 (0.187)	-0.118 (0.158)	0.039 (0.149)
N	3241	3241	3003	3003	3003
Log Likelihood	-7356.737	-7354.484	-6709.483	-5525.066	-5516.216
AIC	14721.470	14720.970	13430.970	11068.130	11050.430
BIC	14745.810	14757.470	13467.010	11122.200	11104.500

***p < .001; **p < .01; *p < .05

50 We calculate the length of oral argument for each case using the start and finish times indicated in each transcript, accounting for any breaks (eg, lunch) as indicated by the transcript.

51 These regressions were estimated using a mixed-effects multilevel model equation with random intercepts grouping observations for each justice and year (20 Justices over 24 years). This formulation allows us to account for clustering of observations which under regression assumptions are assumed to be independent from one another. For a full explanation of this model, see Andrew Gelman and Jennifer Hill, *Data Analysis Using Regression/Multilevel Models* (Cambridge University Press, 2006) ch 15.

Model 1 is the simplest test of any gender effect, looking only at the impact on interruptions of being female. This is the most generous test of Loughland's theory because it does not allow any other possible explanation to enter into the equation.

Nonetheless, it shows that being female is not associated with being interrupted more. In fact, the coefficient is negative, which implies the opposite conclusion that, if anything, men are interrupted more than women.⁵² However, that conclusion is also not supported because gender is not statistically significant at any level of confidence – the p-value of 0.4 means that gender does not come even close to statistical significance, which standard social science requires be less than 0.05, at most.⁵³ This shows, quite simply, that a justice's gender is not a good predictor of who will be interrupted at Australian High Court oral argument.⁵⁴

Model 2 tests another of Loughland's claims: that the gender of a justice and the gender of the Chief Justice interact in a meaningful way in predicting interruptions of High Court oral argument. The results of this model also do not support Loughland's conclusion. Neither being Chief Justice nor being a female justice is a statistically significant predictor of whether a justice will be interrupted, or even close to achieving significance. Of critical importance, the interaction between gender and Chief Justice is also negative, indicating that, if anything, being a male Chief Justice is predictive of female justices being interrupted more; but it is also insignificant, meaning that the gender of the Chief Justice has not been shown to have any effect.

Model 3 provides the simplest test of the role of seniority: it examines the effect of the gender of the justice, the experience of the justice, and a variable that captures the interplay between gender and experience – ie, the difference between being a junior male justice and a senior female justice, and the various permutations thereof. Model 3 is the only model where gender itself is a statistically significant predictor of whether a justice will be interrupted, but the coefficient is negative, meaning that, if there is a gender effect in seven-justice

52 The poisson regression coefficient predicts changes in the count of interruptions experienced by justices of the High Court. Positive coefficients indicate a greater number of interruptions per-justice per-case. More precisely, coefficients are associated with the logarithm of the mean of the poisson distribution, which means that we cannot interpret coefficients directly as with an ordinary least squares regression. For a prediction of the number of interruptions conditional on an explanatory variable, we calculate predicted values and graph them (see Figure 5). The female coefficient is negative but not significant in most cases, meaning that the effect of gender is not distinguishable from zero. This coefficient is negative and significant in Model 3 for reasons explained in the main text below. Note, however, that if we look beyond the seven-justice panels that Loughland uses as her test, we find that the coefficient is positive, but still not significant: see Jacobi, Robinson and Leslie, 'What Explains Interruptive Behavior on the High Court of Australia?' (n 43).

53 At $p < .05$ level, we can have 95% confidence that the results are not the product of a random effect. At the .01 significance level, the confidence is 99%, and at $p < .001$, the confidence level is 99.9%. 95% confidence is the standard social science measure, and is considered the minimum test to make any statistical claim. See, eg, Michael Lewis-Beck, Alan Bryman and Tim Futing Liao, *The SAGE Encyclopedia of Social Science Research Methods* (Sage Publications, 2004).

54 We also included a variable that accounted for the proportion of women on the panel in order to control for any possible effect of more or less women at any given time. We found that there was no association between the number of women on the panel and an increase or decrease in interruptive behaviour. Details available from the authors.

panels, it is that male High Court justices are interrupted disproportionately more than their female colleagues, directly contradicting Loughland's findings. But that does not mean male justices are interrupted more: we have to interpret the three experience and gender variables together. Model 3 also shows that experience is highly statistically significant, with a p-value below 0.001 – ie, an effect we can have considerable confidence in – for both the experience variable and the interaction between gender and experience. Together, these three results show that more senior justices are interrupted more, that senior female justices are particularly prone to being interrupted, but that otherwise female justices are interrupted less. This means that female justices with five or more years of experience will be interrupted more than their similarly situated male colleagues, but more junior female justices will be interrupted less than their junior male colleagues. This suggests that the exposure effect – the fact that more senior justices talk more – might be what is driving some of the results. To test this comprehensively, in Models 4 and 5, we include rates of judicial speech.

In both Models 4 and 5, we include a measure of how many speech episodes a justice has in each case. In both models, judicial speech is highly significant and positive. This shows quite clearly that the exposure explanation is highly influential at High Court argument: the more a justice speaks, the more *he or she* will be interrupted. This is true even accounting for the variation in the number of hours involved in the oral argument, which is also, unsurprisingly, positive and statistically significant. Thus, the exposure effect is not simply that justices talk more in longer oral arguments: even accounting for length of argument, the more a justice speaks, the more interruptions he or she will face.

Turning to the interplay of experience of the justice and the Chief Justice, in Model 4, we include all of our variables except the interaction between Female and Experience, and in Model 5, we do the same but exclude the interaction between Female and Chief Justice.⁵⁵ Considering the two models together, we see that, once again, gender is not significant. Further, we see that the interactions between gender and experience is significant but that gender interacting with the role of Chief Justice is not significant. In Model 5, the Chief Justice coefficient is significant, as is the interaction between gender and experience. This suggests that there is an important gender element here, but it does not operate simply by female justices being interrupted more; rather, there is an interplay between experience and gender and Chief Justice and gender. That is, interruptions of female justices occur more as a product of seniority than gender.

Since the coefficients of the regression model cannot be interpreted directly, Figure 5 shows what the substance of the effect of experience interacting with gender is.

⁵⁵ We cannot include both in one regression given the limited number of female Chief Justices.

Figure 5: The Effect of Experience on the Rate of Interruptions of Male and Female Justices per Case, High Court of Australia 1995–2019 (Seven-Justice Panels Only) (Model 5)

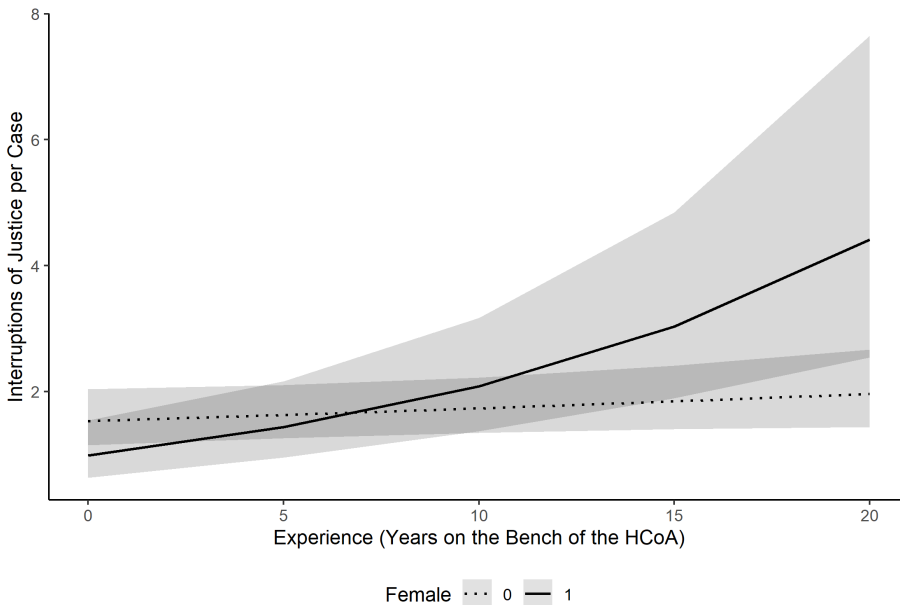


Figure 5 shows how interruptions of male justices (represented by the dotted line) remain flat even as the justice's experience goes from 0 to 20 years. In contrast, interruptions of the female justice (represented by the solid line) actually start off slightly lower than interruptions of male justices in their first five years on the Bench, then increase with time, becoming noticeably higher after a decade on the Bench. However, the shaded regions represent the respective (overlapping) confidence intervals for each variable; the fact that the shaded area covers the entire range of the data means that although this interaction is more established than any simple gender effect on interruptions, it, too, cannot be ascertained with standard levels of confidence.⁵⁶

IV CONCLUSION

Loughland's study of interruption behaviour at the Australian High Court raises many valuable lines of inquiry, including on the importance of equal

⁵⁶ The confidence intervals become wider as experience increases because fewer justices serve for between 10 and 20 years.

participation on the Court,⁵⁷ the constructive symbolic value of having women on the Court,⁵⁸ and the role of that representation in educating men away from gendered assumptions and language.⁵⁹ But with only two and a half Terms, these conclusions were always preliminary. When examining 25 years of data, it is not possible to confirm those findings. None of our models, including the simplest test of the relationship between gender and interruptions, establish a gender effect: the only time the gender variable reaches standard levels of statistical significance, it points in the opposite direction. This does not mean there is gender bias against male justices; rather, once we account for the role of the Chief Justice, the experience of the justice and the Chief Justice, the gender of both the justice and the Chief Justice, the extent of judicial speech participation at oral argument, and the length of the oral argument, it becomes clear that these other variables are far more significant in predicting interruptions at oral argument in the High Court than is any gender pattern.

Of equal importance to the finding that there is no discrimination against female justices of the High Court are two other findings. The first result supports one of Loughland's findings: there is a clear gender difference in advocate interruption behaviour. This is an unfortunate pattern, suggesting that male and female advocates face different expectations at the High Court; but importantly, we show that this difference is dissipating significantly over time. The second result undermines Loughland's claim that the best way to ensure gender equality in High Court oral argument is to prefer male judges as Chief Justice.⁶⁰ In fact, our results show that her conclusion arises because experience is a highly statistically and substantively significant factor in shaping interruptions, and it is the experience of the Chief Justice, not their gender, that shapes interruptions at High Court oral argument.

Loughland deserves credit for being one of the early interrogators of empirical questions that have become vital to legal scholarship elsewhere and applying them in the Australian legal context. And the fact that only one of her three results holds does not in any way mean that Loughland was not right to question whether gender equality exists at the Australian High Court: although her finding that female justices are interrupted more than male justices since 2015 cannot be confirmed as a statistically meaningful result, it is nonetheless a phenomenon that we should pay close attention to. This is particularly in light of other signs of gender bias associated with the High Court: within the 21st century, the High Court had zero representation of women for multiple years, and it still shows evidence of stark gender differences in advocate interruption behaviour. But the findings that the High Court does not display any significant evidence of bias in terms of female justices being interrupted disproportionately, at least in seven-justice panels, or

57 Loughland (n 1) 841 (female justices' 'lack of full participation in the institution's most important deliberative process [due to being interrupted] casts doubt over their substantive equality').

58 Ibid 842 ('almost equal representation of female judges ... is not enough to overcome subtle gender discrimination').

59 Ibid.

60 Ibid 845.

any evidence whatsoever that men make better Chief Justices than women in ensuring gender equality, are results we should celebrate.