In 'A League of Their Own?'
Judgement and Decision-Making by Politicians and Non-Politicians

Barbara Vis and Sjoerd Stolwijk

Introduction

Are politicians – such as ministers, party leaders, Members of Parliament (MPs) and elected municipal council members – in 'a league of their own' in terms of how they take decisions and make judgements?[1] In other words, are there systematic differences between politicians' behaviour and that of the rest of us: a political elite-public gap? Making judgements and taking decisions are core tasks of elected politicians. Knowledge of the character of these decisions is important because politicians' decisions are often consequential, both for themselves (e.g. by influencing their career prospects) and for the wider public. For example, how governments assessed the risk of COVID-19 affected the stringency of the measures they took and the swiftness (or lack thereof) by which they took them (Hale et al., 2020). As we all experienced in 2020, these measures have had a major impact on how we work (and whether we still have work to begin with), our social lives and sometimes our own or loved ones' health. The assumption of an elite-public gap is prominent in much work in political science (see for a recent overview Kertzer, 2020). What is more, some political science theories presume that elite cognition is superior to that of the rest of us (Byman and Pollack, 2001). Interestingly, behavioural economists and psychologists are usually surprised by this presumption. For them, politicians are also humans, so why would their judgement and decision-making differ from that of 'the rest of us'? However, empirically, and with political elites defined broadly as politicians, military personnel or government bureaucrats, the findings on an elite-public gap are conflicting (see Kertzer, 2020) and there is no overriding consensus or clear majority of findings. Whereas some studies find mostly similarities between the

---

[1] With judgements being assessments of situations often preceding decision-making (Newell, Lagnado and Shanks, 2015, p.20).

behaviour of elites and the masses (Sheffer et al., 2018), i.e. no gap, other studies find mostly differences (e.g. Mintz, Redd and Vedlitz, 2006), i.e. a gap; yet other studies find something in between (e.g. Renshon, 2015).

In this chapter, we aim to contribute to this discussion by assessing whether politicians differ from non-politicians in their judgement and decision-making. We also examine whether there is a difference in the direction of the findings and in the strength of the effect. We leverage findings from an experiment that we have conducted previously using a sample of Dutch local politicians and a student sample, i.e. a paired experiment. The overall study is reported in two publications (Stolwijk and Vis, 2018, 2020).[2] Our findings will show that politicians largely make judgements and take decisions like the rest of us, i.e. that there is little evidence of an elite-public gap in this regard (cf. Kertzer's [2020] meta-analysis). However, our findings will also reveal that, under specific circumstances, politicians do differ in their judgement and decision-making. In the final section, we will discuss what all this means for a psychology of democracy, particularly for government of the people.

Existing Studies on (Non-Existing) Differences in Decision-Making between Politicians and Non-Politicians

Let us first briefly summarise the conflicting findings of existing studies on supposed differences between politicians and non-politicians in terms of judgement and decision-making. It is not our aim to be comprehensive here; for more extensive discussions, we refer readers to extant work (e.g. Linde and Vis, 2017; Sheffer, 2018; Sheffer et al., 2018; Vis, 2019).

Broadly speaking, existing work can be grouped into two categories. The first strand of studies stresses the distinctiveness of political elites, including elected politicians (the elite-public gap); the second strand highlights the similarities between political elites and 'the rest of us'. Work that stresses politicians' distinctiveness often focuses on their *experience* of making judgements and taking decisions, and on their *expertise*. For example, it is an empirical question whether experienced decision-makers behave more in line with the predictions of Expected Utility

---

[2] We pre-registered the design of the larger study at AsPredicted.org (https://aspredicted.org/pi28u .pdf); this chapter is part of this larger study. The pre-registration included the analyses on judgement by politicians, which are reported in the studies cited, as well as (some) predictions on the difference between politicians and students for which the results are reported in this chapter. This chapter also reports several exploratory results. Details on the preregistration plan and how we distributed the reporting across different publications are provided in Stolwijk and Vis (2020).

Theory (EUT) (Von Neumann and Morgenstern, 1944), the theory that underlies most rational choice approaches (e.g. Bueno de Mesquita et al., 2003). EUT's key axioms include transitivity, dominance and invariance. Transitivity implies that, if option A is preferred to option B, and B is preferred to C, then A should be preferred to C. Dominance posits that, if an option is better on at least one aspect, and at least as good on the other aspects, it will be preferred to lesser options. Invariance means that a preference order should remain the same irrespective of how options are presented. If experienced decision-makers behave more in line with EUT, this would be contrary to a string of findings about how 'the rest of us' take decisions (for overviews and discussions, see e.g. Gilovich, Griffin and Kahneman, 2002; Kahneman, 2011). There are studies showing that more experienced decision-makers' behaviour supports EUT's predictions (List, 2004), but there are also studies finding that this behaviour is not more in line with EUT (Fréchette, 2011). There may also be differences across politicians and non-politicians because of *selection effects*. As Linde and Vis (2017: 102) note, politicians 'are selected by themselves (Mattozzi and Merlo, 2008), their party (Rahat, 2007) and by the voters (Besley, 2005)'. As there are studies finding that politicians have different attitudes towards risk compared to the general population (Fatas, Neugebauer and Tamborero, 2007; Heß et al., 2013), 'this process could select (...) decision-makers who may be less likely to violate a normative decision-making theory such as expected utility theory' (Linde and Vis, 2017: 102). Also, there is a potentially contentious perspective, especially in International Relations, that views heads of state as 'Great' (Byman and Pollack, 2001; see Copeland, 2001) and stresses an elite-public gap.

The second stream of research finds that politicians and non-politicians are mostly similar in their judgement and decision-making, although these studies agree with the first stream that the context in which politicians operate differs from that of the mass public. Politicians, for instance, receive much larger quantities of information on a daily basis (Baumgartner and Jones, 2015; Walgrave et al., 2013) and the decisions they take typically have larger consequences. In addition, politicians as people use heuristics: cognitive rules of thumb that facilitate judgement and decision-making (see e.g. Gigerenzer and Selten, 2001; Gilovich et al., 2002), but may also lead to decision-making bias, i.e. deviations from the predictions of EUT. There is a difference in degree here: the bar for politicians to use heuristics is generally higher than it is for ordinary citizens (see Vis, 2019 for an overview), as determined by the complexity of a decision (which in theory should be higher for politicians). However,

these studies suggest that there is no fundamental difference, i.e. no difference in kind (see for an overview e.g. Hallsworth et al., 2018).

Empirically, the second strand of work has received most support. For example, only six of the eighteen behavioural traits that could influence political decision-making, as surveyed by Hafner-Burton, Alex Hughes and Victor (2013), provided evidence of differences across experienced and inexperienced decision-makers. What is more, a meta-analysis on elite-public gaps by Kertzer (2020) found little evidence of an elite-public gap. Kertzer's analysis of published and unpublished work includes 162 paired treatments (i.e. 162 elite samples and 162 mass public/convenience samples) from 45 studies, covering 12 countries, which were reported over a 43-year period. Contrary to an elite-public gap, the findings for elites and the mass public were very similar: '(. . .) the treatment effects recovered in the elite samples (. . .) do not significantly differ in magnitude from those recovered from mass samples 88% of the time, and do not significantly differ in sign 98% of the time' (Kertzer, 2020, p.7). This was also the case for a study included in the meta-analysis conducted by one of this chapter's authors on whether politicians take risks like the rest of us (Linde and Vis, 2017). That study – which was an experiment with a sample of Dutch Members of Parliament (n = 46) and a student sample (n = 176) – showed that politicians displayed the 'reflection effect' like the rest of us, meaning their risk attitudes were influenced by whether the outcomes were framed as losses or as gains. It also showed that politicians were less susceptible to probability weighting (Vieider and Vis, 2019), which means that they were less susceptible to overweighing very small odds or underweighing very large ones, less likely than the rest of us to avoid treating probabilities linearly and particularly sensitive to the possibility of a sure outcome. In general, individual studies from Kertzer's meta-analysis that did find significant elite-public differences were typically about attitudes and not about judgement and decision-making, on which we focus here. Importantly, these differences in attitudes proved to be mostly the result of compositional differences: elites were typically older, more highly educated and more often male. This means that, if there is, or actually seems to be, an elite-public gap, this is often due to these compositional differences and not – or at least not only – due to differences in domain-specific expertise and experience.

Leveraging Findings from a Previous Paired Experiment

In this section, we will leverage findings from a paired experiment of politicians' and non-politicians' use of heuristics that we conducted

previously (Stolwijk and Vis, 2018, 2020). The study used students as the mass public/convenience sample. Since the original experiments on which we built also relied on student samples (Kahneman and Frederick, 2002; Kahneman and Tversky, 1972; Simonson and Tversky, 1992; Tversky and Simonson, 1993), using the same demographic group enabled us to compare our findings directly to those of the original tests. However, since education is one variable often argued to reduce heuristic use (Kahneman and Frederick, 2002), a sample of highly educated students predisposed us against demonstrating the use of heuristics in this sample. At the same time, politicians are also generally highly educated (Bovens and Wille, 2017), so that means that these two samples differ little in terms of education. They can, of course, differ in experience and expertise in decision-making.

Our study's research question was whether politicians use the representativeness and/or availability heuristic when making judgements. These are so-called general purpose heuristics from Kahneman and Tversky's heuristics and biases tradition (Kahneman and Frederick, 2002; see Kelman, 2011). People use the *representativeness heuristic* when they 'bypass more detailed processing of the likelihood of the event in question, but instead focus on what (stereotypical) category it appears to fit and the associations they have about that category. Simply put: If it looks like a duck, it probably is a duck' (Stolwijk, 2019, p. 1). People use the *availability heuristic* if they 'assess the frequency of a class or the probability of an event by the ease with which instances or occurrences can be brought to mind' (Tversky and Kahneman, 1974, p. 1127).

In this chapter, we will not discuss in detail how we went about testing whether politicians used these heuristics in their judgement and decision-making (for that, we refer readers to Stolwijk and Vis, 2018, 2020). We will examine whether politicians differ from non-politicians in their judgement and decision-making – which is a question that has received much less attention in our other publications. To answer this question, it is important to describe the general approach of our previous work. We followed most of the existing work, as well as Tversky and Kahneman's own approach, which inferred politicians' use of heuristics 'by measuring the biases that their use is supposed to evoke' (Bellur and Sundar, 2014, p.121). In the case of representativeness heuristics, these biases are termed 'conjunction error' and 'scope neglect'. People make a conjunction error when they consider the conjunction A *and* B (e.g. working at a bank *and* being active in the feminist movement) more likely than, for example A (working at a bank). In this instance, A alone is – logically speaking at least – as large, and probably larger, than the conjunction of A *and*

Table 6.1. *Hypotheses for testing use of the representativeness heuristic.[1]*

H1	*Conjunction error I: The Linda/Vera problem*:[2] When given a stereotypical feminist description of Linda, participants will generally judge the conjunction ('She is a bank employee and is active in the feminist movement') more likely than one or both of its parts ('She is a bank employee' or 'She is active in the feminist movement').
H2	*Conjunction error II: The 'making the headlines' scenario*: Participants will judge it more likely that a terrorist attack will lead to their municipality making the headlines of all major newspapers, compared to making those headlines in general (since making the headlines is supposedly hard, but becomes very likely after such an attack, even though such an attack is very unlikely).
H3	*Conjunction error III: Earthquake scenario*: Participants will judge the likelihood of an earthquake in Groningen to be higher than of a natural disaster in the eastern half of the Netherlands (this is based on the supposition that Groningen is associated with earthquakes, but, although Groningen is geographically in the east of the Netherlands, the east is less associated with natural disasters).
H4	*Scope neglect I: Nuisance scenario (importance):* Participants will generally consider it equally important to deal with twenty-three people who cause a nuisance as with fifty-three (supposedly since people judge the issue relative to their feelings towards nuisance rather than to the scope of the problem).
H5	*Scope neglect II: Nuisance scenario (total budget)*: Participants will generally allocate an equal budget to deal with twenty-three people who cause a nuisance as they would to deal with fifty-three (again supposedly since people judge the issue relative to their feelings towards nuisance rather than towards the scope of the problem).

[1]Please note that some of the hypotheses have been slightly reworded with a view to readability of this chapter, but they are in line with the pre-registered hypotheses (see footnote 2 for more information about the pre-registration).
[2]To avoid participants thinking about a famous Dutch person named 'Linda', we used the name 'Vera' instead. In writing this chapter, we revert to the name 'Linda' because this is the name used in the seminal studies (see e.g. Kahneman (2011) for a discussion).

B (Tversky and Kahneman, 1983). Scope neglect is people's tendency to neglect the representativeness of an event; in this case, of working at a bank. The use of representative heuristics by politicians and students is tested by five hypotheses (see Table 6.1).

In the case of the availability heuristic, a well-established bias is the 'asymmetric dominance effect' (Tversky and Simonson, 1993). People display this effect when their preference among alternatives is influenced by the addition of an irrelevant alternative, i.e. one that is less attractive than at least one of the existing choice options. An example here comes from a study by Simonson and Tversky (1992), in which an ordinary pen (z) was added as the additional option in the choice between a branded pen (y) and money (x). Since an ordinary pen (z) is very likely less attractive than a branded one (y), this should not affect the choice between y and x

(the money). However, it does: it makes option *y* – the branded pen – appear more attractive. Additionally, we examined whether the availability of costs and the scope of a problem (its severity) influenced judgements (which it should not, according to Rational Choice Theory) (Stolwijk and Vis, 2018). The use of availability heuristics by politicians and students is tested by three hypotheses (see Table 6.4). Finally, we examined the reflection effect – the tendency of people to be risk-seeking for gains and risk averse to losses (Kahneman and Tversky, 1979), mainly to test whether, based on our samples, we could identify well-known effects. The reflection effect hypothesis is presented in Table 6.5.

Data

Before turning to the findings, let us briefly discuss the data from our study. Our politician-participants were a sample of elected local politicians from twenty-seven larger Dutch municipalities (sample frame: 1,063, complete responses: 211). This sample is representative of the full population of Dutch elected council members in terms of age, gender and party membership, but somewhat more highly educated: almost 90 per cent self-report holding an applied higher college or university degree compared to 67 per cent on average for the full population (Ministerie van Binnelandse Zaken en Koninkrijksrelaties, 2016).[3] Randomisation tests showed that gender, age, municipality, party and education level were not significantly different between the different conditions (see Stolwijk and Vis, 2020). The non-politician participants were students from three large research-intensive Dutch universities (260 responses from a total sample frame of 1,295).

Results

In this chapter's analyses, we compare: (1) whether politicians made different judgements in the various scenarios we provided to them compared to non-politicians; (2) whether politicians responded differently compared with non-politicians in the various conditions; and (3) whether such differences can be explained by: (a) compositional differences of the characteristics of politicians compared to the population at large; (b) experience with political judgement; or (c) expertise in the area of the judgement in question. Compositional differences might reflect differences between ordinary citizens and those motivated to run for office, or biases in the selection process for which individuals achieve office, for example

---

[3] Note that the sample of politicians is hereby very similar to the student sample, which consists entirely of people who follow education at university level.

biases in the electoral chances of different candidates due to (elements of) the electoral system or due to voter biases. There may also be differences across politicians and non-politicians because of *selection effects* (as discussed above in the section titled 'Existing Studies'). We tested such compositional differences in terms of age, education, gender, news consumption (as a proxy for political interest), ideology (political Right/Left orientation) and ability (maths skill). Experience is tested by comparing the judgements of politicians varying in tenure of office. Expertise is tested by comparing the judgements of politicians who are spokespersons on the judgement area in question or not.

Representativeness Heuristics

As we explained above, we tested participants' use of the representative heuristic by examining whether they displayed the key biases related to this heuristic: the conjunction error and scope neglect. We included three scenarios for the former and two for the latter. Table 6.1 displays the five hypotheses related to these scenarios (for more extensive descriptions, we refer the reader to Stolwijk and Vis (2020)).

Conjunction Error I: The Linda/Vera Problem (H1)

We found that both politicians and non-politicians made the conjunction error – so there was no difference in the direction of the findings. However, a t-test showed that the non-politicians were more likely to commit the conjunction error, but this result was only marginally significant (single tailed). We found no effect of control variables (gender, education, maths skill, political experience, Right-Left self-placement). When adding controls, the difference between politicians and non-politicians remained. We were unable to test the effect of age on the difference between politicians and non-politicians, since age was nearly collinear (all students are from [approximately] the same cohort, thus do not vary in age, and are generally [much] younger than the politicians). However, we were able to test the effect of age within the sample of politicians and found that it did not influence politicians' judgements. This implies that it is not the reason for the difference between politicians and non-politicians (otherwise younger politicians would be more like the non-politician student sample). Finally, Left-Right orientation had no effect among the non-politicians, but it did influence the rate of the conjunction error among politicians. The results of logistic regressions (see Table 6.2) show that Left-wing politicians are less likely to make the conjunction error in the Linda scenario than Right-wing politicians (63 per cent of Left-wing politicians committed the error versus 85 per cent of Right-wing politicians in our sample). Since the conjunction error involves stereotypes, this might

Table 6.2. *Logistic regressions predicting expectation order for Left-wing and Right-wing politicians in the Linda/Vera scenario.*

	Made the conjunction error	Made the conjunction error	Ranks the conjunction ('A and B') as more probable for Linda compared to her being active in the feminist movement ('B')	Ranks the conjunction ('A and B') as more probable for Linda compared to her being active in the feminist movement ('B')	Ranks the conjunction ('A and B') as more probable for Linda compared to her being a bank teller ('A')	Ranks the conjunction ('A and B') as more probable for Linda compared to her being a bank teller ('A')
Left-wing	−.83* (.33)		−.41 (.30)		−.26 (.30)	
Right-wing		1.05* (.41)		.63* (.32)		.15 (.32)
Constant	1.34*** (.24)	.67*** (.19)	−.15 (.19)	−.53** (.18)	.11 (.19)	−.05 (.18)

Note: N (Politicians) = 186; * $p<.05$; ** $p<.01$; *** $p<.001$; 'A' = active in the feminist movement; 'B' = being a bank teller; 'A and B' = a bank teller active in the feminist movement.

suggest that some Left-wing politicians have applied positive discrimination (favouring the opposite of the prejudice in their judgement). However, Left-wing politicians were not more likely to opt for a reverse stereotypical ordering (and Right-wing politicians were *more,* rather than less, likely to do so: 32 per cent of Right-wing politicians made this error versus 16 per cent of Left-wing politicians in our sample). Equally, Right-wing politicians were not more likely to opt for a stereotypical ordering (and Left-wing politicians were not less likely to do so: 32 per cent of Right-wing politicians made this error versus 26 per cent of Left-wing politicians in our sample).[4] These results appear to contradict each other: Right-wing politicians were more likely to choose the reverse stereotypical ordering, but Left-wing politicians were less likely to make the conjunction error. The mixed findings mean the inferences are difficult to interpret and suggest that further research is needed.

Conjunction Error II: 'Making the Headlines' Scenario (H2)

In the 'making the headlines' scenario, neither the politicians nor the non-politicians judged it more likely that a terrorist attack would lead to their municipality making the headlines of all major newspapers, compared to making those headlines in general. However, we found that politicians judged it more likely that their municipality would make the headlines in general than non-politicians would judge Apeldoorn to do (the municipality we asked them to think about). What is more, the non-politicians judged it likelier that Apeldoorn would make the headlines due to a terrorist attack than politicians judged their municipality to make the headlines due to a terrorist attack (see Figure 6.1).

Control variables did not explain the difference in the strength of the effect between the politicians and non-politicians. This suggests that the politicians were influenced by the availability heuristic referencing their municipality (as the questions were directed at their municipality), but questions to non-politicians were directed to consider Apeldoorn. However, Apeldoorn is more related to terror than other municipalities, because of a terrorist attack there about a decade before, implying that its cognitive

---

[4] From the six different orderings participants could propose, several listed feminist higher than bank employee, and vice versa. All of these are accounted for in the logistic regressions in Table 6.2. One even listed feminist as more likely than bank employee (stereotypical), while also listing feminist bank employee as more likely than feminist (anti-stereotypical). To avoid confusing readers with overlapping percentages, we only present percentages here for the quintessential stereotypical ordering (most likely a feminist, than a feminist bank employee, then a bank employee) and its reverse (most likely a bank employee, than a feminist bank employee, then a feminist). Note that both of these are examples of the conjunction fallacy, since they list the conjunction (feminist bank employee) as more likely than at least one of its constituents (i.e. either feminist (reverse stereotype) or bank employee (stereotype)).
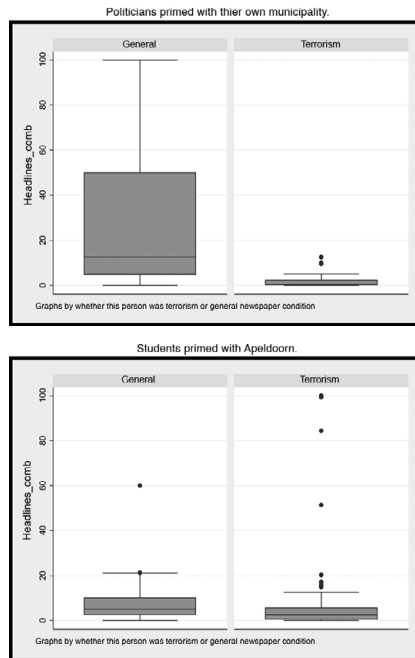
Figure 6.1   'Making the headlines' scenario comparing politicians' and students' ratings of probability.
Note: The y axis displays the participant's judged probability that their municipality would make it to the headlines. The x axis indicates whether the participant was in the general condition (figures on the left-hand side of each paired box plot) or in the terrorism condition (figure on the right-hand side of each paired box plot).

availability was stronger than that of politicians' own municipalities. It is notable that the non-politicians did not deviate from politicians in their baseline assessment of the likelihood across conditions, which would have suggested an effect of proximity of the city of interest (since the students did not live in Apeldoorn, while the politicians were asked about their own city). Rather, on average, they gave a lower probability in the general condition (6.8 per cent for non-politicians versus 28.4 per cent for politicians) and a higher probability in the terrorism conditions (8.0 per cent for non-politicians versus 1.5 per cent for politicians), suggesting that the terrorism association overrode the availability of politicians' 'own' municipality.

Conjunction Error III: The Earthquake Scenario (H3)
In the earthquake scenario, both politicians and non-politicians judged it more likely that an earthquake will hit Groningen than that a natural disaster

will hit the east of the Netherlands, thereby making a conjunction error. Politicians estimated both the likelihood of an earthquake and the likelihood of a natural disaster lower than non-politicians (pooled over conditions 5.3 per cent [politicians] versus 5.9 per cent [non-politicians]), but the difference between estimates for the earthquake or natural disaster were similar among politicians and non-politicians. Again, there are no differences in the direction of the findings, but some difference in the strength of the effect. The control variables did not influence the absence of a difference between politicians and non-politicians and we may conclude from this that politicians seem to judge the odds of danger to be smaller. They did so in this scenario as well as in the terrorism condition (see 'Making the headlines' scenario).

Scope Neglect I: Nuisance Scenario (Importance) (H4)
In the first of two 'scope neglect' scenarios, we found that politicians judged the issue of dealing with people who cause a nuisance more important than non-politicians, regardless of the condition. In contrast to the politicians, the non-politicians on average judged the problem of fifty-three people who cause a nuisance to be slightly more important than the problem caused by twenty-three (4.20 vs 4.40 on a 1–6 scale; t = 1.68, p = 0.05, n[non-politicians] = 263).

   The difference between the politicians and non-politicians is significant: politicians are less sensitive to the difference between twenty-three versus fifty-three people who cause a nuisance in assessing the importance of the issue than are non-politicians. In this scenario, Left-Right political orientation influences judgement of importance, but the difference between politicians and non-politicians in this Left-Right orientation does not (fully) explain the difference in judged importance between them. The other control variables had no effect.

Scope Neglect II: Nuisance Scenario (Total Budget) (H5)
In the second 'scope neglect' scenario, we found that the non-politicians took the difference between twenty-three and fifty-three nuisance makers into account, i.e. not neglecting scope, contrasting with politicians. This happened even though both non-politicians and politicians confirmed in additional answers that they believed that the budget should be different for twenty-three compared to fifty-three people who make a nuisance. In line with their judgement that the issue is more important, politicians also allocated a higher budget on average than did the non-politicians[5] and had

---

[5] After controlling for perceived importance of the issue, the difference between politicians and non-politicians in allocated budget is no longer significant.

Table 6.3. *Similarities and differences in the use by politicians and non-politicians of representativeness heuristics.*

	Test	Direction of the effect was the same for politicians and non-politicians?	Strength of the effect was the same for politicians and non-politicians?
H1	Conjunction error I: The Linda problem	√	X The non-politicians were more likely to commit the conjunction error.
H2	Conjunction error II: The making the headlines scenario	√	X Non-politicians judged it more likely that Apeldoorn would make the headlines due to a terrorist attack than did politicians of their municipality.
H3	Conjunction error III: The earthquake scenario	√	X Politicians estimated the likelihood of a natural disaster and an earthquake lower than the non-politicians.
H4	Scope neglect I: Nuisance scenario (importance)	X The politicians neglected scope, whereas the non-politicians did not.	*N.A.*
H5	Scope neglect II: Nuisance scenario (total budget)	X The politicians neglected scope, whereas the non-politicians did not.	*N.A.*

a higher proportion of extreme answers among them. The control variables, such as Left-Right orientation, had no effect on the allocated budget. From this finding, we may conclude that politicians are more likely to use heuristics in their judgement of a scenario like this one as it is more like their day-to-day decisions (compared to the Linda/Vera problem). Table 6.3 summarises the similarities and differences in the findings for politicians and non-politicians for the representativeness heuristic.

The difference we find between the politician and student samples for H4 and H5 might be explained by issue saliency. The task of assigning a budget for such an issue might have been more difficult for non-politicians who have less experience in doing so, prompting them to think harder about it

and so triggering System 2 (Evans and Stanovich, 2013; Kahneman, 2011), that is, effortful, logical 'slow' thinking. Conversely, for politicians this may be more of a routine task suited for System 1, that is, automatic, stereotypic and 'fast' thinking (see Hafner-Burton et al., 2013 for more arguments why elites might rely more rather than less on heuristics). While the direction of the effect in H3 was the same for the politician and non-politician samples, we found that politicians were less likely to display the bias related to the heuristic in the 'making the headlines' scenario.

Availability Heuristic Scenarios

Three scenarios examined the biases related to the availability heuristic: the asymmetric dominance effect, cost availability and scope availability. Table 6.4 displays the hypotheses related to these scenarios; for more extensive discussions, we refer the reader to Stolwijk and Vis (2018).

Asymmetric Dominance Effect (H6)
Neither the politicians nor the non-politicians increased their preference for the 'broad' option *y* (employing both city council watchmen and neighbourhood volunteers to deal with the nuisance issue relative to the preference for extra police) over extra police (option *x*) when offered the

Table 6.4. *Hypotheses on the availability heuristic.[1]*

H6	*Asymmetric dominance hypothesis.* When asked how they would deal with the nuisance problem referred to above, participants will be more likely to prefer policy option *y* over option *x* when these are contrasted with option *z* (which is supposedly similar but inferior to option *y*), i.e. the premise is the presence of option *z* makes option *y* look more favourable.
H7	*Cost availability hypothesis.* Participants will be more likely to prefer policy option *y* as a policy response to the nuisance problem when first asked about the amount of budget allocated, compared to when the budget questions follow the policy question (supposedly because the budget question raises cost concerns and policy option *y* is supposed to be cheaper than option *x*).
H8	*Scope availability hypothesis.* Participants will generally allocate a larger budget to deal with fifty-three people who cause a nuisance than in dealing with twenty-three such people if they are asked about the budget per person first, than if they are asked about the total budget right away (supposedly because asking about the budget per person highlights the relevance of scope, i.e. the number of people causing a nuisance).

[1]Please note that some of the hypotheses have been slightly reworded with a view to readability of this chapter, but they are in line with the pre-registered hypotheses (see footnote 2 for more information about the pre-registration)'.

additional option z (only employ city council watchmen), which means that neither displayed the asymmetric dominance effect. The politicians and non-politicians also did not differ in their overall preference for the broad option. Either this test did not (or was not sensitive enough to) capture the asymmetric dominance effect, or this effect does not apply to the choice between these policy options.

Cost Availability (H7)

Neither the politicians nor the non-politicians appeared to be influenced by the enhanced availability of a policy's financial consequence – by asking about it first – in determining their preference for a specific policy option. Actually, they more often preferred the costly option of extra police, and less often the 'broad' option to deal with troublemakers when they were asked initially about how much budget they wanted to allocate – compared with before they were asked about the budget to be allocated, i.e. the percentage of politicians preferring extra police after being asked about the budget allocation was higher (28 per cent) than before being asked about the budget (19 per cent), which was a similar outcome for non-politicians: 32 per cent preferred extra police after being asked about the budget versus seventeen per cent before being asked about the budget allocation ($p<.01$). This means that neither group displayed the cost availability heuristic.

Scope Availability (H8)

Neither in the case of politicians nor of non-politicians did we find an interaction effect in the budget allocation to twenty-three versus fifty-three troublemakers and whether they were first asked to allocate a budget per troublemaker or not. This means that neither displayed the scope availability heuristic. Rather, non-politicians allocated a higher budget to both twenty-three and fifty-three troublemakers after being asked about the budget allocation per troublemaker, compared to beforehand.

   Summing up this scenario: it appears that the per-person budget question alerted the non-politicians to the costs involved by giving them more time to think about the cost needed to tackle the larger problem of fifty-three versus twenty-three nuisance makers. Perhaps the difficulty of reasoning from a per-person budget to a budget for twenty-three/fifty-three triggered heuristic processing, because the costs of dealing with more 'nuisance causers' do not increase linearly, as funding is needed to pay at least one person to deal with it regardless of group size. Among politicians, the answers to the budget allocated to deal with the issue per person depended

on whether the preceding description listed twenty-three or fifty-three trou-blemakers, but this was not the case among non-politicians. This suggests that the question was easier for politicians to address – and they were already thinking of their total budget for the issue – while the non-politicians were still contemplating the size of a reasonable budget to allocate.

Reflection Effect (H9)

The reflection effect hypothesis states that participants will generally prefer the certainty of an amount when choosing between gains, while preferring the lottery when choosing between losses. This is indeed what we found. Facing negative prospects, the politicians (see top panel in Figure 6.2) preferred the risky choice less often than did the non-politicians (see bottom panel in Figure 6.2), while they preferred the risky choice more often than did the non-politicians facing positive prospects. So, both politicians and non-politicians showed evidence of the reflection effect, but the politicians were less sensitive to it than were the students.
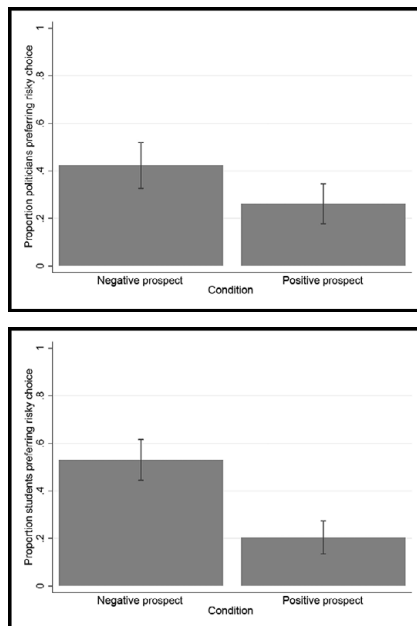

Figure 6.2   Reflection effect findings (politicians – top panel; non-politicians – bottom panel).

Table 6.5. *Similarities and differences between politicians and non-politicians in displaying the biases related to the availability heuristic and the reflection effect.*

	Test	Direction of the effect was the same for politicians and non-politicians?	Strength of the effect was the same for politicians and non-politicians?
H6	Asymmetric dominance effect	√	√
H7	Cost availability	√	X Differences were significant for non-politicians, but not for politicians.
H8	Scope availability	√	X Students allocated a higher budget to both twenty-three and fifty-three troublemakers after being asked about the per troublemaker budget (compared to being asked beforehand).
H9	Reflection effect	√	X Politicians were somewhat less sensitive to the framing in terms of gains and losses (increasing their preference for the risky option by only seventeen percentage points when framed as a loss rather than a gain, compared to a thirty-three percentage points increase in this preference among non-politicians).

Table 6.5 summarises the similarities and differences in the findings for politicians and non-politicians for the availability heuristic and the reflection effect.

Additional Analyses

In Stolwijk and Vis (2020), we conducted an additional analysis to examine whether politicians with different levels of political experience – measured by length of time serving as a local council member – were sensitive to displaying the biases related to the representativeness heuristic.

We did so by interacting the treatments in the various scenarios with political experience. We found no significant interaction effects for any of the scenarios. This should not be interpreted as strong evidence that political experience has no effect, since the many missing values on this variable make the sample size for these analyses rather small. By means of similar analyses, we also examined the effect of expertise – measured by being a spokesperson on an area related to the troublemaker scenario, i.e. order/security/safety [*veiligheid*] or use/management of public spaces [*openbare orde*]. Again, we found no significant interaction effects between political expertise and the treatments in the various scenarios. These findings suggest that neither experience nor expertise appears to explain the difference between politicians and non-politicians.

Discussion

We end this chapter with a methodological comment. To enable the accumulation of findings and to assess their stability across contexts, it is valuable to use the same or at least similar scenarios as earlier studies. However, using the same scenario on samples of politicians and non-politicians can be challenging if it is abstract and thus detached from the judgements and decisions politicians actually make. We experienced this in our study on the use of the availability heuristic by Dutch local politicians (Stolwijk and Vis, 2018). Originally, we wanted to include two abstract, seminal scenarios on the availability heuristic – a so-called word frequency test (Tversky and Kahneman, 1973) and a maths problem test (Tversky and Kahneman, 1974) – and pre-registered hypotheses to this end,[2] however, ultimately it was not possible to include these two seminal scenarios in testing the availability heuristic in this experiment. In Online Appendix A, which is available at https://www.barbaravis.nl/publications/, we discuss these scenarios in more detail. In this appendix, we also explain how new insights emerged during the pre-testing phase that made clear that including these scenarios in our survey experiment would jeopardize the rest of our study.

What do our findings mean for a psychology of democracy, particularly for government of the people? Similar to earlier findings and meta-analyses by Hafner-Burton et al. (2013) and Kertzer (2020), our results show no systematic difference between elites and non-elites. As such, this contradicts the notion that selection makes politicians different as a decision-making group from non-politicians. We also found little evidence to support the two other mechanisms that might produce differences: political experience and expertise, which means that, overall, there is little ground to suggest that politicians are in 'a league of their own'.

However, there are also some differences that may have consequences for the functioning of representative democracy and for policy-making. Politicians are no worse, but also no better, than non-politicians in avoiding decision-making biases. This suggests that expertise and experience, while relevant for other parts of the policy- and decision-making process (like negotiation skills, or suggesting alternative policy options, etc), did not play a part in these scenarios. Moreover, in the scenario where experience and expertise could be expected to yield the largest benefit – the complex and rather tedious task of assigning a budget – politicians actually performed worse than non-politicians, at least from a policy-seeking perspective in which funding reflects the political priorities of a politician rather than the wording of an issue. As Hafner-Burton et al. (2013) argued, the benefits of experience and expertise in decision-making are very domain specific. Perhaps the best political decisions are ill-served by the accumulation of expertise, due to the many areas for which politicians are responsible. This would be an interesting avenue for further research.

Acknowledgements

REFERENCES

Baumgartner, F. R. and Jones, B. D. (2015). *The politics of information: Problem definition and the course of public policy in America*. Chicago and London: The University of Chicago Press.

Bellur, S. and Sundar, S. S. (2014). How can we tell when a heuristic has been used? Design and analysis strategies for capturing the operation of heuristics. *Communication Methods and Measures*, 8(2), 116–137.

Besley, T. (2005). Political selection. *Journal of Economic Perspectives*, 19(3), 43–60.

Bovens, M. and Wille, A. (2017). *Diploma democracy: The rise of political meritocracy*. Oxford, UK: Oxford University Press.

Bueno de Mesquita, B., Smith, A., Siverson, R. M. and Morrow, J. D. (2003). *The logic of political survival*. Cambridge, MA: MIT Press.

Byman, D. L. and Pollack, K. M. (2001). Let us now praise great men: Bringing the statesman back in. *International Security*, 25(4), 107–146.

Copeland, D. C. (2001). Theory and history in the study of major war. *Security Studies*, 10(4), 212–239.

Evans, J. S. B. T. and Stanovich, K. E. (2013). Dual-process theories of higher cognition: Advancing the debate. *Perspectives on Psychological Science*, 8(3), 223–241.

Fatas, E., Neugebauer, T. and Tamborero, P. (2007). How politicians make decisions: A political choice experiment. *Journal of Economics*, 92(2), 167–196.

Fréchette, G. R. (20011). *Laboratory experiments: Professionals versus student*. Available at SSRN: https://ssrn.com/abstract=1939219 or http://dx.doi.org/10.2139/ssrn.1939219

Gigerenzer, G. and Selten, R. (Eds.) (2001). *Bounded rationality: The adaptive toolbox*. Cambridge, MA and London, UK: The MIT Press.

Gilovich, T., Griffin, D. and Kahneman, D. (Eds.) (2002). *Heuristics and biases: The psychology of intuitive judgment*. New York: Cambridge University Press.

Hafner-Burton, E. M., Alex Hughes, D. and Victor, D. G. (2013). The cognitive revolution and the political psychology of elite decision making. *Perspectives on Politics*, 11(2), 368–386. https://doi.org/10.1017/S1537592713001084

Hale, T., Webster, S., Petherick, A., Phillips, T. and Kira, B. (2020). Oxford COVID-19 government response tracker. *Blavatnik School of Government*. Available at: www.bsg.ox.ac.uk/research/research-projects/covid-19-government-response-tracker.

Hallsworth, M., Egan, M., Rutter, J. and McCrae, J. (2018). *Behavioural government: Using behavioural science to improve how governments make decisions*. London: The Behavioural Insights Team.

Heß, M., Scheve, C. von, Schupp, J. and Wagner, G. G. (2013). Members of German federal parliament more risk-loving than general population. SOEP Papers 546. Accessed at: www.diw.de/documents/publikationen/73/diw_01.c.418993.de/diw_sp0546.pdf.

Kahneman, D. (2011). *Thinking, fast and slow*. London: Penguin Books.

Kahneman, D. and Frederick, S. (2002). Representativeness revisited: Attribute substitution in intuitive judgment. In T. Gilovich, D. Griffin, and D. Kahneman (Eds.), *Heuristics and biases: The psychology of intuitive judgment* (pp. 49–81). New York: Cambridge University Press.

Kahneman, D. and Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47(2), 263–193.

(1972). Subjective probability: A judgment of representativeness. *Cognitive Psychology*, 3(3), 430–454.

Kelman, M. (2011). *The heuristics debate*. Oxford, UK: Oxford University Press.

Kertzer, J. D. (2020). *Re-assessing elite-public gaps in political behavior. American Journal of Political Science*, https://doi.org/10.1111/ajps.12583

Linde, J. and Vis, B. (2017). Do politicians take risks like the rest of us? An experimental test of prospect theory under MPs. *Political Psychology*, 38(1), 101–117.

List, J. A. (2004). Neoclassical theory versus prospect theory: Evidence from the marketplace. *Econometrica*, 72(2), 615–625. https://doi.org/10.1111/j.1468-0262.2004.00502.x

Mattozzi, A. and Merlo, A. (2008). Political careers or career politicians? *Journal of Public Economics*, 92(3–4), 597–608.

Ministerie van Binnenlandse Zaken en Koninkrijksrelaties (2016). *Staat van het Bestuur*. Available at: https://kennisopenbaarbestuur.nl/media/254488/staat-van-het-bestuur-2016-webrichtlijnenproof.pdf.

Mintz, A., Redd, S. B. and Vedlitz, A. (2006). Can we generalize from student experiments to the real world in political science, military affairs, and international relations? *Journal of Conflict Resolution*, 50(5), 757–776.

Newell, B. R., Lagnado, D. A. and Shanks, D. R. (2015). *Straight choices: The psychology of decision making* (2nd ed.). Hove and New York: Psychology Press.

Rahat, G. (2007). Candidate selection: The choice before the choice. *Journal of Democracy*, 18(1), 157–170.

Renshon, J. (2015). Losing face and sinking costs: Experimental evidence on the judgment of political and military leaders. *International Organization*, 69(3), 659–695.

Sheffer, L. (2018). *Behavioural foundations of elite politics: How individual-level characteristics shape the decision making of elected politicians*. PhD Dissertation: University of Toronto.

Sheffer, L., Loewen, P. J., Soroka, S., Walgrave, S. and Shaefer, T. (2018). Nonrepresentative representatives: An experimental study of the decision making of elected politicians. *American Political Science Review*, 112(2), 302–321.

Simonson, I. and Tversky, A. (1992). Choice in context: Tradeoff contrast and extremeness aversion. *Journal of Marketing Research*, 29(3), 231–295.

Stolwijk, S. (2019). The representativeness heuristic in political decision making. In D. P. Redlawsk, C. Erisen, E. Hennes, Z. Oxley, D. Schreiber and B. Vis (Eds.), *The Oxford research encyclopedia of politics*. Available at: https://oxfordre.com/politics/browse?page=60&pageSize=20&sort=authorsort&subSite=politics.

Stolwijk, S. and Vis, B. (2020). Politicians, the representativeness heuristic and decision-making Biases. *Political Behavior*. https://doi.org/10.1007/s11109-020-09594-6

    (2018). Political decision making and the availability heuristic. *Paper prepared for the seventy-sixth Annual MPSA Conference, Chicago, USA, 5–8 April*.

Tversky, A. and Kahneman, D. (1983). Extensional versus intuitive reasoning: The conjunction fallacy in probability judgment. *Psychological Review*, 90(4), 293–315.

    (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157), 1124–1131.

    (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, 5(2), 207–232.

Tversky, A. and Simonson, I. (1993). Context-dependent preferences. *Management Science*, 39(10), 1179–1189.

Vieider, F. and Vis, B. (2019). Prospect theory in political decision making. In D. Redlawsk, C. Erisen, E. Hennes, Z. Oxley, D. Schreiber and B. Vis (Eds.),

Oxford research encyclopedia of politics. Available at: https://oxfordre.com/politics/browse?page=60&pageSize=20&sort=authorsort&subSite=politics.

Vis, B. (2019). Heuristics and political elites' judgment and decision making. *Political Studies Review*, 17(1), 41–52.

Von Neumann, J. and Morgenstern, O. (1944). *Theory of games and economic behavior*. Princeton, NJ: Princeton University Press.

Walgrave, S., Epping, L. and Sevenan, J. (2013). *Het Informatiemenu van politici en hun medewerkers: Resultaten van Interviews met Federale Parlementsleden, Ministers, Partijvoorzitters en hun Persoonlijke Medewerkers*. Antwerp: University of Antwerp.