

Climate and government: weather, health and electoral outcome

Rosemary Aldrich

Publications on climate change and the health of populations are burgeoning,^{1,2} and the relationship between climate change and government actions continues to provoke heated international debate.^{3,4} Climate is well known to affect the mental health of individuals.^{5,6} In addition, and of relevance to governments, the relationship between a sense of health and well-being and voter behaviour has been examined.⁷ However, although it is recognised that climate can affect voter turnout, and elections have been disrupted by inclement weather,^{8,9} the link between *climate* and *government change* has hitherto received no attention in the international literature.

METHODS

Using a quasi-semi case-control study design (*sans* controls), I studied interim results of the October 2004 Australian federal election and weather patterns on election day to test the hypothesis that there is a relationship between weather and voter behaviour, and that it is significant enough to have an electoral impact.

I obtained information about the electorates in which the sitting party was replaced from the website of the Australian Broadcasting Corporation.¹⁰ The weather predicted by the Australian Bureau of Meteorology for voting day in the electorates which changed hands was obtained from a national newspaper.¹¹

RESULTS

In general, voters across Australia enjoyed fine weather on election day (9 October 2004). There was a swing of over 3% to the incumbent Liberal Coalition Government.¹² However, the swing was not uniform, nor in one direction. Thirteen of 150 electorates changed party (Box).

For three of the five electorates with a swing to the Labor Opposition sufficient to change hands, the weather was not fine, and indeed was predicted to worsen during the day. This weather pattern contrasts dramati-

cally with electorates which recorded a swing to the Liberal Coalition Government sufficient to change hands. In six of these eight electorates (75%), the weather was fine. In the remaining two, the weather was forecast to clear during the day.

DISCUSSION

This study suggests that weather on the day of an election may influence voter choice. However, the limitations of the study do not allow a causal statement. The limitations include the assumption that fine weather is universally welcome, the small sample size, and the imprecision of weather records. Nevertheless, the findings of the study may have relevance to electoral campaigning — and therefore to political and subsequently population health outcomes.

Possible improvements to the study include use of a historical cohort design, in which weather data are collected for each electorate on serial election days and compared between electorates which changed party and those that did not. The method could be adapted for international comparisons, and the hypothesis tested over time in other electoral systems. Subsequently, if the findings are very strongly suggestive, and resources and technology emerge to facilitate it, researchers could randomise similar electorates to receive “usual” weather or “enhanced” weather. This could answer definitively whether weather, and what weather, wins votes.

Importantly, a proven relationship between climate and government change would stretch the horizons of scholarship. Incumbent governments could research and use evidence-based physical and spiritual interventions to exploit the vast campaign resource potentially provided by fine weather. Conversely, parties in opposition seeking office could develop behaviour-change strategies to convince key voters that although they *think* the weather is fine, it is only a matter of time. In any event, this research highlights the possibility for the diverse disciplines of meteorology, medi-

Forecast weather in electorates that changed party in the Australian federal election, 9 October 2004*

Electorate	Sitting party	Forecast weather	Swing
ALP gain			
Adelaide (SA)	LIB	Fine	1.9%
Cunningham (NSW)	GREEN	Partly cloudy	0.8%
Hindmarsh (SA)	LIB	Fine	1.0%
Parramatta (NSW)	LIB	Becoming cloudy	1.9%
Richmond (NSW)	NAT	Isolated showers later	1.9%
Liberal gain			
Bass (TAS)	ALP	Fine	4.7%
Bonner (QLD)	ALP	Fine	2.4%
Braddon (TAS)	ALP	Fine	7.1%
Greenway (NSW)	ALP	Fine	3.7%
Hasluck (WA)	ALP	Clearing showers	3.6%
Kingston (SA)	ALP	Fine	1.4%
Stirling (WA)	ALP	Clearing showers	3.6%
Wakefield (SA)	ALP	Fine	1.9%

* Electoral information was obtained from www.abc.net.au/elections/federal/2004/results/changing.htm¹⁰ (accessed 10 Nov 2004), and forecast weather from the Bureau of Meteorology (published 9 Oct 2004 in *The Weekend Australian*¹¹). ALP = Australian Labor Party. GREEN = Australian Greens Party. LIB = Liberal Party. NAT = National Party. NSW = New South Wales. QLD = Queensland. SA = South Australia. TAS = Tasmania. WA = Western Australia.

cine, social psychology, political science and demography to explain electoral success — an outcome with potentially major impacts on health.

ACKNOWLEDGEMENTS

I thank Dr Rick Iedema, University of New South Wales, Sydney, for discussion about the hypothesis tested in this study.

COMPETING INTERESTS

I have worked for the media organisations Fairfax and the Australian Broadcasting Corporation, have voted in elections and have prayed for fine weather.

Faculty of Health, University of Newcastle, Newcastle, NSW.

Rosemary Aldrich, BA (Comm), MPH, FAFPHM, Public Health Physician and Conjoint Lecturer.

Correspondence: Dr Rosemary Aldrich, Faculty of Health, University of Newcastle, PO Box 664J, Newcastle, NSW 2300. Rosemary.Aldrich@newcastle.edu.au

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(Received 13 Oct 2004, accepted 9 Nov 2004)

