

Does Local Population Context Matter for our Wellbeing?

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Capital thinking. Globally minded.



Outline:

1. **Intro:** Wellbeing and Wellbeing Inequality
2. **Literature:** The Argument
3. **Context:** Countries, Cities and Neighbourhoods
4. **Psychological Underpinnings:** The Fairness Hypothesis
5. **Summary**

Intro: Wellbeing and Wellbeing Inequality

“Wellbeing can be defined as the extent to which an individual or group experiences their life as going well, based on experiencing positive emotions, functioning well and meeting basic psychological needs.”

- Quick, 2015 (p. 7)

Wellbeing inequality is a measure of the spread of wellbeing in a given area.

- Most research and public interest to date has been on income inequality and its effect on wellbeing. Our work replaces *income* inequality with *wellbeing* inequality.

Intro: How is wellbeing measured?

Life Satisfaction

“Taking everything into account, how satisfied or dissatisfied are you with your life in general these days?” (NZ Quality of Life Survey 2012)

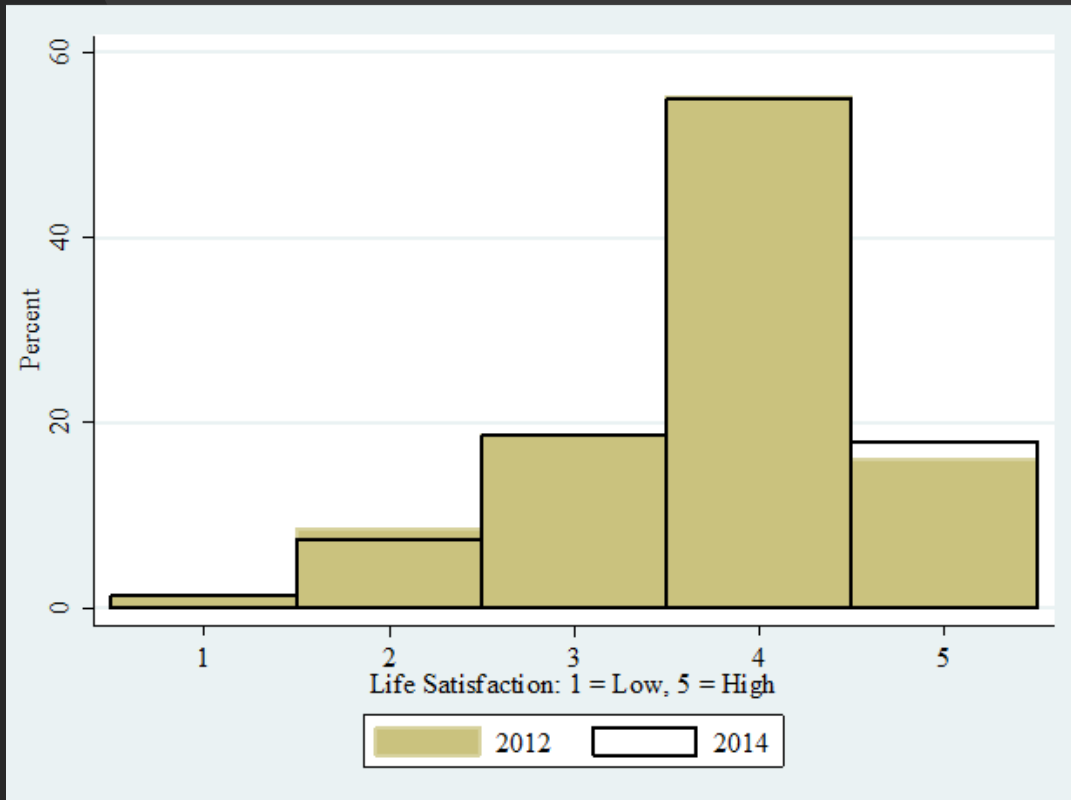
– Likert Scale: 1 - *Very Dissatisfied* to 5 - *Very Satisfied*

“How do you feel about your life as a whole right now?” Prefaced by: “I’m now going to ask you a very general question about your life. This includes all areas of your life, not just what we have talked about so far” (NZ General Social Survey 2012)

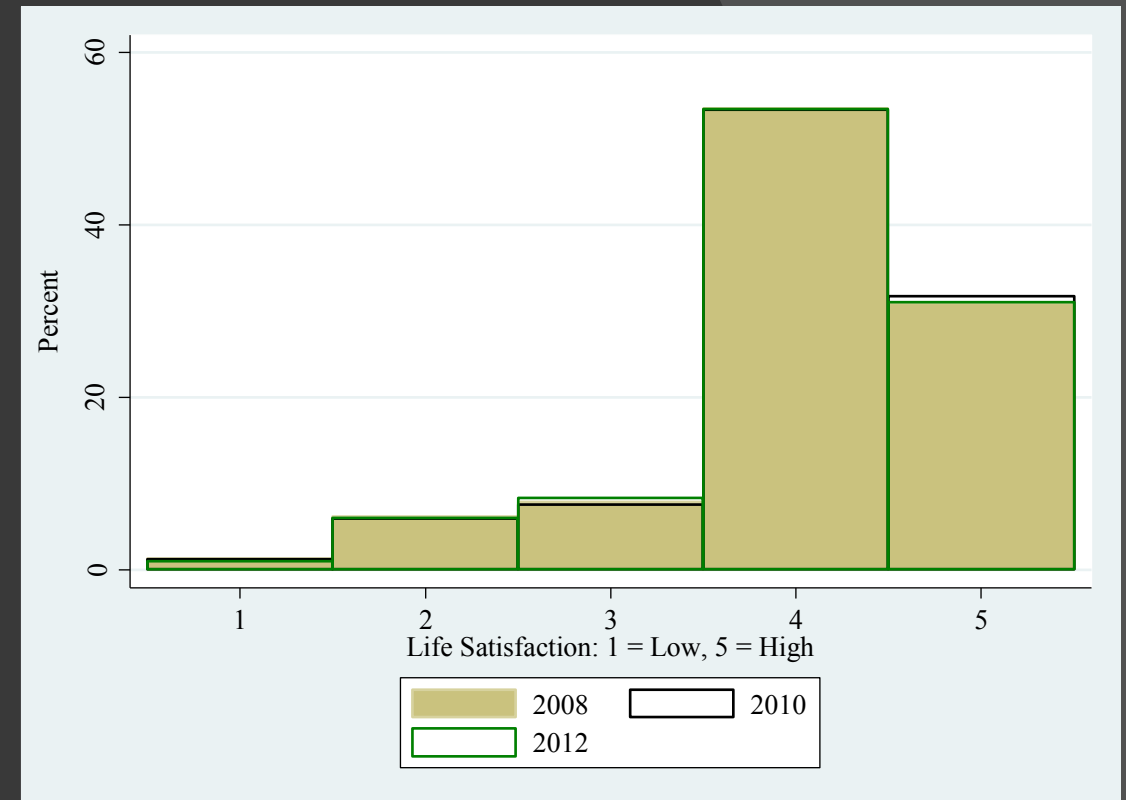
– Likert Scale: 1 - *Very Dissatisfied* to 5 - *Very Satisfied*

Intro: How is wellbeing inequality measured?

Standard Deviation as a measure of wellbeing inequality



NZ Quality of Life Survey
2012 mean = 3.76,
n(5459)



NZ General Social Survey
2008 mean = 4.07, n(8710)
2010 mean = 4.09, n(8543)
2012 mean = 3.88, n(8457)

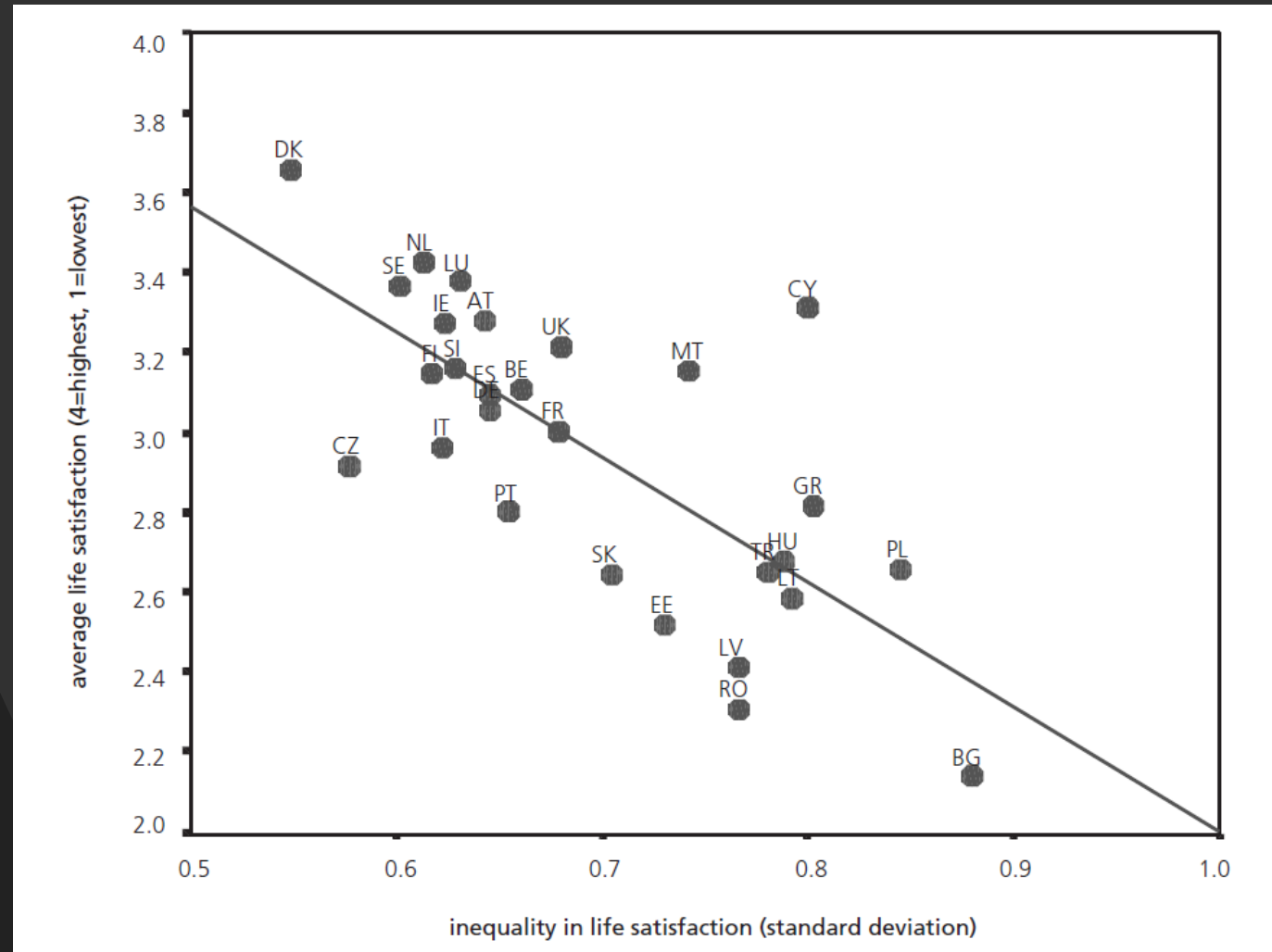
Literature: The Argument

A handful of literature examines the relationship between wellbeing and wellbeing inequality (Ott, 2005; Delhey, 2004; Fahey & Smyth, 2004; Goff, Helliwell & Mayraz, 2016; 2018).

They consistently find that people are sensitive to the spread of wellbeing in their country.



Literature: Countries as context



Delhey (2004), Association between average life satisfaction and life satisfaction dispersion, 28 European countries.

What about the sub-national case?

World Values Survey: Regions

NZ Quality of Life Survey: New Zealand Cities and Wards

Context: Regions of Countries, International

The relationship between mean and standard deviation life satisfaction among regions, various countries

$b = -0.953$
 $p < .001$
 $R^2 = 0.139$
 $n = 462$
regions



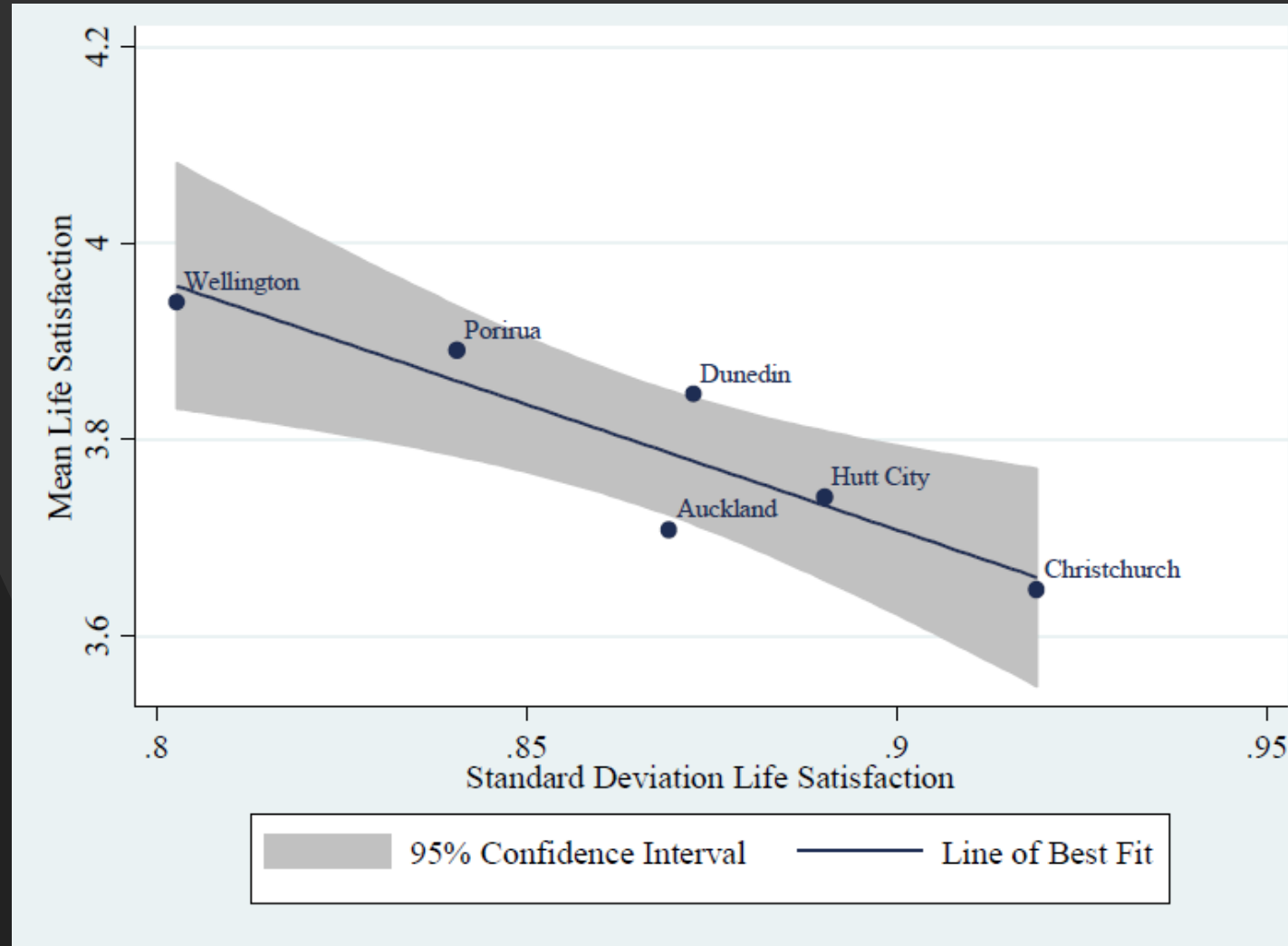
Data: World Values Survey, 2010-2014

WVS

Context: Cities, New Zealand

The relationship between mean and standard deviation life satisfaction in selected cities

$b = -2.554$
 $p < .05$
 $R^2 = 0.812$
 $n = 6$ cities

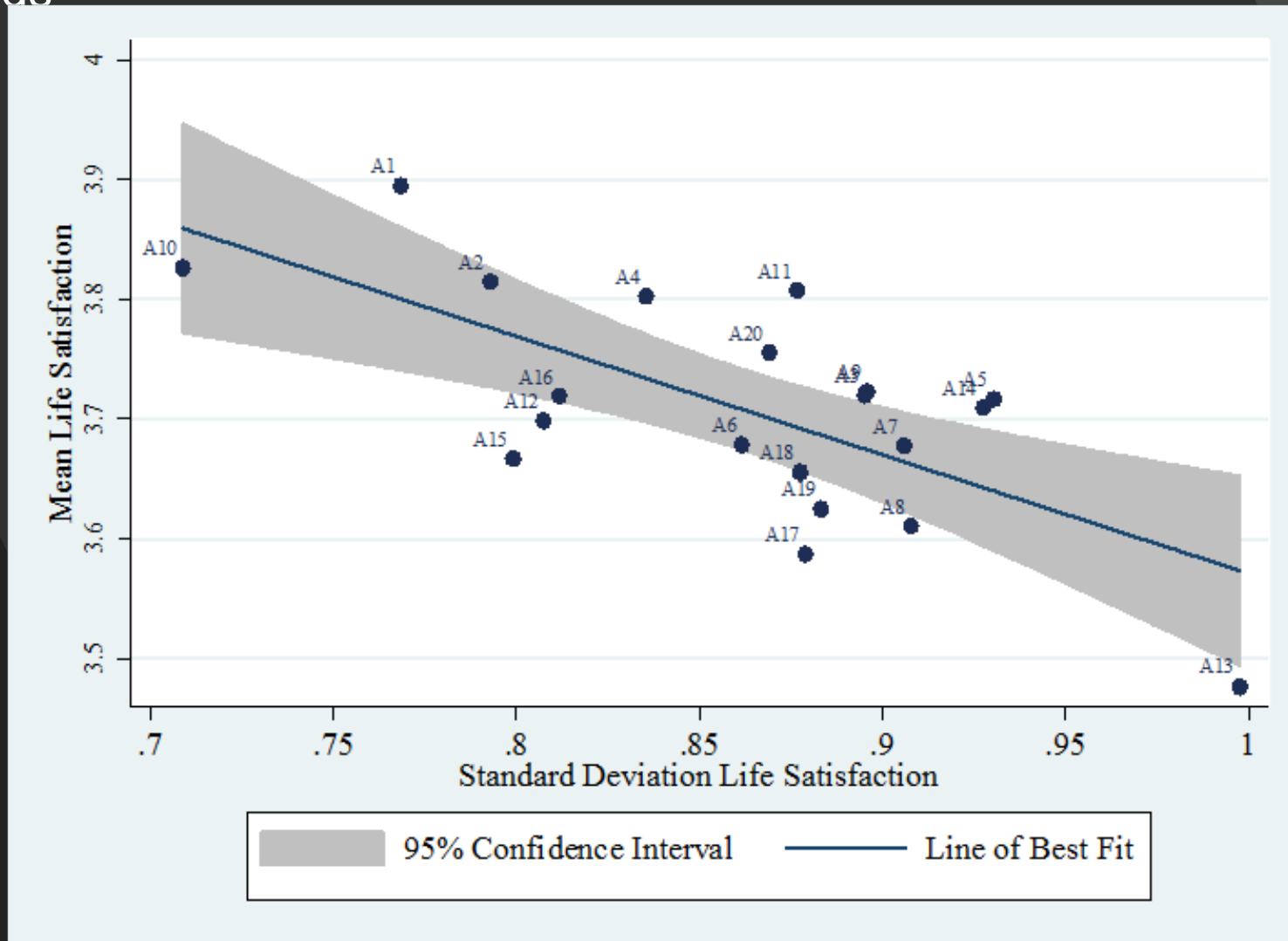


Data: New Zealand
Quality of Life Survey
2012

Context: Neighbourhoods, Auckland

The relationship between mean and standard deviation life satisfaction by Auckland wards

$b = -0.989$
 $p < .01$
 $R^2 = 0.466$
 $n = 20$ wards

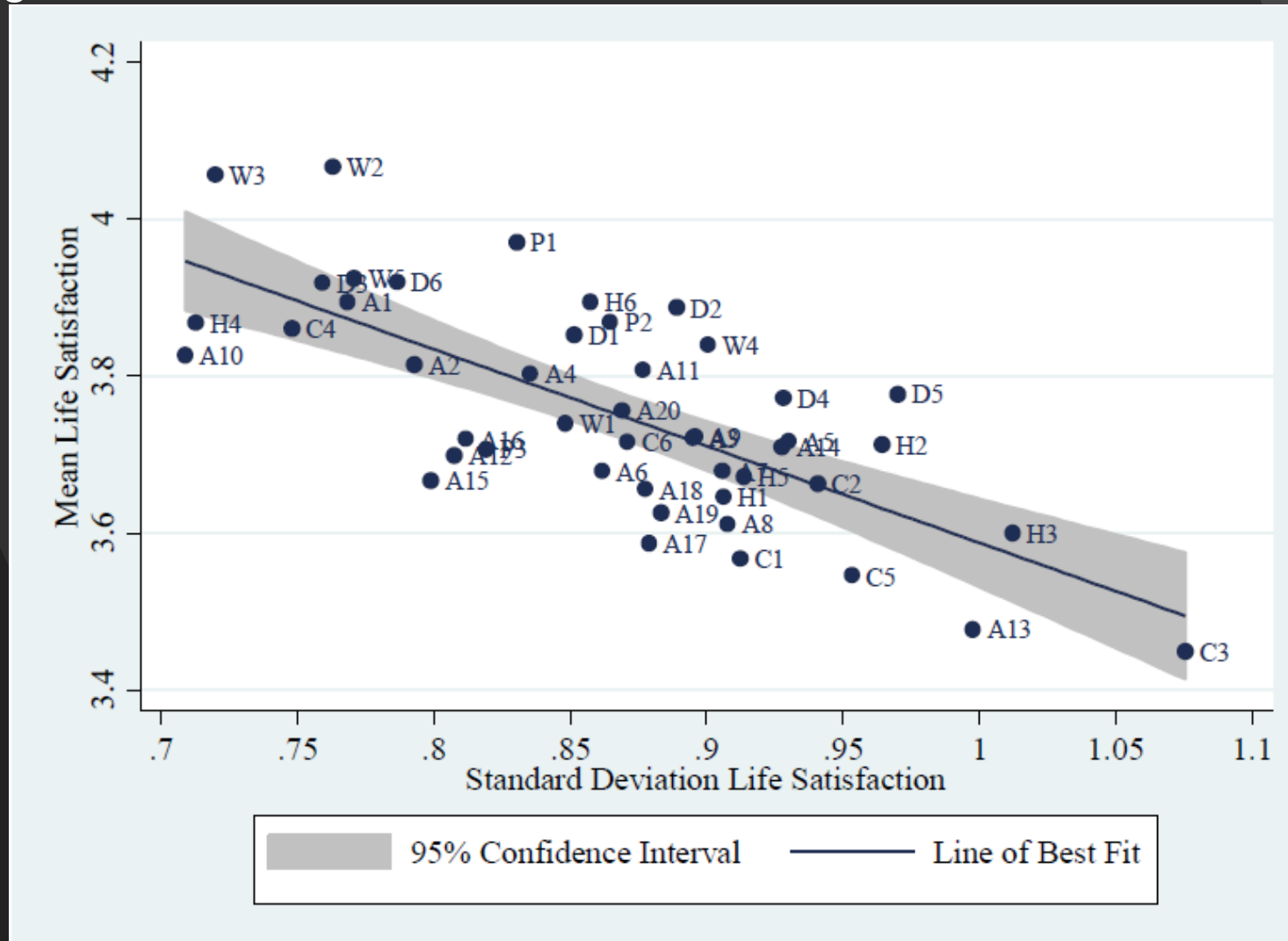


Data: New Zealand Quality of Life Survey 2012

Context: Neighbourhoods, Six NZ cities

The relationship between mean and standard deviation life satisfaction among New Zealand wards

$b = -1.233$
 $p < .001$
 $R^2 = 0.523$
 $n = 46$ wards
(across 6 cities)



Data: New Zealand
Quality of Life Survey
2010

Why does wellbeing decrease with rising wellbeing inequality?

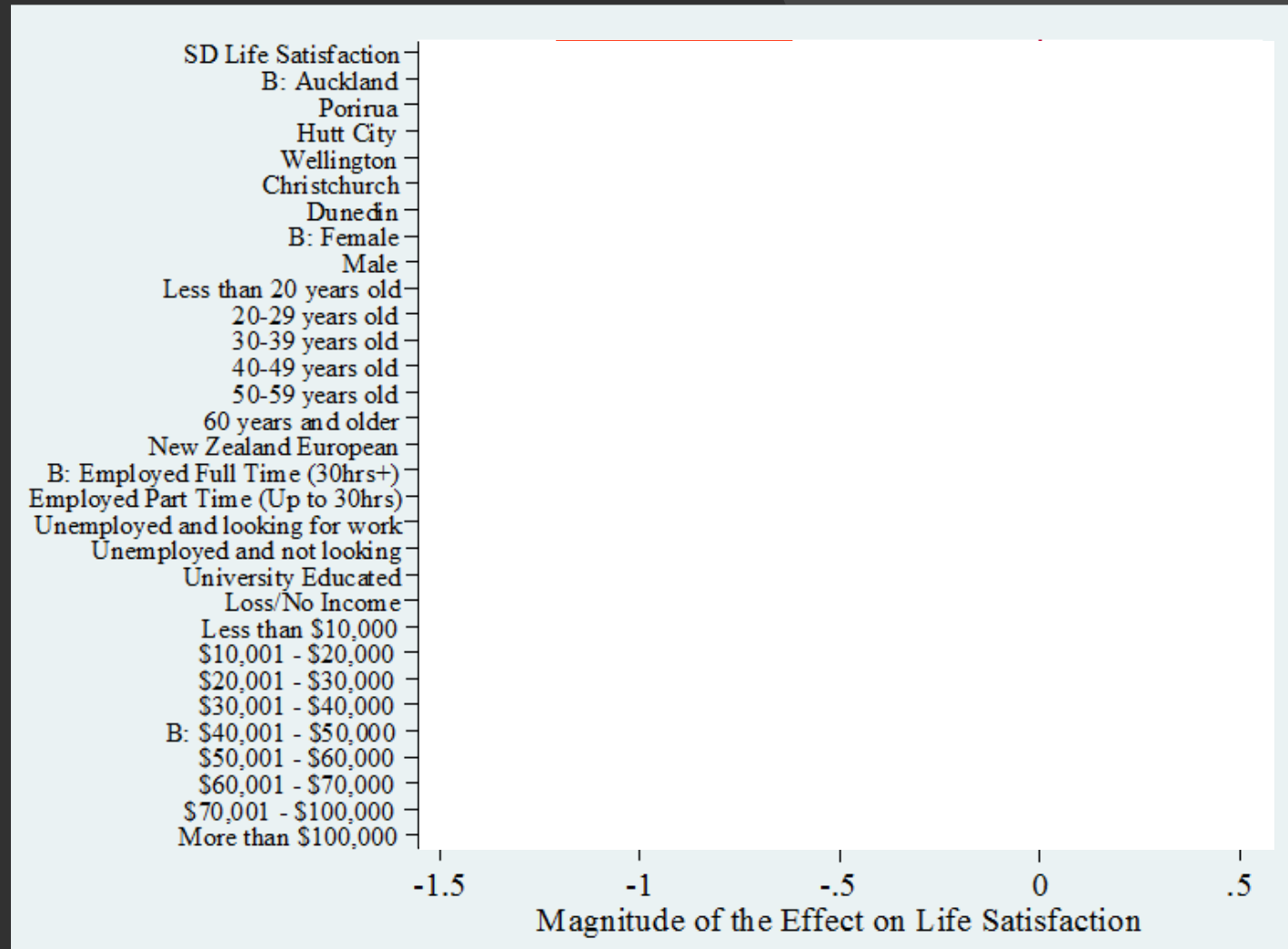
Many variables impact an individual's wellbeing: therefore, we need to introduce controls before we can answer this question.

Psychological Underpinnings: Individual Data

The individual level model:

- We control for location, as well as a number of demographic and achievement based characteristics.
- The effect exists after introducing controls, and is still relatively strong ($b = 0.918$, $p < .001$).

Local wellbeing inequality is one of the strongest predictors of poor wellbeing for individuals in New Zealand.



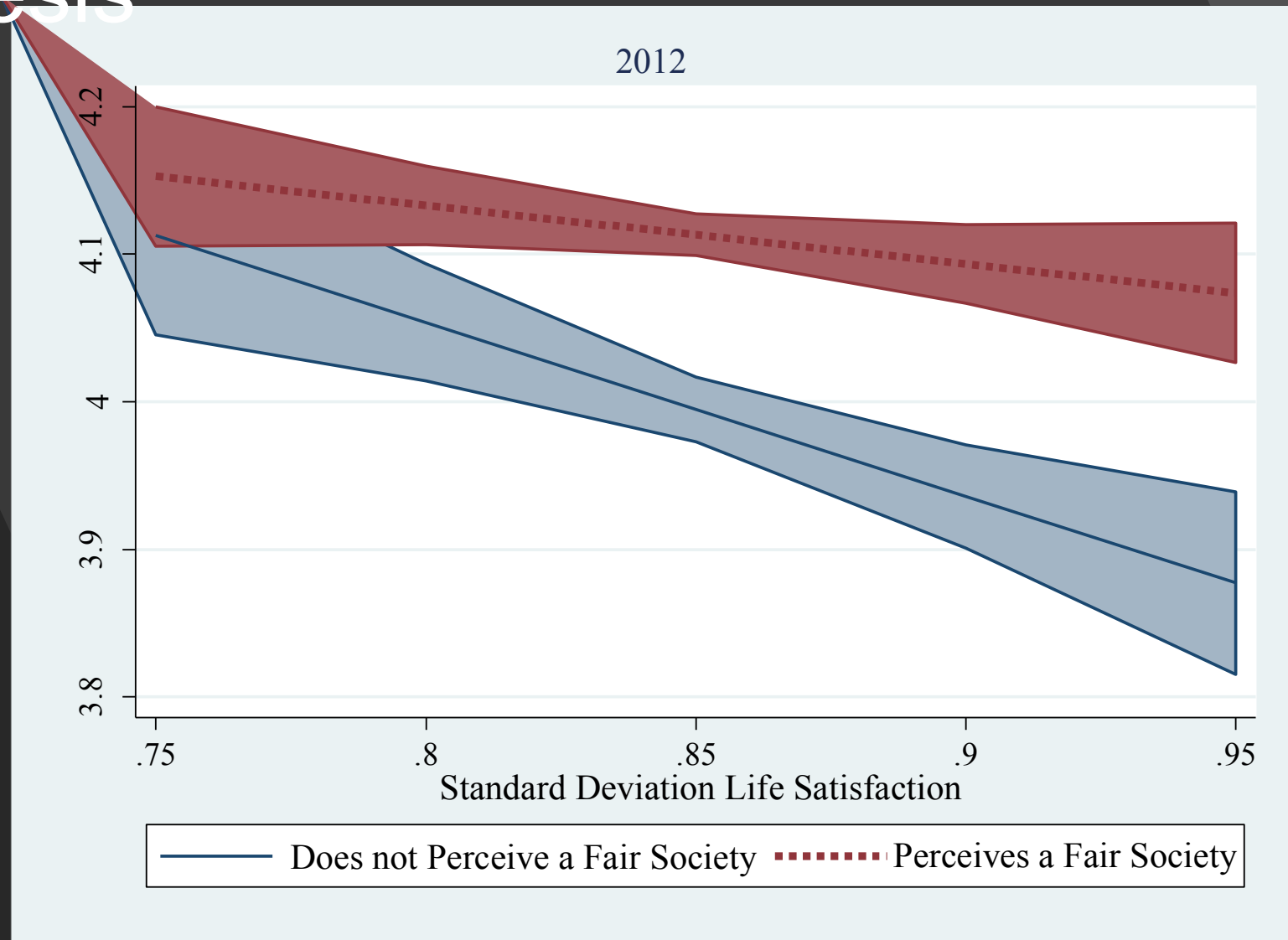
Psychological Underpinnings: The Fairness Hypothesis

So why do we see this relationship between wellbeing and wellbeing inequality?

- We turn to the New Zealand General Social Survey (2008, 2010, 2012) and use individual data to test the impact of societal fairness perceptions on sensitivity to wellbeing inequality.
- We use a fairness variable comparing those who believe that people are generally treated fairly vs those who do not believe that people are generally treated fairly.

Prediction: That those who perceive society to be unfair will be more sensitive to wellbeing inequality.

Psychological Underpinnings: The Fairness Hypothesis



Data: New Zealand General Social Survey, 2008,10,12. Controls included in graph.

Summary

- Wellbeing inequality is being offered as complement to income inequality.
 - Offers a useful additional layer of understanding regarding societal inequality.
- In general, our wellbeing decreases as inequality in wellbeing around us rises.
- The sensitivity of our wellbeing to wellbeing inequality in our local populations varies according to our perceptions of the origins of inequality.
- Indicates a need to focus on wellbeing and wellbeing inequality at more local scales than the nation.
 - Need to identify ways to reduce wellbeing inequality and make the wellbeing generation process more fair, in order to raise the wellbeing of all.

Questions

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References and Further Reading

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The change in the Local Government Act (LGA)

- When the LGA was introduced in 2002, one of the two statutory purposes of local government was defined as: “to promote the social, economic, environmental, and cultural wellbeing of communities, in the present and in the future”
- In 2012 this purpose was amended to: “to meet the current and future needs of communities for good quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.”
- Proposed changed back to “promoting the social, economic, environmental, and cultural well-being of their communities, taking a sustainable development approach.”
- See more on <http://www.legislation.govt.nz>

Introduction to the research: Problems with how wellbeing inequality is measured – the bounded scale

Inequality in Life Satisfaction is generally measured by standard deviation

However, standard deviation as a measure of inequality has some drawbacks

- The more left skewed the distribution, the more chance there is a technical negative relationship between the mean and the spread of wellbeing (the 'bounded scale' or 'ceiling' effect).
- While worth acknowledging, this effect has been found to only have a minor impact on results (Goff, Helliwell & Mayraz, 2018).

Findings: The Fairness Hypothesis

Construction of fairness perception variable

“think staff at various organisations in New Zealand accept and tolerate different groups”

- Staff at your local council
- The police in your area
- Judges and other staff at law courts
- Staff at government departments
- Your local doctors
- Staff at other health services in your area
- Staff at the schools in your area
- Staff at other education facilities like polytech or university in your area
- Local employers
- Staff at local shops and other services

Strongly Agree ('5') - Strongly Disagree ('1'):

“(organisation) treat everyone fairly, regardless of what group they are from”

Findings: The Fairness Hypothesis

OLS Regression of life satisfaction on the interaction between fairness perceptions and SD Life satisfaction, 2008 NZGSS

	Coefficient	SE	t	P>t	95% Confidence Intervals	
SD Life Satisfaction	-1.285	0.341	-3.77	0.001	-1.997	-0.573
Perceives a Fair Society	-0.876	0.232	-3.77	0.001	-1.361	-0.391
The Interaction Effect						
Perceives a Fair Society	1.269	0.262	4.84	0.000	0.723	1.815
Constant	5.030	0.298	16.91	0.000	4.410	5.651
	N = 8,576			R ² = 0.017		

Data: New Zealand General Social Survey, 2008,10,12

	2008	2010	2012	2013	2014	Total
NZGSS	8,710	8,543	8,455	-	-	25,708
QoLS	-	-	5,459	-	5,277	10,736
Total	8,710	8,543	13,914	5,541	5,277	41,985

	Mean Age Group	Sex (Male)	New Zealand European	Employment Status (Unemployed)	Mean Income Group
NZGSS	Fifteen	Binary	Multiple	Four	Thirteen
2008	45-49	44.92%	80.70%	2.83%	\$25k-\$30k
2010	45-49	44.15%	80.48%	3.70%	\$25k-\$30k
2012	45-49	43.88%	76.91%	3.95%	\$25k-\$30k
QoLS	Eleven	Binary	Multiple	Four	Ten
2012	45-49	46.04%	72.87%	5.97%	\$40k-\$50k
2014	40-44	45.96%	69.83%	6.59%	\$40k-\$50k

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Auckland Wards Key:

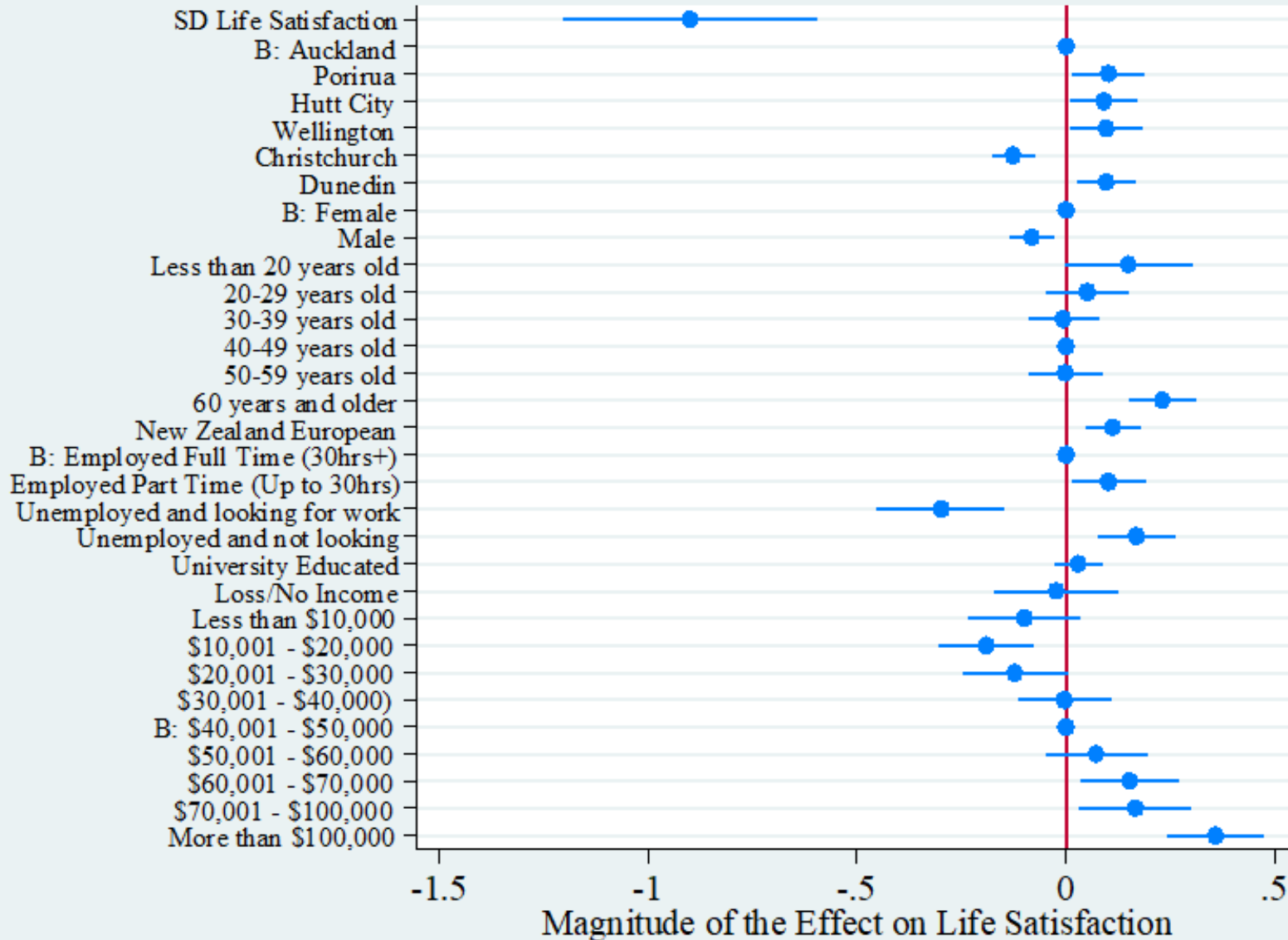
A1	Rodney	A11	Albert-Eden
A2	Hibiscus and Bays	A12	Puketapapa
A3	Upper Harbour	A13	Maungakiekie-Tamaki
A4	Kaipatiki	A14	Orakei
A5	Devonport-Takapuna	A15	Howick
A6	Waitakere Ranges	A16	Otara Papatoetoe
A7	Henderson-Massey	A17	Mangere-Otahuhu
A8	Whau	A18	Manurewa
A9	Waitemata	A19	Papakura
A10	Waiheke and Great Barrier Is.	A20	Franklin

Findings: The Fairness Hypothesis

Construction of NZGSS Geographic Variable

Label	Location	N	Label	Location	N
A1	Main Urban Auckland	5,505	A3	Minor Urban Auckland	67
W1	Main Urban Wellington	3,237	W3	Minor Urban Wellington	80
N1	Main Urban Northland Grp	2,590	N3	Minor Urban Northland Grp	304
RN1	Main Urban Rest NI	2,981	RN3	Minor Urban Rest NI	754
C1	Main Urban Canterbury	2,562	C3	Minor Urban Canterbury	378
RS1	Main Urban Rest SI	1,921	RS3	Minor Urban Rest SI	699
A2	Secondary Urban Auckland	112	A4	Rural Auckland	124
W2	Secondary Urban Wellington	210	W4	Rural Wellington	77
N2	Secondary Urban Northland Grp	154	N4	Rural Northland Grp	707
RN2	Secondary Urban Rest NI	757	RN4	Rural Rest NI	541
C2	Secondary Urban Canterbury	603	C4	Rural Canterbury	315
RS2	Secondary Urban Rest SI	495	RS4	Rural Rest SI	495

Coefficient Plot QoLS 2014



Data: New Zealand Quality of Life Survey 2014