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Preference for Quality of Life or Survival: Results from Survey on Preferences for End-of-Life Care among Singaporeans

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Background

- End-of-life care and treatment
  - Prolong life
  - Or alleviate suffering/ improve quality of life (QOL)
- Lack of knowledge of patient preferences:
  - leads to unwanted treatment
- Preferences for prolonging life or improving QOL known to vary by individual socio-demographics
- Singapore
  - Little knowledge about end-of-life care preferences and its variation in general population

Objective

- To assess whether preference for survival or quality of life varies by individual characteristics such as living arrangement, self-rated health and bequest motive.

Methods- Survey on preferences for end-of-life care among Singaporeans (SPECS)

- National household survey
- Sampling frame: 5000 households from national database of dwellings
- 1 eligible person (Singaporean citizen or permanent resident ≥50 years) selected from each household
- Target sample size: 1500
- Current analysis: 600

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Methods

- Outcome: Preference for Survival or Quality of life: 8-item quality-quantity (QQ) scale.[1]
    - 4-point Likert scale - strongly disagree=1/ disagree=2/ agree=3/ strongly agree=4
- Independent variables:
  - Living arrangements- living alone vs. others
  - Self-rated health- visual analogue scale (0-100)
  - Importance of leaving an inheritance for loved one after death – very important/somewhat important/not important at all
- Socio-demographics- Age, gender, ethnicity (Chinese/Malays/Indians), educational status

[1] Stiggelbout et al. Tradeoffs between quality and quantity of life. Development of the QQ Questionnaire for cancer patient attitudes. Med Decis Making 16:184-92, 1996

Statistical analysis

- Principal component analysis to identify sub-scales for QQ scale
- Linear regression predicting difference in sub-scale scores

Table 1: Sample characteristics

Variable	% (N=591)
Demographics	
Age (in years)	
50-60	44.7
61-70	31.9
≥71	23.4
Gender	
Men	42.1
Women	57.9
Ethnicity	
Chinese	75.1
Malays	17.4
Indians	7.5
Educational status	
Primary education or less	57.7
Secondary education	31.1
Greater than secondary education	11.2
Housing type	
1-2 room public housing	10.3
3 room public housing	25.0
≥4 room public housing and private housing	62.3
Missing	2.4

Table 1: Sample characteristics

Variable	% (N=591)
Living arrangement	
Living alone	9.6
Living with someone	90.4
Self-rated health (30-100)	
≤25th percentile (30-60)	25.3
>25th percentile (61-100)	74.7
Importance of leaving an inheritance for loved one after death	
Very important	41.1
Somewhat important	32.3
Not important at all	26.1
Missing	0.5

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Table 2: Results of principal component analysis

	Factor 1 (Preference for survival)	Factor 2 (Preference for quality of life)
If a treatment could prolong my life, I would always accept it, whatever the side effects might be	**73**	-3
If I reached a point during treatment at which I felt like giving up, I would probably manage to find the strength to continue	**67**	13
I would always accept hard-to-tolerate treatment, even if the chance of its prolonging my life was as little as one per cent	**74**	0
In order to live a bit longer, I would try just about anything	**78**	-9
If a life prolonging treatment would prevent me from leading a normal life, then I would rather not have it	1	**56**
I can imagine some side effects being so bad that I would refuse treatment, even if that meant a shorter life	6	**80**
A moment might come at which I would say “I have done my best, this is the limit”	-4	**73**
If I had to endure six months of intensive treatment in order to live for an extra half year, then I wouldn’t bother	-3	**60**

Figure 1: Variation in preference scores by living arrangements

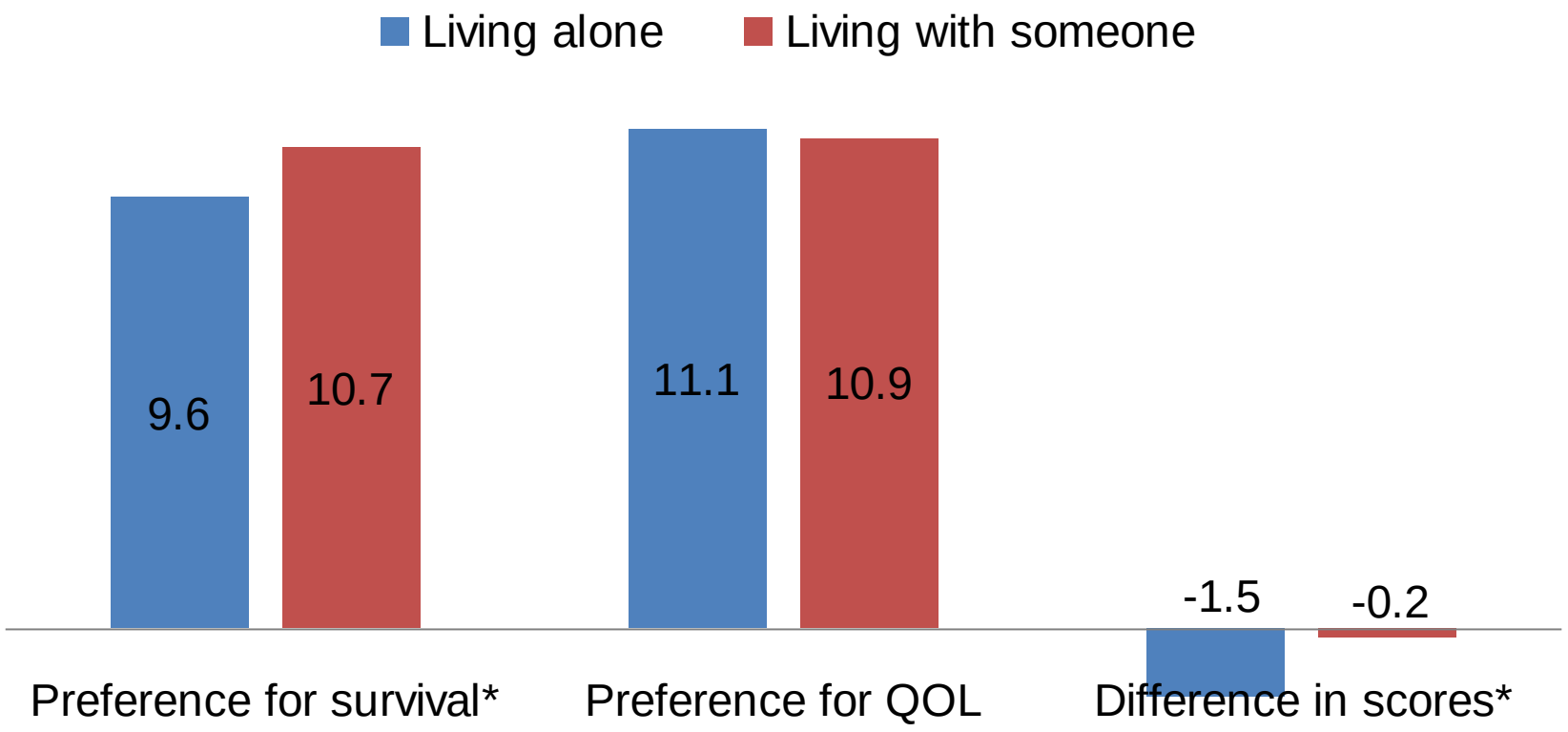

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Figure 2: Variation in preference scores by self-rated health

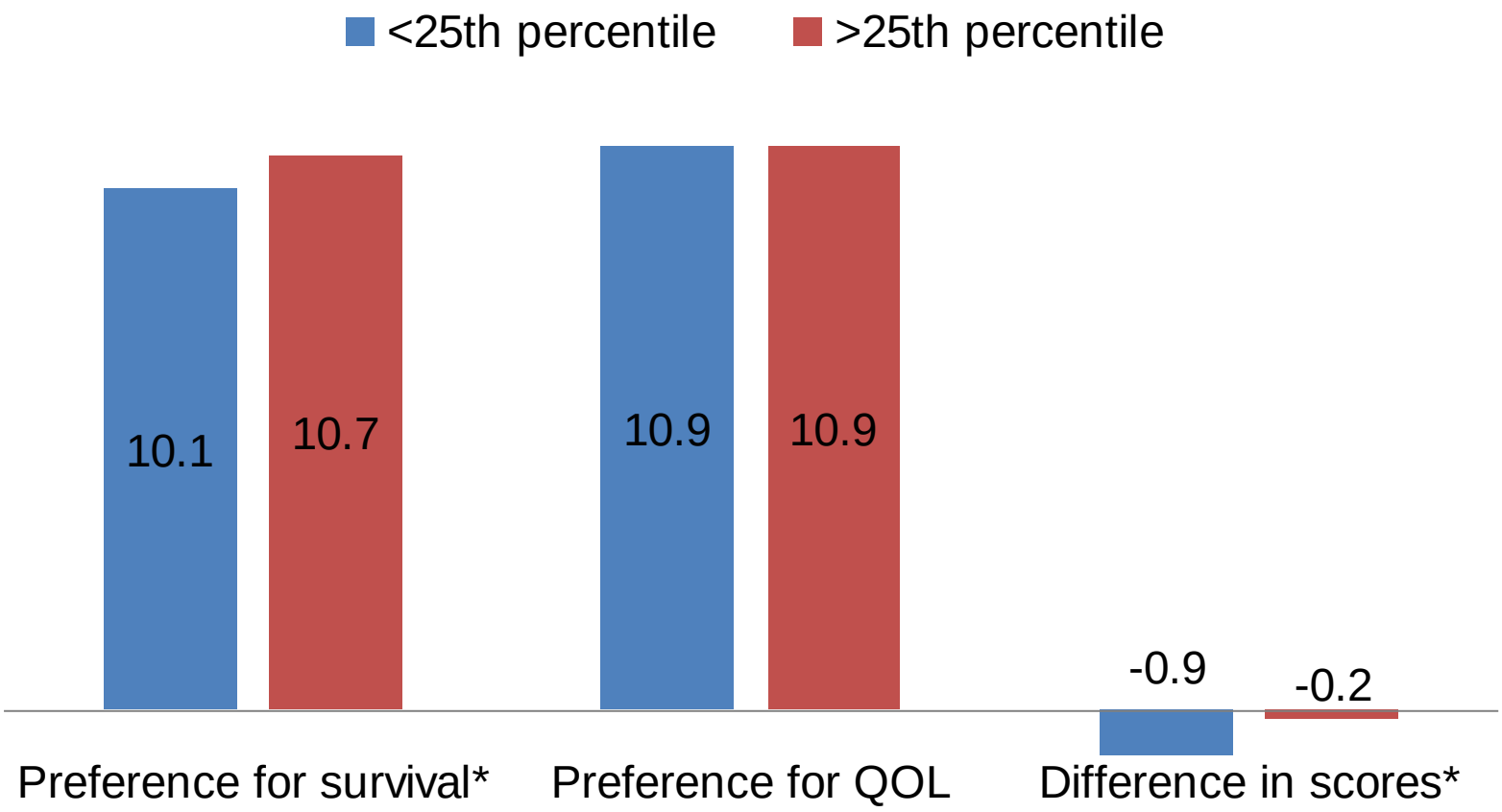

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Figure 3: Variation in preference scores by bequest motive

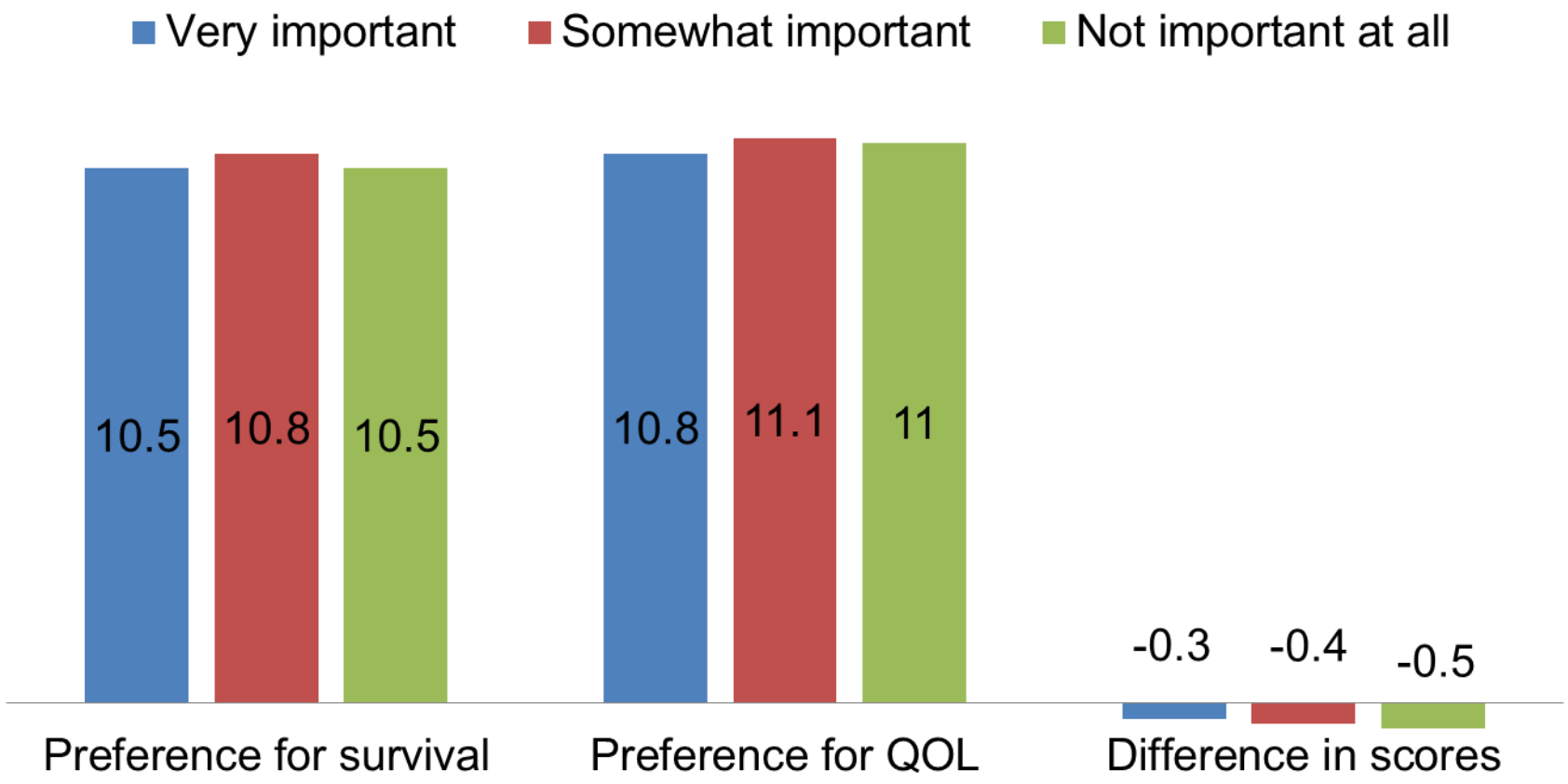

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Table 2: Linear regression model predicting difference in scores between preference for survival and preference for quality of life (N=575)

	Adjusted model β (SE)
Intercept	-1.46 (.51)
Living arrangement	
Living alone	**-.97 (.32)***
Self-rated health	
≤25th percentile	**-.59 (.21)***
Importance of leaving an inheritance for loved one after death	
Not important at all	-.19 (.22)
Somewhat important	-.23 (.20)

Analysis is adjusted for age, gender, ethnicity, educational status and housing type

Reference categories: Living with someone; >25th percentile self-rated health; very important (leaving an inheritance for loved one after death); ≥71 years; men; Malays; greater than secondary education; ≥4 room public housing and private housing

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Conclusion

- Living arrangements and self-rated health status predict preferences for survival or QOL at the EOL
- Those living alone prefer to live shorter but with greater QOL
  - Lack of potential caregiver
- Those with poorer self-rated health prefer to live shorter but with QOL

- Complete data to be available by June 2012

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Thank you