

Valuation of EQ-5D-Y Health Index using Discrete Choice Experiment (DCE) in Hong Kong Adolescent Population: Pilot Feasibility Study



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Objectives

This study aims to assess the feasibility and validity of EQ-5D-Y using discrete choice experiment (DCE) among adolescents in Hong Kong (HK).

Methods

Study design

- A cross-sectional survey was conducted in two selected local secondary schools.

Sample

- Adolescents aged 11-17 years; and
- Cantonese speaking HK residents.

Participants were invited to complete a self-administrated questionnaire which included four sections. [Table 1].

Table 1. Content of Study Questionnaire

	Section One [Figure 1 & 2] <ul style="list-style-type: none"> • Descriptive system of EQ-5D-Y • Visual Analogue Scale (VAS)
	Section Two [Figure 3] <ul style="list-style-type: none"> • 16 pairs of health states using DCE
	Section Three [Figure 4] <ul style="list-style-type: none"> • Structured feedback questions
	Section Four <ul style="list-style-type: none"> • Demographic information

Figure 1. EQ-VAS

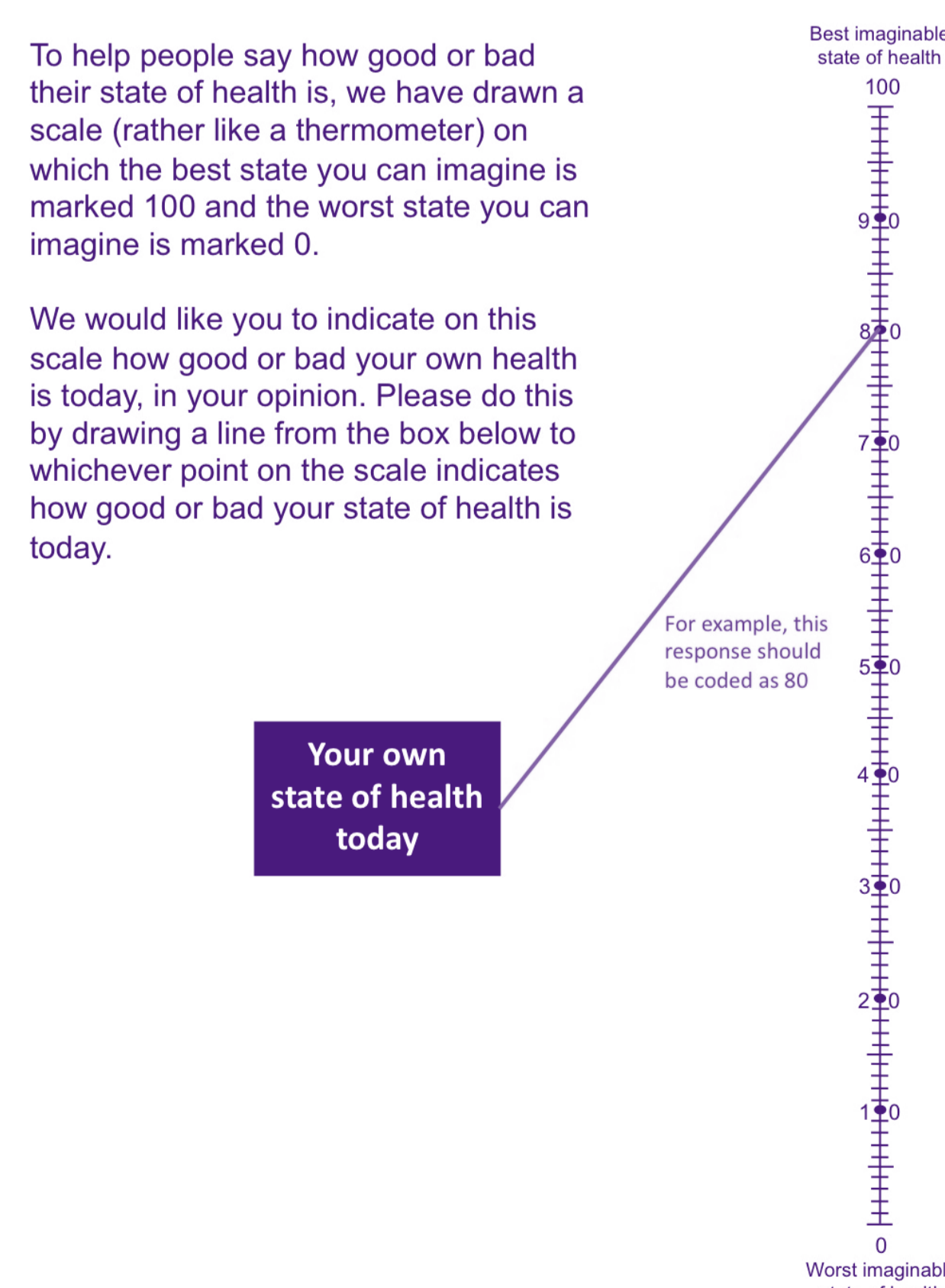


Figure 2. Descriptive system of EQ-5D-Y

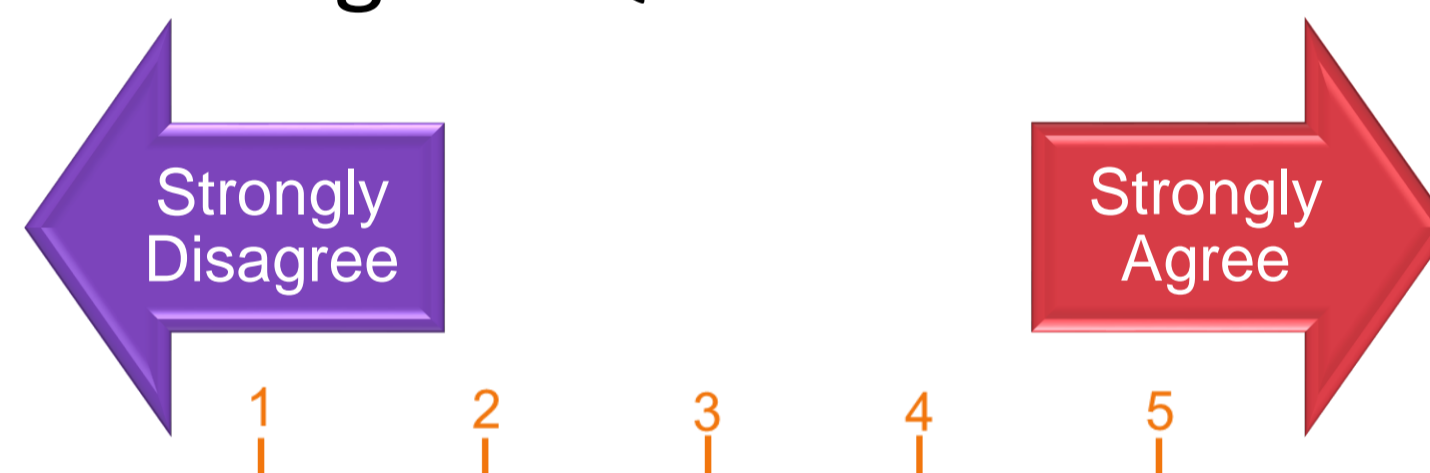
EQ-5D-Y		
Mobility (<i>walking about</i>)	MO	<input type="checkbox"/> No problem
Looking after myself	SC	<input type="checkbox"/> Some problems
Doing usual activities	UA	<input type="checkbox"/> A lot of problems
Having pain or discomfort	PD	
Feeling worried, sad or unhappy	AD	

Figure 3. Discrete Choice Experiment (DCE)

- 15 pair of DCE tasks were randomly chosen from a pool of 125 health states;
- 1 additional pair of DCE for data quality check.

Figure 4. Structured feedback questions

Three debriefing statements were accompanied by a five-point Likert scale scoring 1 to 5 from strongly disagree to strongly agree to determine the participants' understanding of EQ-5D-Y



- 1) Did you find it difficult in **answering** the DCE questions?
- 2) Did you find it difficult to **differentiate** the health states?
- 3) Did you find it difficult to **imagine** the provided health states?

Results

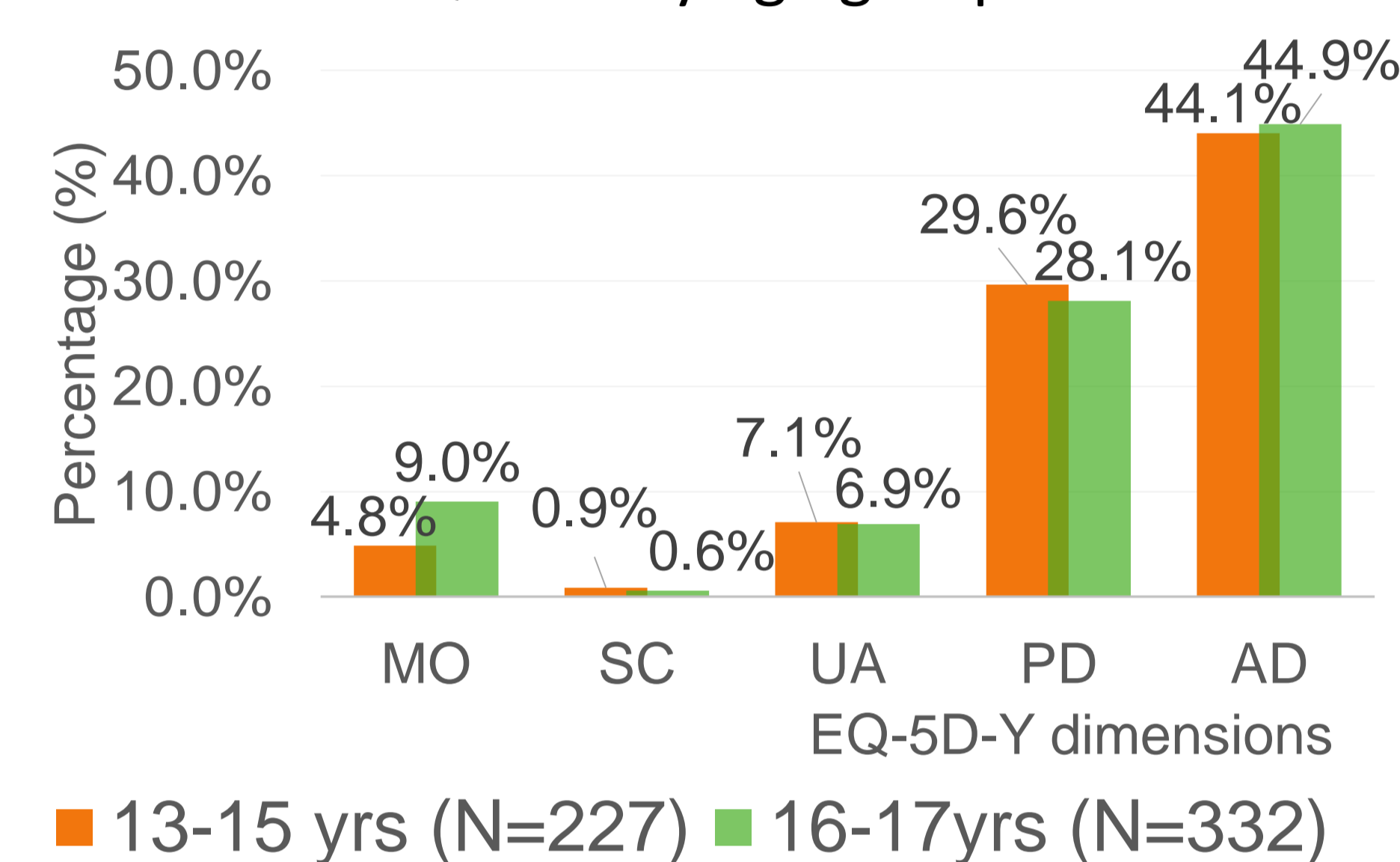
A total of 583 secondary students were recruited and only 559 cases were used for final analysis due to incomplete responses.

Table 2. Descriptive system of EQ-5D-Y among 11-17 years adolescents

Col %	MO	SC	UA	PD	AD
No Problem	92.6	99.3	93.0	71.3	55.5
Some problems	7.2	0.7	6.5	27.5	41.3
A lot of problems	0.2	0	0.5	1.2	3.2

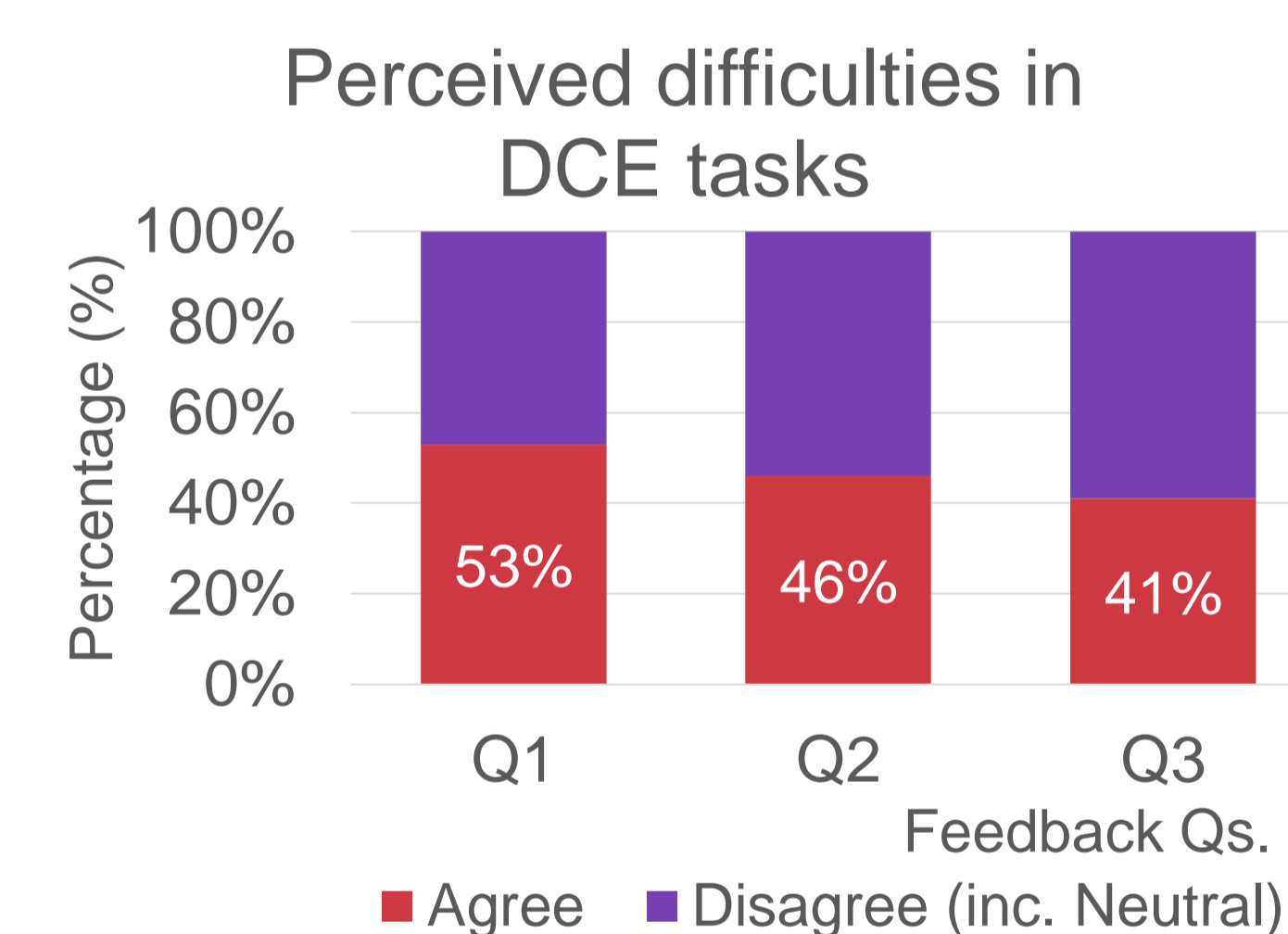
Findings revealed that majority of respondents (>90%) experienced no problem on Mobility, Self-care and Doing usual activities while a relative large proportion of them experienced problems on Pain/Discomfort (28.7%) and feeling of worries and sadness (44.5%). [Table 2 & Figure 5]

Figure 5. % of students experienced problems on dimensions of EQ-5D-Y by age groups



For the feedback questions, nearly half of them expressed they had some difficulties in answering the DCE questions (53%), differentiating different health states (46%), and imagining the provided health status (41%) [Figure 6].

Figure 6. Structured debriefing feedback (N=556)



Conclusion

- This study provides a preliminary evidence with high proportion of valid scoring supports the feasibility of EQ-5D-Y with DCE in HK adolescent population.
- However, given the large amount of students indicated their difficulties in answering the DCE questions, further evaluation on the DCE tasks including its translation and interview method is required to improve the quality of data.
- A cultural adaptation is therefore an important step before the valuation study of EQ-5D-Y.

Acknowledgement

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