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科技及創新政策研究中心

# Survey on Public Support to Green Deck Project

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Do you think Green Deck is a good idea?

# Our Survey Based on the PolyU Community

- More than 80% of respondents considered Green Deck
  - Wise
  - Worthy
  - Pleasant



Brilliant idea, what's next?

# Scientific solution is just the beginning...

- A gap between what scientists agreed and what the public perceived
  - E.g., climate change, COVID-19, vaccine, ...
- A gap between attitudes and behaviours
  - What I think is good  $\neq$  what I do



Understanding public opinion is a crucial step  
for the implementation of scientific solution

# The Case of the Green Deck Project

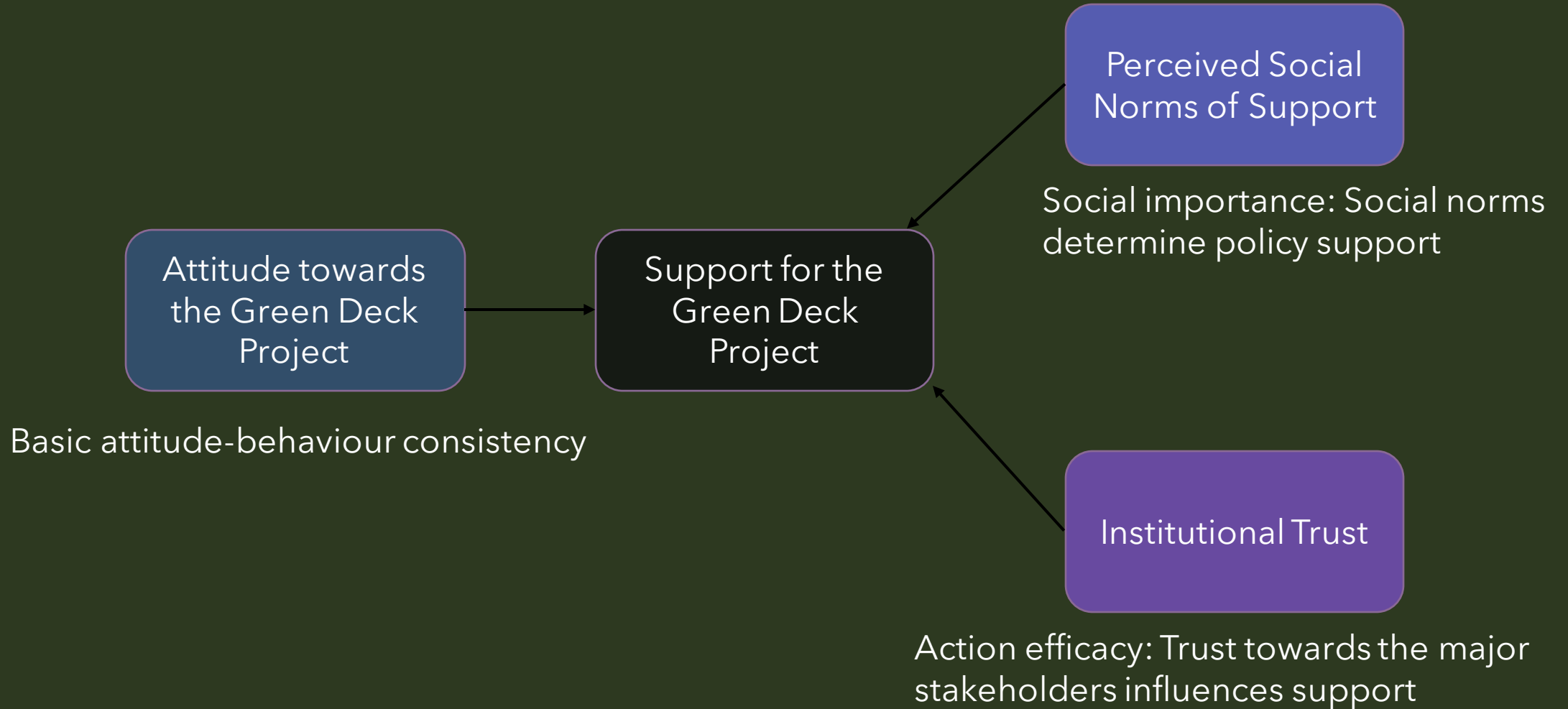
1. Understand public opinions: Evaluate how **people think, feel, and support** the Green Deck Project
2. From attitude to behaviour: Identify **factors that influence public support** for the Green Deck Project

# The Role of Social Sciences

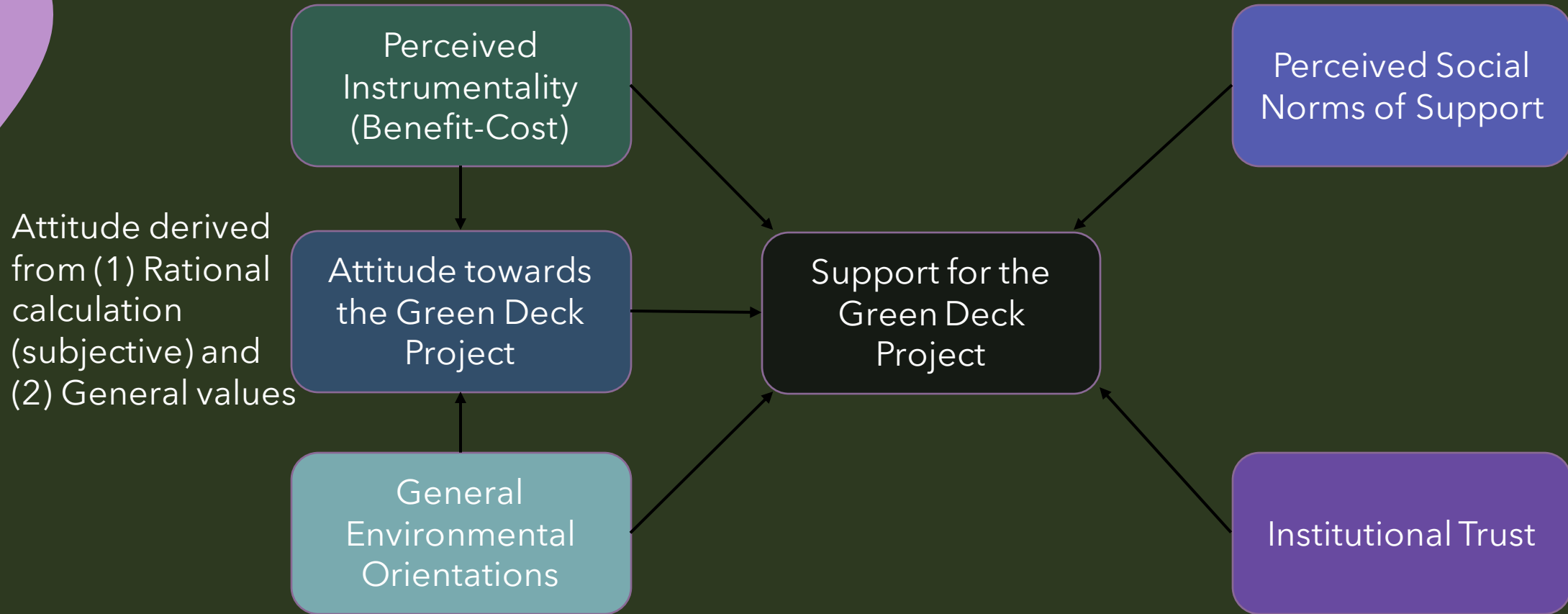
- Provide a theoretical basis for understanding the human mind and behaviour: *What to measure*
- Provide a scientific method for evaluating public opinions: *How to measure*



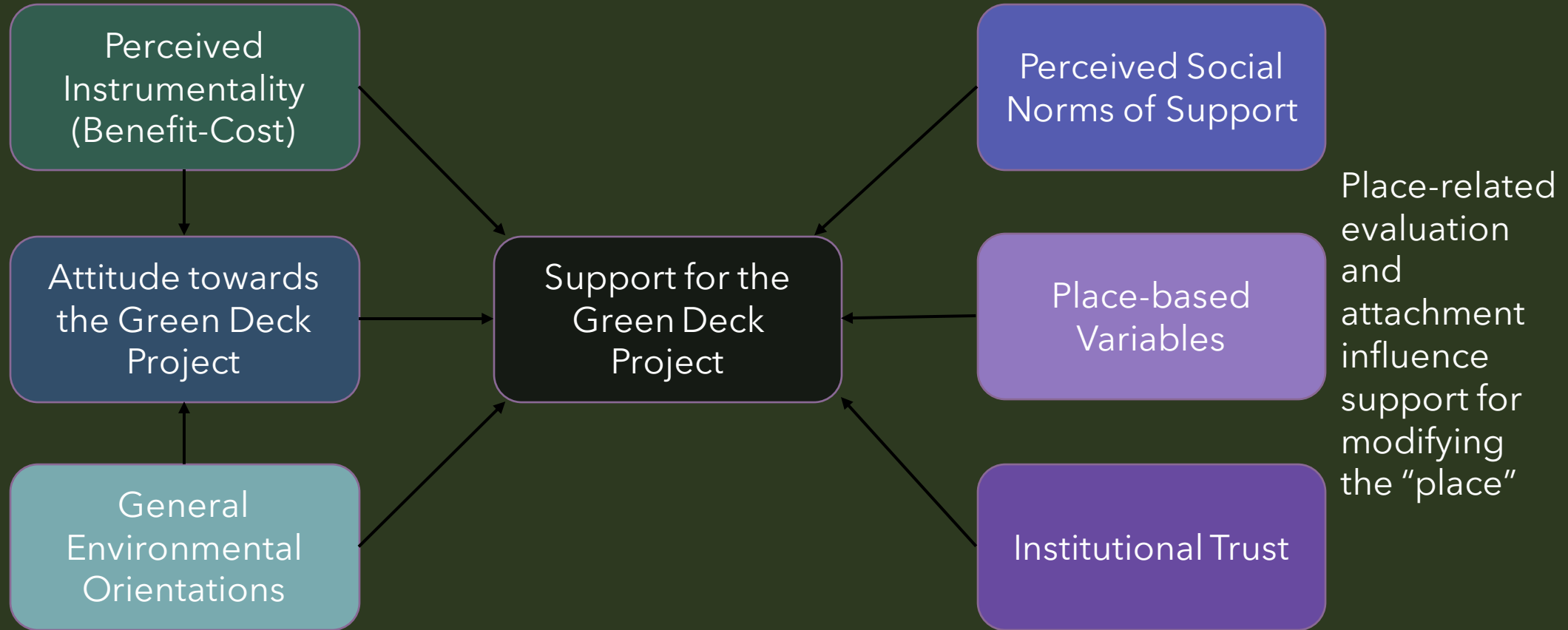
# Guiding Theoretical Model in Survey Design



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# Guiding Theoretical Model in Survey Design





# Two Survey Studies

- Study 1 – Street Intercept Survey
- Study 2 – PolyU Community



# Study 1: Street Intercept Survey (General Public)

# Study 1 - Street Intercept Survey

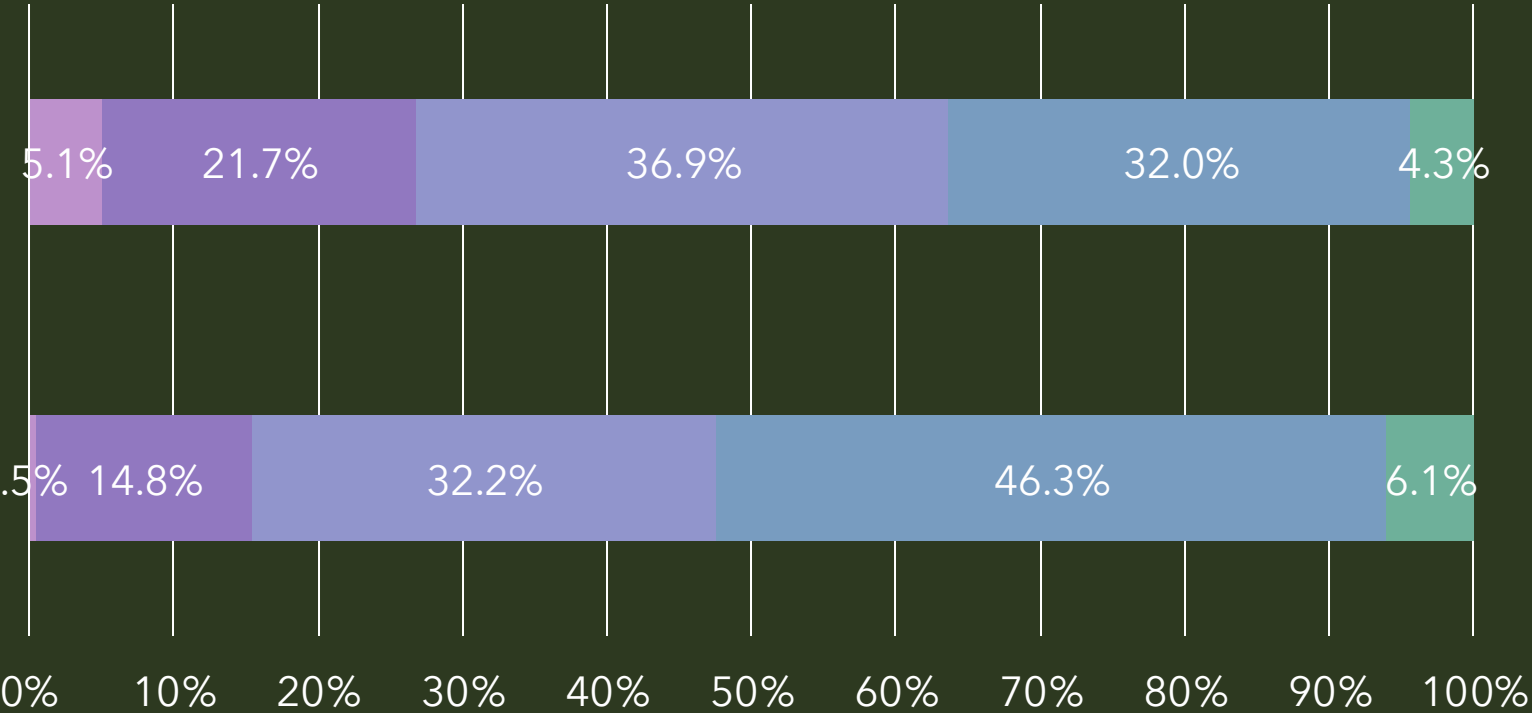
- 1,000 respondents
  - 400 Hung Hom, Yau Ma Tei, and Tsim Sha Tsui
  - 600 Other areas
  - PolyU staff members and students excluded
- Data collection: 15 to 27 April 2023; including weekdays and weekends
- **Random sampling:** Invite the 5<sup>th</sup> person of every five people
- Sample weight: Gender and age group based on government statistics

# Measures and Descriptive Results

- Support for the Green Deck Project:
  - E1: To what extent do you support the implementation of the Green Deck Project?
  - E2: To what extent do you support using public resources for implementing the Green Deck Project?
  - (1 = Not at all to 5 = Very much)

E2. Support for Using Public Resources

E1. Support for Implementation



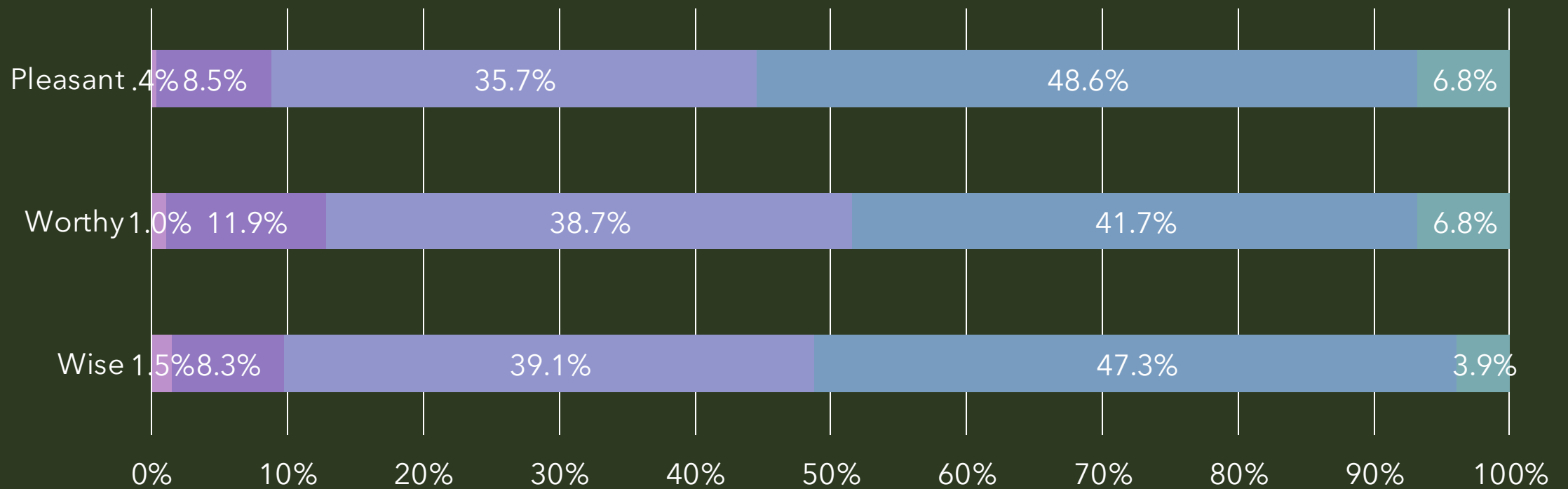
	E1. Support for Implementation	E2. Support for Using Public Resources
1. Strongly Oppose	.5%	5.1%
2	14.8%	21.7%
3	32.2%	36.9%
4	46.3%	32.0%
5. Strongly Support	6.1%	4.3%

1. Strongly Oppose 2 3 4 5. Strongly Support



# Measures and Descriptive Results

- Attitudes towards the Green Deck Project
- For me, the idea of green deck is...
  - (1) Fool-Wise (5)
  - (1) Worthless-Worthy (5)
  - (1) Unpleasant-Pleasant (5)



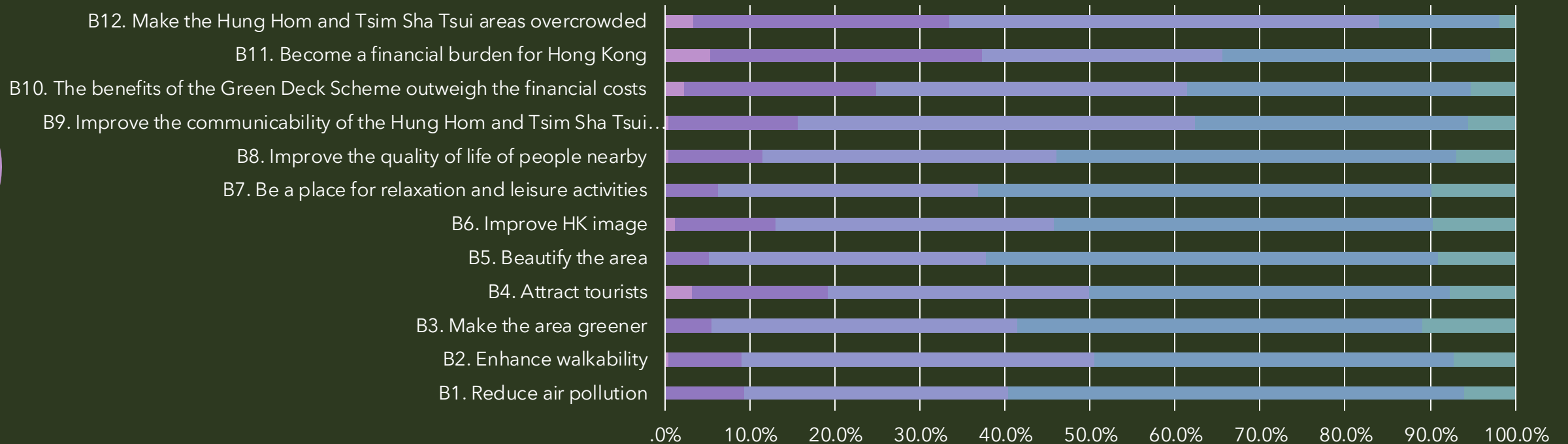
	Wise	Worthy	Pleasant
1	1.5%	1.0%	.4%
2	8.3%	11.9%	8.5%
3	39.1%	38.7%	35.7%
4	47.3%	41.7%	48.6%
5	3.9%	6.8%	6.8%

■ 1 ■ 2 ■ 3 ■ 4 ■ 5

# Measures and Descriptive Results

- Perceived Instrumentality (Benefits) of the Green Deck Project
  - **Benefits to Physical Environment:** Reduce air pollution, Make the areas greener
  - **Benefits to Social Environment:** Improve the quality of life of people nearby, Be a place for relaxation and leisure activities, Improve the communicability
  - **Benefits to Hong Kong:** Improve the image of Hong Kong, Attract tourism, Beautify the areas
  - **Improve Walkability:** Make the areas more walkable, Make the areas more crowded (reverse-coded)
  - **Benefits Outweigh Costs:** Benefits outweigh financial costs, Become financial burden (reverse-coded)

1 = Not at all to 5 = Very much

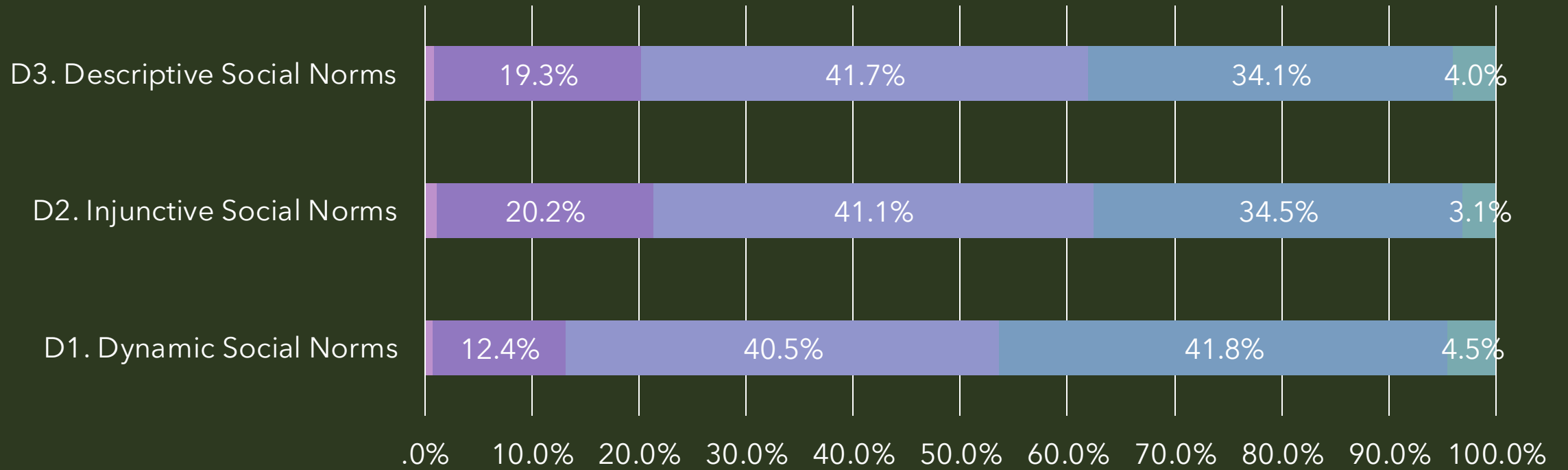


	B1. Reduce air pollution	B2. Enhance walkability	B3. Make the area greener	B4. Attract tourists	B5. Beautify the area	B6. Improve HK image	B7. Be a place for relaxation and leisure activities	B8. Improve the quality of life of people nearby	B9. Improve the communicability of the Hung Hom and Tsim Sha Tsui East areas	B10. The benefits of the Green Deck Scheme outweigh the financial costs	B11. Become a financial burden for Hong Kong	B12. Make the Hung Hom and Tsim Sha Tsui areas overcrowded
1. Strongly disagree	.1%	.4%	0.0%	3.2%	.1%	1.1%	.1%	.3%	.3%	2.3%	5.4%	3.3%
2	9.2%	8.5%	5.5%	15.9%	4.9%	11.9%	6.1%	11.1%	15.3%	22.5%	31.9%	30.2%
3	31.0%	41.6%	35.9%	30.8%	32.7%	32.8%	30.7%	34.6%	46.7%	36.6%	28.3%	50.5%
4	53.7%	42.1%	47.7%	42.4%	53.1%	44.5%	53.3%	47.0%	32.0%	33.4%	31.6%	14.1%
5. Strongly agree	5.9%	7.3%	11.0%	7.7%	9.1%	9.8%	9.8%	6.9%	5.6%	5.2%	2.9%	1.8%

1. Strongly disagree 2 3 4 5. Strongly agree

# Measures and Descriptive Results

- Perceived Social Norms of Support
  - **Dynamic social norm:** A growing number of Hong Kong would support the green deck scheme
  - **Injunctive social norm:** Many people in Hong Kong will support it if I support the green deck scheme
  - **Descriptive social norm:** Many people in Hong Kong consider it important to support the green deck scheme
  - 1 = strongly disagree to 5 = strongly agree



	D1. Dynamic Social Norms	D2. Injunctive Social Norms	D3. Descriptive Social Norms
1. Strongly Disagree	.8%	1.1%	.9%
2	12.4%	20.2%	19.3%
3	40.5%	41.1%	41.7%
4	41.8%	34.5%	34.1%
5. Strongly Agree	4.5%	3.1%	4.0%

1. Strongly Disagree
  2
  3
  4
  5. Strongly Agree

# Summary of Descriptive Findings

- Hold positive attitudes
- Tended to agree with the benefits
- Tended to support the green deck scheme in general
- Neutral leaning positive towards spending public resources for its implementation
- Perceived neutral leaning supportive social norms



# Predicting Public Support



# Measures of Other Predictor Variables

- **General Pro-Environmental Orientations**

- Environmental self-identity (2 items; e.g., I see myself as an environmentally-friendly person)
- Connectedness to nature (1 item; I often feel a sense of oneness with the natural world around me)
- Perceived importance of public green spaces (5 items; e.g., Having public green space is important to me)

# Measures of Other Predictor Variables

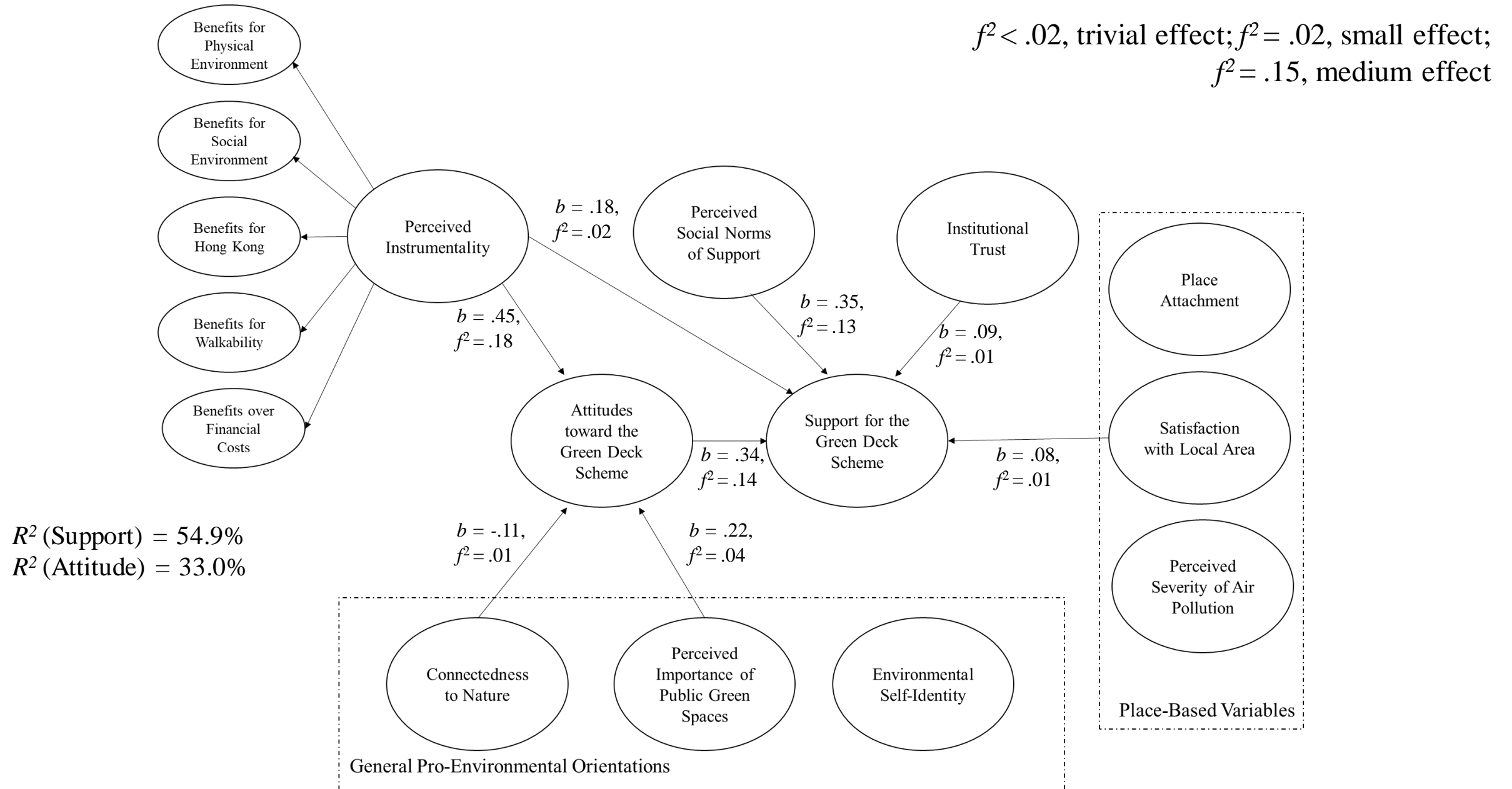
- **Institutional trust**

- Trusting the following individuals/organizations for tackling environmental issues in HK
    - 1. Scientists and professionals
    - 2. Environmental non-governmental organizations
    - 3. the District and legislative councils
    - 4. Hong Kong government
- (1 = Not at all to 5 = Very much)

# Measures of Other Predictor Variables

- **Place-Based Variables**

- Satisfaction of the Local Areas (3 items; greenness, recreational facilities, and public green spaces)
- Perceived severity of air pollution (1 item)
- Attachment to the Local Areas (2 items: e.g., The Hung Hom and Tsim Sha Tsui East areas are very special to me)
- Attachment to Hong Kong (3 items: e.g., I am very attached to Hong Kong)



Note. The non-significant paths and indicator variables (i.e., items) were omitted for the sake of parsimonious

# Summary of Findings

- Attitudes, perceived social norms, institutional trust, and perceived instrumentality were crucial predictors of support for the green deck scheme
- Perceived instrumentality and perceived importance of public green spaces were a crucial predictor of attitudes



# Study 2: PolyU Community

# Study 2: PolyU Community

- Online Survey
- 674 respondents
  - 420 students
  - 254 staff members
- Data collection: 15 April to 15 May 2023
- Participants recruited via mass e-mail

# Summary of Descriptive Findings

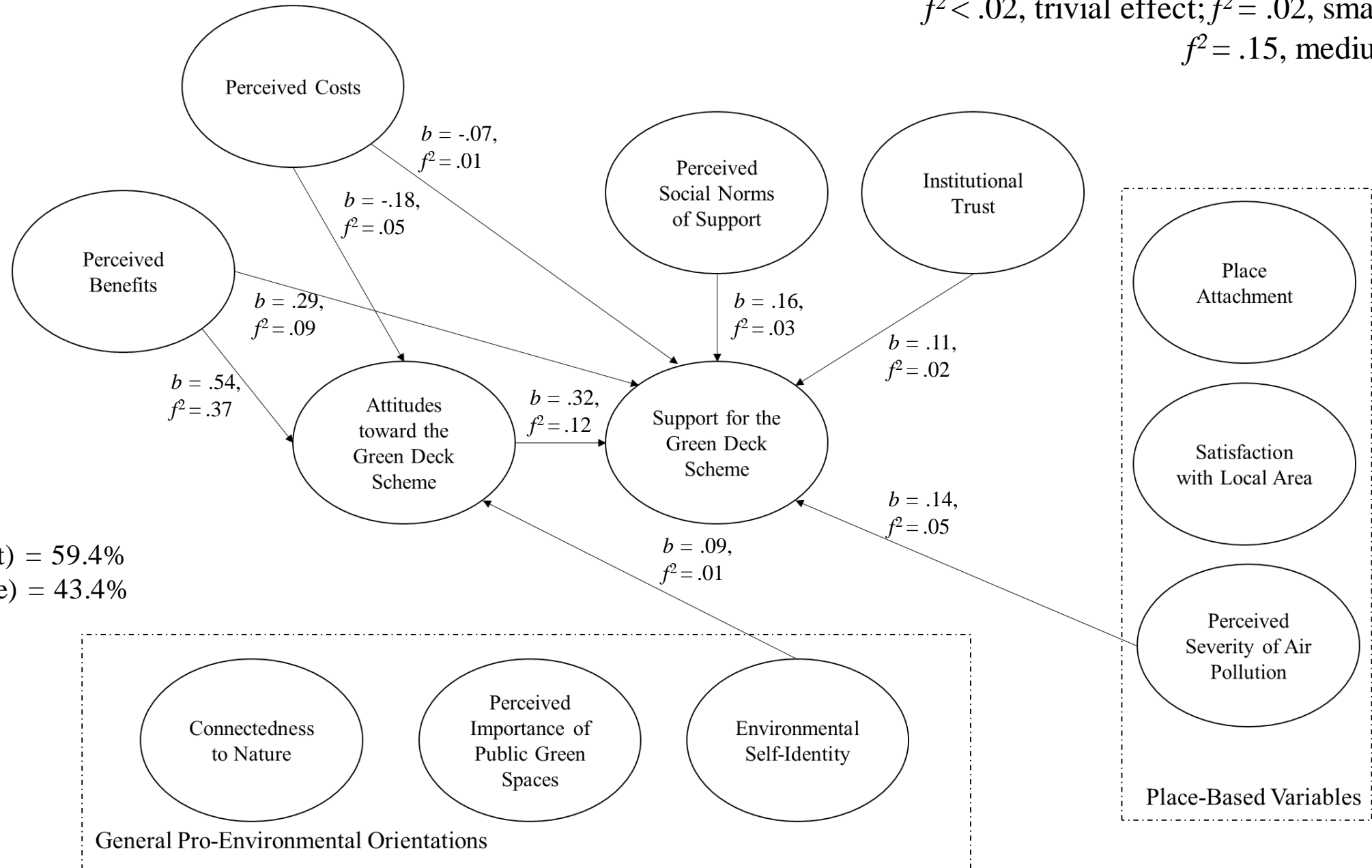
- PolyU students and staffs tended to hold positive attitude, considered the social norms to be supportive, and support the Green Deck Project
- PolyU students and staffs considered the Project to be beneficial in general but were also ambivalent about its financial costs
- Trusted experts, scientists, and ENGOs in general but were more ambivalent about legislative councils and the government





# Predicting Public Support

$f^2 < .02$ , trivial effect;  $f^2 = .02$ , small effect;  
 $f^2 = .15$ , medium effect



$R^2$  (Support) = 59.4%  
 $R^2$  (Attitude) = 43.4%

Note. The non-significant paths and indicator variables (i.e., items) were omitted for the sake of parsimonious

# Summary of Findings

- Mostly consistent with Study 1
  - Attitudes, perceived social norms, institutional trust, and perceived instrumentality (benefits and costs) were crucial predictors of support for the green deck scheme
  - Perceived instrumentality (benefits and costs) was a crucial predictor of attitudes
- Perceived severity of air pollution was a crucial predictor of support among the PolyU communities

# General Discussion

- The majority viewed the Green Deck Project positively and beneficial or at least neutral leaning positive
- Yet, people were more conservative when they considered using public resources for implementing the Project
- Indeed, 34.5% of the respondents considered the Project to be a financial burden, while 38.6% of the respondents considered the benefits outweigh the financial costs

# General Discussion

- What factors are possibly important in shaping public support for the Green Deck Project?
  - Attitudes towards the Green Deck Project
  - Perceived social norms of support
  - Institutional trust
  - Perceived instrumentality
  - Perceived importance of public green spaces (public sample)

# Implications for Practice

- Communicating **the benefits and costs** are crucial for mobilizing public support
  - Perceived instrumentality could influence support directly and indirectly via attitudes
  - Indeed, around 30-40% of respondents were neutral leaning in some of the perceived instrumentality measures
  - NGOs and experts are trusted by citizens; communication through these agents could be useful
  - Benefits of public green spaces could be emphasized

# Concluding Remark

- Cross-disciplinary efforts are required for transforming science into practical solutions

## Social Science

**Science and  
Technological  
Solutions and Policy  
Interventions**

**Human Behaviour  
(including Public  
Support)**



Thank you