

## Supplementary Material

### **Prevalence and correlates of suicidal behaviours in a representative epidemiological youth sample in Hong Kong: the significance of suicide-related rumination, family functioning, and ongoing population-level stressors**

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**Table S1. Proportions of young people from the representative epidemiological sample in Hong Kong with 12-month suicidal behaviours across each gender group (n = 2,540)**

Gender	Overall sample (n = 2,540)	12-month suicidal ideation (n = 533)	12-month suicidal ideation-only (n = 387)	12-month suicide plan (n = 125)	12-month suicide attempt (n = 34)
Male	1,059 (41.7)	168 (31.5)	132 (34.1)	30 (24.0)	Male 8 (23.5)
Female	1,474 (58.0)	363 (68.1)	254 (65.6)	94 (75.2)	26 (76.5)
Asexual	1 (0.0)	–	–	–	–
Transgender	2 (0.1)	1 (0.2)	1 (0.3)	–	–
Non-binary	3 (0.1)	1 (0.2)	–	1 (0.8)	–
Other	1 (0.0)	–	–	–	–

Note. Sample sizes and proportions are unweighted.

**Table S2. Summarised findings from the multivariable logistic regression models for 12-month suicidal ideation, ideation-only, plan, and attempt in the representative epidemiological youth sample in Hong Kong (n = 2,540)**

Construct		12-month suicidal ideation (n = 533)	12-month suicidal ideation-only (n = 387)	12-month suicide plan (n = 125)	12-month suicide attempt (n = 34)
<b>Suicide-related rumination</b>	Suicide-related rumination	✓	✓	✓	✓
<b>Extrinsic stressful events</b>	Social unrest-related TEs	n.s.	n.s.	n.s.	n.s.
	COVID-19 PEs	n.s.	n.s.	n.s.	✓
	Personal SLEs	n.s.	n.s.	n.s.	✓
<b>Personality and psychological factors</b>	Hopelessness	✓	✓	✓	n.s.
	Neuroticism	✓	✓	n.s.	n.s.
<b>Interpersonal factors</b>	Family conflicts	✓	✓	n.s.	✓
<b>Cognitive ability</b>	Forward digit span	n.s.	n.s.	✓	n.s.
	Backward digit span	n.s.	n.s.	n.s.	n.s.
<b>Experience of self-harm and psychiatric condition</b>	Lifetime non-suicidal self-harm	n.s.	n.s.	✓	✓
	12-month MDE	✓	✓	✓	n.s.
	Excessive alcohol use	n.s.	n.s.	n.s.	n.s.
<b>Background factors</b>	Younger age	✓	✓	n.s.	n.s.
	Female	✓	n.s.	✓	n.s.
	Childhood adversity	n.s.	n.s.	n.s.	n.s.

Note. n.s. signifies non-significant findings from the separate multivariable logistic regression models.

MDE = major depressive episode; PEs = COVID-19 pandemic-related events; SLEs = personal stressful life events; TEs = social unrest-related traumatic events.

**Table S3. Multivariable logistic regression models showing the associations between the range of intrinsic and extrinsic factors and 12-month suicidal ideation, ideation-only, suicide plan, and suicide attempt in the representative epidemiological youth sample with age as a categorical variable**

	Overall sample (n = 2,540)	12-month											
		suicidal ideation (n = 533)			suicidal ideation-only (no plan or attempt) (n = 387)			suicide plan (n = 125)			suicide attempt (n = 34)		
		OR	95% CI	<i>p</i>	OR	95% CI	<i>p</i>	OR	95% CI	<i>p</i>	OR	95% CI	<i>p</i>
Suicide-related rumination													
Suicide-related rumination	1.06 (1.43)	<b>1.71</b>	<b>1.58 – 1.85</b>	<b>&lt;0.001</b>	<b>1.64</b>	<b>1.51 – 1.79</b>	<b>&lt;0.001</b>	<b>1.55</b>	<b>1.35 – 1.77</b>	<b>&lt;0.001</b>	<b>1.52</b>	<b>1.18 – 1.95</b>	<b>0.001</b>
Extrinsic stressful events													
Social unrest-related TEs	0.93 (0.71)	1.00	0.85 – 1.18	1.00	1.01	0.85 – 1.21	0.89	0.97	0.73 – 1.28	0.81	1.20	0.74 – 1.95	0.46
COVID-19 PEs	1.49 (0.96)	0.90	0.79 – 1.02	0.088	0.88	0.77 – 1.01	0.066	0.97	0.78 – 1.20	0.76	<b>1.60</b>	<b>1.07 – 2.40</b>	<b>0.021</b>
Personal SLEs	0.82 (1.12)	0.98	0.89 – 1.08	0.70	0.94	0.84 – 1.05	0.25	1.09	0.93 – 1.27	0.31	1.23	0.96 – 1.60	0.11
Psychological and personality													
Hopelessness	6.84 (4.08)	<b>1.09</b>	<b>1.06 – 1.13</b>	<b>&lt;0.001</b>	<b>1.08</b>	<b>1.05 – 1.12</b>	<b>&lt;0.001</b>	<b>1.11</b>	<b>1.05 – 1.17</b>	<b>&lt;0.001</b>	1.02	0.93 – 1.12	0.74
Neuroticism	25.68 (5.67)	<b>1.07</b>	<b>1.05 – 1.10</b>	<b>&lt;0.001</b>	<b>1.07</b>	<b>1.05 – 1.10</b>	<b>&lt;0.001</b>	1.04	1.00 – 1.09	0.079	1.00	0.92 – 1.09	0.94
Interpersonal factors													
Poorer family functioning	19.87 (7.16)	<b>1.04</b>	<b>1.02 – 1.06</b>	<b>&lt;0.001</b>	<b>1.04</b>	<b>1.02 – 1.06</b>	<b>&lt;0.001</b>	1.03	1.00 – 1.06	0.10	<b>1.08</b>	<b>1.02 – 1.13</b>	<b>0.006</b>
Cognitive ability													
Forward digit span	12.71 (1.44)	0.93	0.85 – 1.01	0.079	0.97	0.89 – 1.07	0.58	<b>0.82</b>	<b>0.71 – 0.94</b>	<b>0.004</b>	0.92	0.73 – 1.15	0.45
Backward digit span	9.75 (2.97)	1.02	0.98 – 1.06	0.41	1.01	0.96 – 1.05	0.73	1.05	0.98 – 1.13	0.19	0.99	0.87 – 1.12	0.83
Self-harm and psychiatric condition													
No lifetime non-suicidal self-harm, n (%)	2,160 (85)	Ref			Ref			Ref			Ref		
Has lifetime non-suicidal self-harm, n (%)	380 (15)	<b>1.35</b>	<b>1.01 – 1.82</b>	<b>0.044</b>	1.17	0.84 – 1.63	0.34	<b>1.61</b>	<b>1.03 – 2.52</b>	<b>0.038</b>	<b>4.01</b>	<b>1.71 – 9.42</b>	<b>0.001</b>
No 12-month MDE, n (%)	2,159 (85)	Ref			Ref			Ref			Ref		
Has 12-month MDE, n (%)	381 (15)	<b>1.89</b>	<b>1.42 – 2.52</b>	<b>&lt;0.001</b>	<b>1.59</b>	<b>1.15 – 2.19</b>	<b>0.005</b>	<b>2.73</b>	<b>1.75 – 4.25</b>	<b>&lt;0.001</b>	2.00	0.87 – 4.56	0.10
Alcohol use	2.12 (3.36)	1.00	0.97 – 1.03	0.96	0.99	0.96 – 1.03	0.76	1.00	0.95 – 1.06	0.90	1.02	0.93 – 1.11	0.71
Demographics and background, n (%)													
Aged 19–25 years	1,682 (66.2)	Ref			Ref			Ref			Ref		
Aged 15–18 years	858 (33.8)	<b>1.35</b>	<b>1.05 – 1.73</b>	<b>0.018</b>	<b>1.35</b>	<b>1.04 – 1.76</b>	<b>0.027</b>	1.15	0.74 – 1.79	0.53	1.20	0.54 – 2.65	0.65
Male	1,062 (41.8)	Ref			Ref			Ref			Ref		
Female	1,478 (58.2)	<b>1.37</b>	<b>1.07 – 1.76</b>	<b>0.012</b>	1.28	0.98 – 1.66	0.071	<b>1.64</b>	<b>1.03 – 2.61</b>	<b>0.038</b>	1.22	0.51 – 2.95	0.65
No childhood adversity	1,612 (63.5)	Ref			Ref			Ref			Ref		
Has childhood adversity	928 (36.5)	0.95	0.73 – 1.23	0.69	0.97	0.73 – 1.28	0.81	1.03	0.65 – 1.63	0.91	0.66	0.28 – 1.55	0.34

*Note.* Values are presented in the form of mean (SD), unless stated otherwise. MDE = major depressive episode; PEs = COVID-19 pandemic-related events; SLEs = personal stressful life events; TEs = social unrest-related traumatic events.