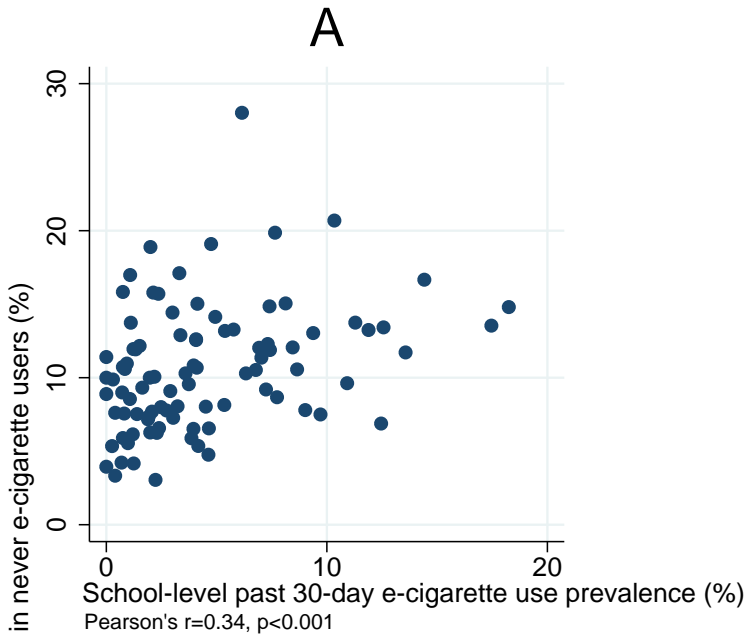


School-level electronic cigarette use prevalence and student-level tobacco use intention and behaviours

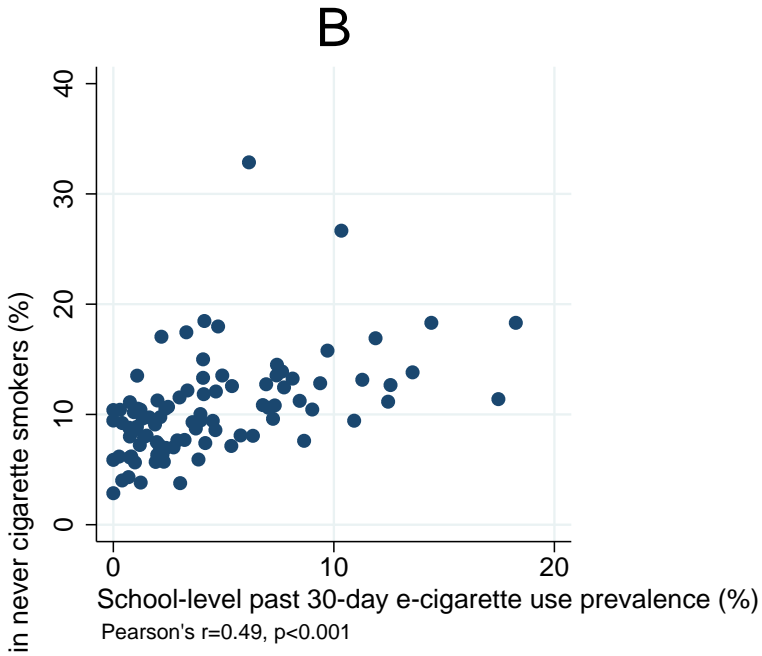
Jianjiu Chen¹, MPhil; Sai Yin Ho^{1*}, PhD; Lok Tung Leung¹, MPhil; Man Ping Wang², PhD; Tai Hing Lam¹, MD

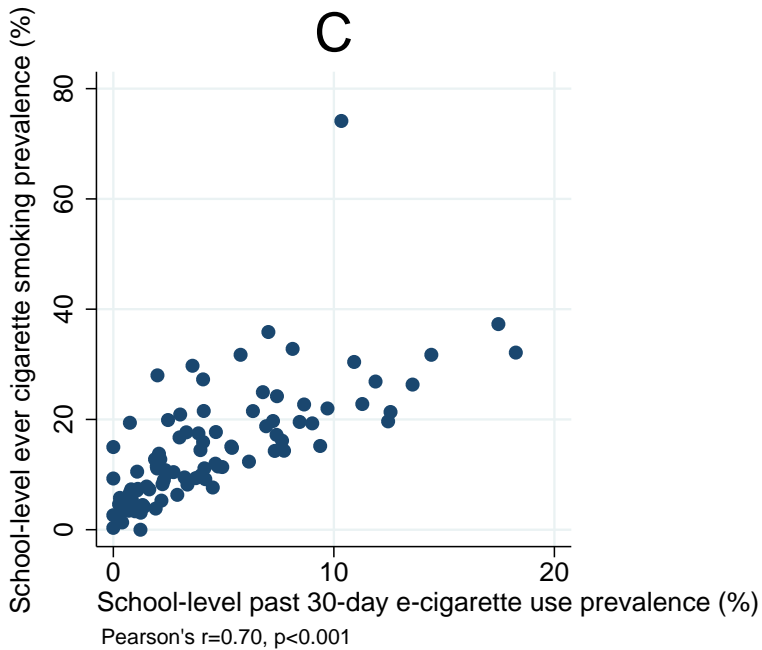
Affiliations: ¹School of Public Health, University of Hong Kong, Hong Kong Special Administrative Region, People's Republic of China; ²School of Nursing, University of Hong Kong, Hong Kong Special Administrative Region, People's Republic of China

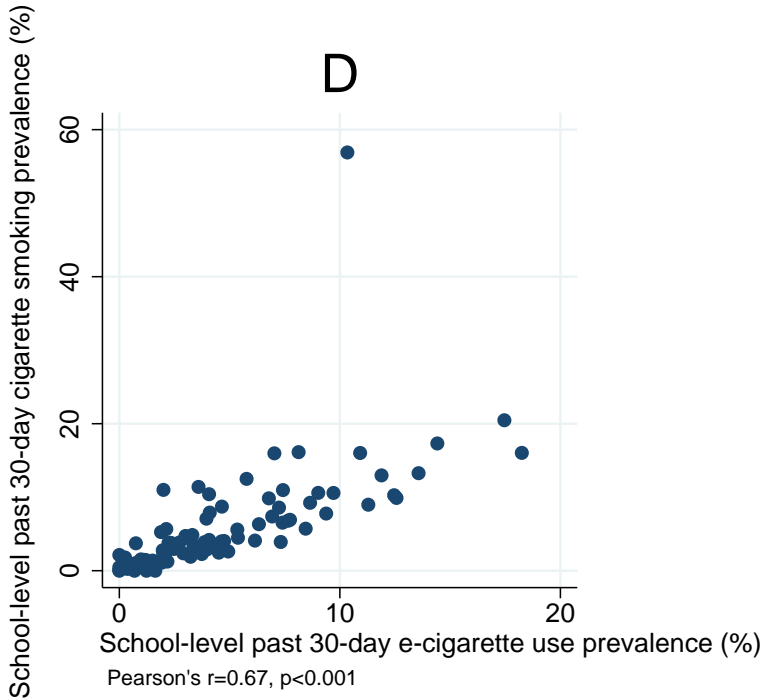
School-level prevalence of e-cigarette use susceptibility
in never e-cigarette users (%)



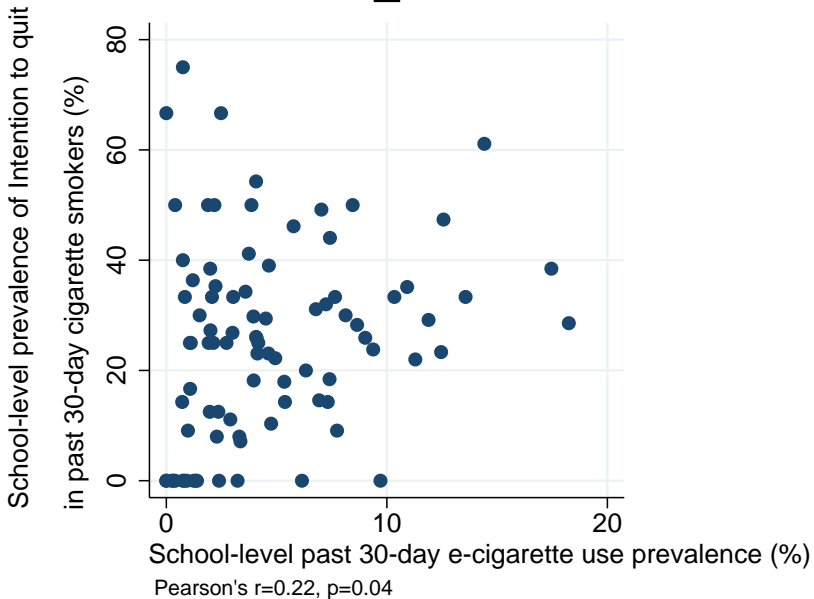
School-level prevalence of cigarette smoking susceptibility
in never cigarette smokers (%)







E



Supplementary Figure 1 (A-E). Correlation of school-level past 30-day e-cigarette use prevalence with school-level prevalence of other intention and behaviour indicators related to tobacco use

Supplementary Table 1. Association of school-level past 30-day e-cigarette use prevalence with student-level alcohol drinking

		School-level past 30-day e-cigarette use prevalence			
		Low ^a	Medium ^a	High ^a	Per 1% increase ^b
Monthly drinking	CORs (95% CIs)	1	1.39 (1.20-1.61) ***	1.66 (1.43-1.93) ***	1.05 (1.04,1.07) ***
	AORs (95% CIs)^c	1	1.00 (0.88-1.15)	0.88 (0.74-1.05)	0.98 (0.96,1.00) *
Weekly drinking	CORs (95% CIs)	1	1.95 (1.57-2.41) ***	2.84 (2.29-3.51) ***	1.11 (1.09,1.13) ***
	AORs (95% CIs)^c	1	1.15 (0.96-1.37)	0.98 (0.79-1.22)	1.00 (0.97,1.02)
Daily drinking	CORs (95% CIs)	1	1.88 (1.22-2.91) **	3.62 (2.38-5.51) ***	1.14 (1.09,1.18) ***
	AORs (95% CIs)^c	1	0.93 (0.61-1.40)	0.86 (0.53-1.39)	0.99 (0.94,1.04)

*P < 0.05; **P < 0.01; ***P < 0.001.

CORs=crude odds ratios; AORs=adjusted odds ratios.

^a Low: 0-1.99%; medium: 2.00-4.94%; high: 5.35-18.25%.

^b Per 1% increase was per unit increase in school-level past 30-day e-cigarette use prevalence (continuous; range 0-18.25).

^c With adjustment of age, sex, perceived family affluence, school-level past 30-day cigarette smoking prevalence (continuous), e-cigarette use status, and cigarette smoking status.

Supplementary Table 2. Association of school-level ever e-cigarette use prevalence with student-level e-cigarette use and cigarette smoking susceptibility

		School-level ever e-cigarette use prevalence			
		Low ^a	Medium ^a	High ^a	Per 1% increase ^b
E-cigarette use susceptibility (in never e-cigarette users)	CORs (95% CIs)	1	1.31 (1.07-1.61) **	1.65 (1.34-2.04) ***	1.03 (1.02-1.04) ***
	AORs (95% CIs) ^c	1	1.27 (1.02-1.58) *	1.58 (1.20-2.08) **	1.05 (1.03-1.07) ***
Cigarette smoking susceptibility (in never cigarette smokers)	CORs (95% CIs)	1	1.42 (1.18-1.71) ***	1.80 (1.49-2.18) ***	1.04 (1.02-1.05) ***
	AORs (95% CIs) ^d	1	1.26 (1.02-1.54) *	1.42 (1.09-1.85) *	1.04 (1.02-1.06) ***

*P < 0.05; **P < 0.01; ***P < 0.001.

CORs=crude odds ratios; AORs=adjusted odds ratios.

^a Low: 0-4.88%; medium: 5.11-13.56%; high: 13.59-50.00%.

^b Per 1% increase was per unit increase in school-level ever e-cigarette use prevalence (continuous; range 0-50.00).

^c With adjustment of age, sex, perceived family affluence, school-level past 30-day cigarette smoking prevalence (continuous), and cigarette smoking status.

^d With adjustment of age, sex, perceived family affluence, school-level past 30-day cigarette smoking prevalence (continuous), and e-cigarette use status.

Supplementary Table 3. Association of school-level ever e-cigarette use prevalence with student-level cigarette smoking and intention to quit

		School-level ever e-cigarette use prevalence			
		Low ^a	Medium ^a	High ^a	Per 1% increase ^b
Ever cigarette smoking	CORs (95% CIs)	1	3.11 (2.35-4.12) ***	5.91 (4.46-7.83) ***	1.10 (1.08-1.11) ***
	AORs (95% CIs) ^c	1	2.01 (1.54-2.62) ***	3.08 (2.36-4.03) ***	1.06 (1.05-1.08) ***
Past 30-day cigarette smoking	CORs (95% CIs)	1	4.52 (3.16-6.47) ***	10.85 (7.59-15.50) ***	1.12 (1.10-1.14) ***
	AORs (95% CIs) ^c	1	2.19 (1.54-3.11) ***	3.48 (2.44-4.95) ***	1.06 (1.05-1.08) ***
Intention to quit (in past 30-day cigarette smokers)	CORs (95% CIs)	1	1.50 (0.87-2.58)	1.84 (1.09-3.13) *	1.03 (1.01-1.05) **
	AORs (95% CIs) ^d	1	1.36 (0.78-2.38)	1.60 (0.87-2.91)	1.03 (0.99-1.07)

*P < 0.05; **P < 0.01; ***P < 0.001.

CORs=crude odds ratios; AORs=adjusted odds ratios.

^a Low: 0-4.88%; medium: 5.11-13.56%; high: 13.59-50.00%.

^b Per 1% increase was per unit increase in school-level ever e-cigarette use prevalence (continuous; range 0-50.00).

^c With adjustment of age, sex, perceived family affluence, and e-cigarette use status.

^d With adjustment of age, sex, perceived family affluence, school-level past 30-day cigarette smoking prevalence (continuous), and e-cigarette use status.

Supplementary Table 4. Association of school-level ever e-cigarette use prevalence with student-level past 30-day NCNE tobacco product use^a

NCNE tobacco products (%) ^b		School-level ever e-cigarette use prevalence			
		Low ^c	Medium ^c	High ^c	Per 1% increase ^d
Waterpipe	CORs (95% CIs)	1	4.11 (2.14-7.90) ***	5.77 (3.00-11.12) ***	1.14 (1.09-1.19) ***
	AORs (95% CIs)^e	1	1.84 (0.81-4.16)	1.67 (0.63-4.43)	1.05 (0.97-1.13)
Chewing tobacco	CORs (95% CIs)	1	2.44 (0.65,9.15)	9.16 (2.77-30.26) ***	1.17 (1.06-1.28) **
	AORs (95% CIs)^e	1	0.78 (0.19-3.24)	1.83 (0.41,8.26)	1.03 (0.92-1.16)
Cigar	CORs (95% CIs)	1	3.20 (1.23,8.36) *	7.24 (2.87-18.26) ***	1.15 (1.06-1.24) ***
	AORs (95% CIs)^e	1	0.77 (0.26-2.28)	1.06 (0.32-3.56)	0.96 (0.88-1.06)
Snus	CORs (95% CIs)	1	3.20 (1.33-7.73) **	5.38 (2.27-12.73) ***	1.11 (1.05-1.17) ***
	AORs (95% CIs)^e	1	1.16 (0.40-3.40)	1.15 (0.32-4.13)	0.95 (0.86-1.05)
Smoking pipe	CORs (95% CIs)	1	1.45 (0.40-5.24)	6.09 (1.97-18.84) **	1.12 (1.02-1.24) *
	AORs (95% CIs)^e	1	0.43 (0.09-2.11)	1.05 (0.19-5.63)	0.95 (0.82-1.10)
Other tobacco products	CORs (95% CIs)	1	4.21 (1.56-11.38) **	5.20 (1.90-14.26) **	1.11 (1.03-1.20) **
	AORs (95% CIs)^e	1	2.22 (0.53,9.33)	1.81 (0.31-10.44)	1.02 (0.88-1.17)

*P < 0.05; **P < 0.01; ***P < 0.001.

CORs=crude odds ratios; AORs=adjusted odds ratios.

^a NCNE=Non-cigarette non-e-cigarette. The analysis was conducted in a subsample (10923 students; 30 schools) of the whole sample (40202 students; 92 schools). Only the subsample had data on NCNE tobacco product use.

^b Proportion of product users in the subsample.

^c Low: 0-5.12%; medium: 5.28-11.47%; high: 12.41-21.35%.

^d Per 1% increase was per unit increase in school-level ever e-cigarette use prevalence (continuous; range 0-21.35).

^e With adjustment of age, sex, perceived family affluence, school-level past 30-day cigarette smoking prevalence (continuous), e-cigarette use status, and cigarette smoking status.