



Family influences, acculturation and the prevalence of tobacco smoking among Asian youth in New Zealand: findings from a national survey

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Introduction

Acculturation increases youth smoking rates among Asian residents in Western countries (Chen et al, 2006; Ma et al, 2004; Rissel et al, 2000)

Family factors are associated with Asian youth smoking rates (Chen et al, 1999; Hesketh et al, 2001; Scragg et al, 2003; Wen et al, 2005)

However, the potential influence of family on youth smoking in the context of acculturation has received scant attention.



Aim

To determine the association of family factors and acculturation with regular smoking among Asian youth



Methods

Study design

- Nationally representative computer-assisted survey conducted in 2001

Sampling

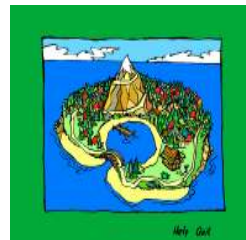
- Random selection of 133 out of 389 secondary schools
- Self-identified Asian subset (n=922) of total study sample (n=9567 students)

Data collection

- Multi-media computer assisted self-interviewing
- Use of M-CASI enhanced understandability, acceptability, honesty, ease of data handling
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Questionnaire domains



- Ethnicity & Culture
- Home
- School
- Physical & Mental health
- Food & Activities
- Substance use
- Sexual health
- Injuries & Violence
- Neighbourhood
- Spirituality



Results

780 self-identified Asian individuals (85%) answered the questions on smoking cigarettes

Asian only	57%
Asian/non-Asian	43%
Born overseas	64%
Smoking at least weekly	11%
- Boys	13%
- Girls	10%

Family factors associated with weekly smoking

	OR*	95% CI
Parents don't smoke in home	0.32	(0.21 to 0.49)
Parents upset if their children use cigarettes/tobacco	0.20	(0.12 to 0.34)
Family pays attention to you	0.37	(0.17 to 0.80)
Family cares about your feelings	0.42	(0.24 to 0.73)
You and your family have fun together	0.45	(0.26 to 0.78)
Family understands you	0.56	(0.34 to 0.92)
Always have time with parents	0.40	(0.27 to 0.61)
Family want to know who you are with and where	0.35	(0.18 to 0.66)
Live with both parents	0.50	(0.32 to 0.79)

* Adjusted for gender, age, decile group, and cluster effects

(Continued)

Family factors associated with weekly smoking (Ctd)

	OR*	95% CI
Relationship with family		
Getting on with family is causing problems	1.00	-
Neither good or bad	0.65	(0.34 to 1.23)
Happy about how you get on	0.35	(0.16 to 0.80)
How much does your family expect of you?		
Not much or nothing	1.00	-
Some	0.29	(0.11 to 0.75)
A lot	0.34	(0.14 to 0.82)
Too much	0.77	(0.30 to 1.96)

* Adjusted for gender, age, decile group, and cluster effects

Acculturation measures associated with weekly smoking

	OR*	95% CI
Asian self-identity only vs Asian and Non-Asian	0.28	(0.19 to 0.42)
Not born in NZ	0.33	(0.21 to 0.51)
Age arrived in NZ		
NZ born	1.00	-
0 – 4 years old	0.79	(0.34 to 1.38)
5 – 9 years old	0.10	(0.02 to 0.43)
10 – 14 years old	0.31	(0.18 to 0.52)
15 – 18 years old	0.35	(0.15 to 0.78)
English is not main language at home	0.34	(0.21 to 0.56)
Family celebrates NZ European special activities/traditions		
A lot	1.00	-
Some	0.57	(0.37 to 0.88)
Not many/None	0.42	(0.22 to 0.81)
Comfortable in NZ European social surroundings	0.53	(0.35 to 0.80)

* Adjusted for gender, age, decile group, and cluster effects

Joint effects of family factors Model 1

	OR*	95% CI
Parents upset if use cigarettes/tobacco	0.20	(0.11 to 0.35)
Parents don't smoke in home	0.39	(0.23 to 0.64)
Always have time with parents	0.50	(0.30 to 0.84)
Family cares about your feelings: some / a lot vs. not at all / a little	0.47	(0.26 to 0.86)

* Adjusted for gender, age, decile group, and cluster effects

Joint effects of family factors and acculturation Model 2

	OR*	95% CI
Parents upset if use cigarettes/tobacco	0.19	(0.11 to 0.35)
Parents don't smoke in home	0.42	(0.24 to 0.73)
Always have time with parents	0.47	(0.29 to 0.77)
Family cares about your feelings: some / a lot vs. not at all / a little	0.53	(0.27 to 1.02)
Asian ethnic identity only	0.55	(0.24 to 0.94)
Comfortable in NZ European social surroundings	0.43	(0.24 to 0.74)
Age arrived in NZ		
NZ Born	1.00	-
0 – 4 years old	1.23	(0.52 to 2.96)
5 – 9 years old	0.17	(0.03 to 0.92)
10 – 14 years old	0.44	(0.22 to 0.87)
15 – 18 years old	0.30	(0.11 to 0.88)

* Adjusted for gender, age, decile group, and cluster effects

The protective effects related to youth smoking associated with time with family, having parents who do not smoke, and who disapprove of the student smoking, remained highly significant with minimal attenuation in the effect sizes in the presence of acculturation.



Summary

- Family factors are strongly associated with youth smoking regardless of the presence or absence of acculturation
- Tobacco control programmes targeting Asian youth in Western countries could benefit from reinforcing the importance of parents as non-smoking role models and the protective effects of positive family relationships

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