

BMJ Open

A qualitative analysis of Māori and Pacific smokers' views on informed choice and smoking

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2016-011415
Article Type:	Research
Date Submitted by the Author:	06-Feb-2016
Complete List of Authors:	Gifford, Heather; Whakauae Research for Maori Health and Development, Director's Office Tautolo, El-Shadan; AUT University , Department of Public Health and Psychosocial Studies Erick, Stephanie; ASH New Zealand, Director's office Hoek, Janet; University of Otago, Marketing Gray, Rebecca; University of Otago Wellington, Public Health Edwards, Richard; University of Otago Wellington, Public Health
Primary Subject Heading:	Smoking and tobacco
Secondary Subject Heading:	Public health, Qualitative research
Keywords:	PUBLIC HEALTH, QUALITATIVE RESEARCH, SOCIAL MEDICINE

SCHOLARONE™
Manuscripts

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1 **A qualitative analysis of Māori and Pacific smokers’ views on informed choice and**
2 **smoking**

4 Heather Gifford¹, El-Shadan Tautolo², Stephanie Erick³, Janet Hoek⁴, Rebecca Gray⁵,
5 Richard Edwards⁵

- 6 1. Whakauae Research Services, Director’s Office, Whanganui, New Zealand
7 2. AUT University, Department of Public Health and Psychosocial Studies, Auckland, New
8 Zealand
9 3. ASH New Zealand, Director’s Office, Auckland, New Zealand
10 4. Department of Marketing, University of Otago, Dunedin, New Zealand
11 5. Department of Public Health, University of Otago Wellington, Wellington, New Zealand

14 **Corresponding Author:**
15 Janet Hoek
16 Department of Marketing
17 University of Otago
18 PO Box 56
19 Dunedin 9054
20 New Zealand
21 Email: Janet.hoek@otago.ac.nz

23 Number of Tables: 1
24 Number of Figures: 0

25 **Word Count: 4389** (Excluding title page, abstract, summary, references and table)

27 ABSTRACT

28 **Objectives:** Tobacco companies frame smoking as an informed choice, a strategy that holds
29 individuals responsible for harms they incur. Few studies have tested this argument, and even
30 fewer have examined how informed indigenous smokers or those from minority ethnicities
31 are when they start smoking. We explored how young adult Māori and Pacific smokers
32 interpreted “informed choice” in relation to smoking.

33 **Participants:** Using qualitative in-depth interviews, we recruited and interviewed 20 Māori
34 and Pacific young adults aged 18-26 who smoked.

35 **Analyses:** Data were analysed using an informed-choice framework developed by Chapman
36 and Liberman. We used a thematic analysis approach to identify themes that extended this
37 framework.

38 **Results:** Few participants considered themselves well-informed and none met more than the
39 framework’s initial criteria. Most reflected on their unthinking uptake and subsequent
40 addiction, and identified environmental factors that had facilitated uptake. Nonetheless,
41 despite this context, most agreed that they had made an informed choice to smoke.

42 **Conclusions:** The discrepancy between participants’ reported knowledge and understanding
43 of smoking’s risks, and their assessment of smoking as an informed choice, reflects their
44 view of smoking as a symbol of adulthood. Policies that make tobacco more difficult to use
45 in social settings could help change social norms around smoking and the ease with which
46 initiation and addiction currently occur.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

47 **Article Summary**

48 **Strengths and limitations of this study**

- 49 • Use of in-depth qualitative methods allowed detailed probing of participants’ smoking
50 uptake and their understanding and personal acceptance of smoking’s risks.
- 51 • Our findings illustrate how young adult Māori and Pacific see smoking as usual within
52 their communities and highlight potential interventions that could denormalise smoking
53 and reduce its perceived acceptability.
- 54 • The study is deliberately exploratory and our findings thus require testing with a wider
55 sample before they can be generalised further.

Peer review only

BACKGROUND

In October 2010, the Māori Affairs Select Committee (MASC) reported on its *Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori*.^[1] The Inquiry was prompted by Māori politicians and health advocates, who called for an analysis to examine the toll of tobacco use on Māori, and recognise New Zealand's striking disparities in smoking prevalence, which is much higher among Māori and Pacific peoples than among NZ European.^[2]

Among other claims advanced to the MASC, tobacco company representatives argued that smoking is an 'informed adult choice'; this argument implies smokers start smoking after appraising the risks and benefits they may incur.^[3] By transferring responsibility for future harm back onto smokers themselves, tobacco companies reduce their potential liability and promote beliefs that tobacco control measures undermine individuals' right to smoke.^[3, 4]

Māori and Pacific take up smoking at a younger age than their European counterparts; children as young as 11 years of age may experiment with smoking and smoking may become established in children by age 14;^[5] for these smokers, starting smoking is clearly not an adult choice. However, smoking uptake also occurs among Māori and Pacific young adults and prevalence remains high among those aged 18–25, despite reductions in adolescent smoking rates.^[6, 7] Evidence of increasing smoking uptake among young people aged 18 and over, who are legally considered adults in New Zealand, highlights the importance of testing the tobacco industry's 'informed choice' arguments. Specifically, few studies have explored whether young adults, particularly those most impacted by inequalities, make active and informed decisions to start smoking.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

82 Despite the superficial appeal of ‘informed choice’ arguments, which draw on neo-liberal
83 views of personal responsibility,[8, 9] these overlook important socio-economic and cultural
84 factors that influence Māori and Pacific young adults’ decision-making. For example, Māori
85 and Pacific ethnic groups typically have poverty rates around double those of the European
86 ethnic group, regardless of the measure used, and smoking accounts for a large proportion of
87 economic hardship experienced by Māori and Pacific peoples.[10] Levels of social inequality
88 between Māori and European people have an independent effect on Māori smoking rates.[11]
89 Where smoking prevalence is high, as it is among Māori and Pacific, young adults may
90 regard it as normal, associate it with desirable social benefits,[12-14] and discount the risks
91 communicated in health warnings and through other media. Furthermore, cultural practices
92 such as gift giving and sharing may undermine informed choice by promoting uptake in
93 contexts where refusal to accept or use tobacco may be regarded as impolite, or where
94 sharing is strongly associated with hospitality and generosity.[15]
95
96 Other factors likely to affect European New Zealanders as well as Māori and Pacific young
97 adults, include the widespread association of smoking and drinking.[16] Growing evidence
98 suggests alcohol consumption both facilitates smoking initiation and fuels tobacco use.[16,
99 17] Higher rates of drinking “a large amount of alcohol” among Māori and Pacific peoples
100 thus further undermines young people’s ability to undertake the risk–benefit assessments
101 implicit in informed choices.[18, 19]

103 **Informed Choice Framework**

104 Chapman and Liberman proposed four levels of understanding and knowledge that smokers
105 should possess before they can make an informed choice.[20] First, smokers need to have
106 heard that smoking increases health risks; second, they must be aware that smoking causes

specific diseases; third they must accurately appreciate the meaning, severity and probabilities of developing diseases caused by tobacco use. Finally, they must personally accept the risks inherent in levels 1–3 as applicable to themselves. Other factors, such as addiction and social context, may also influence informed choices by circumscribing the options available to young people. We considered these factors, together with young people's socio-economic and cultural settings, alongside Chapman and Liberman's criteria, and then used the resulting framework to investigate whether Māori and Pacific young adults make active, informed decisions when they beginning to smoke. We compared and contrasted the results from these analyses with those from a predominately New Zealand European sample, which has been reported separately.[21]

117

118

119 METHODS

120 Sample

We conducted in-depth interviews with 20 18–26-year-olds (10 Māori and 10 Pacific) who had started smoking since turning 18. Participants were recruited using whanaungatanga or kinship networks, by word of mouth, and via social media and community advertising, using approaches we have previously used successfully.[22] We also recruited via Māori and Pacific health services that offered culturally targeted primary care, where we placed notices about the research. As recruitment proceeded, we used purposive selection to promote diversity and ensure participants varied by age and gender, and displayed varied smoking behaviours (i.e., the sample included both daily and intermittent smokers, and recent quitters).

130

Māori participants included students, caregivers, and those in employment; just over half were in paid employment and eight of the ten were living with wider family or friends. Seven of the ten Pacific participants were living with their parents, the majority were in some form of paid employment, and three participants were also studying. (Table 1 summarises participants' characteristics). Ethics approval was obtained from the University of Otago's Human Ethics Committee, which undertook a full review of the proposed research (approval 11/297).

Table 1: Participants' Characteristics

Participant	Age	Gender	Smoking status
M1	26	Male	Daily
M2	24	Female	Recent quitter
M3	20	Male	Daily
M4	19	Female	Intermittent
M5	23	Male	Daily
M6	25	Female	Daily
M7	19	Female	Daily
M8	22	Female	Daily
M9	25	Female	Daily
M10	25	Male	Daily
P1	18	Female	Intermittent
P2	23	Female	Daily
P3	20	Female	Daily
P4	24	Female	Intermittent
P5 (19a) ¹	19	Male	Daily
P6 (19b) ¹	19	Male	Daily
P7	19	Female	Daily
P8 (19c) ¹	19	Male	Intermittent
P9	19	Male	Intermittent
P10	19	Female	Daily

1. Participants are referred to as 19a, 19b and 19c in the text to differentiate them from each other.

Protocol and Procedure

We used a semi-structured interview guide to explore participants' smoking initiation and each component of Chapman and Liberman's informed choice framework. Specifically, we explored participants' awareness and knowledge of smoking's risks, and their acceptance of those risks when they began smoking. We also probed their reflections on how informed they considered their uptake of smoking was. To test the framework's completeness, we examined how participants understood addiction (particularly prior to smoking), explored whether and how they had considered the risks smoking poses, and reviewed the social and environmental contexts in which their smoking began. A copy of the interview guide is included as a supplementary file. Interviews were carried out by Māori and Pacific interviewers in late 2011 and early 2012 and took between 25 and 50 minutes. With participants' permission, each interview was audio recorded and then transcribed verbatim.

Data Analysis

Interviewers undertook an intensive review of their interview transcripts and developed an initial descriptive classification that drew on the interview guide and was grounded in their own cultural knowledge and perspectives.[23, 24] All interviewers (Māori, Pacific and European) then met face to face to compare and contrast the findings across all three ethnic groups. During this analysis workshop, we identified over-arching themes within the transcripts and extended the initial descriptive analyses that corresponded largely to the research protocol. This process allowed themes to be cross-validated and nuanced, and the themes reported below reflect a consensus reached by the authors. We make extensive use of participants' own comments, and signal each participant's ethnicity (M – Māori, P- Pacific); gender (F-female, M-male), and age.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

166 **RESULTS**

167 We began by identifying themes that corresponded to Chapman and Liberman’s theoretical
168 framework[20] and then identified additional themes specific to Māori and Pacific
169 participants. These latter themes provided more nuanced insights into participants’ risk
170 acceptance and likelihood of making informed choices.

172 **Levels 1 and 2: Awareness of general and specific health risks**

173 Most participants had received some information about smoking’s health risks from sources
174 including television advertising, and family and friends. However, as the participant below
175 explained, this information often conflicted with their immediate environment: *Um, just, mum*
176 *and dad, and the tv, like they have all those ads on the TV and, we were just brought*
177 *up, knowing that, it’s bad for you, and like, even though like, we had older cousins and that*
178 *doing it* (MF24).

180 Others reported learning about smoking’s risks from school programmes and, once they
181 started smoking, from warnings on packs: *I was in school, I was in 5th form. People from the*
182 *hospital they came to school and did an interview about smoking and that, and showed us*
183 *some photos of little kids smoking.... it put me off for like, all those pictures* (PF18). Both
184 Māori and Pacific participants reported gleaning information from tobacco packaging, which
185 had had a strong visual impact on them: *The first thing I saw was the packet. How it had all*
186 *those pictures on it* (PM19c). Others went on to read the warning labels and learned about
187 smoking’s risks from these: *I learnt more reading off the packets.... How it affects your*
188 *lungs. And as I said you get looks of the pictures. Gangrene on your feet and stuff* (MF19).
189 *Yeah I read about it (risks of smoking) on the packet* (PM19b).

191 Awareness of smoking's specific risks increased once participants had developed a regular
192 smoking pattern and were more frequently exposed to on-pack warnings. As a result, some
193 considered "cutting down" so they could resolve the dissonance their risk knowledge
194 aroused: *The first thing I saw was the packet. How it had all those pictures on it, and this*
195 *was when we cut down on smoking.... when I always go for a smoke I always read the pack,*
196 *it has all those lung stuff. That's what I always read* (PM19c).

197
198 While many participants reported receiving information about risks, some felt they had
199 received little information, or reported they were not fully aware of the risks: *Oh I didn't*
200 *know anything when I first started.....when I was 18 I didn't know that you could get killed*
201 *from this stuff. And I didn't notice how bad it affects your body and stuff* (MF 19). Of those
202 who did possess some risk understanding, most focused generally on cancer and few showed
203 a detailed knowledge of the multiple risks caused by smoking: *That cancer thing, and I don't*
204 *really know that much, ay. I just know that part.* (PM19a).

205
206 Māori participants regretted their lack of knowledge and wondered whether knowing more at
207 a younger age might have helped them remain smokefree: *Yeah, I should've been told about it*
208 *before I picked up my first cigarette* (MM 20). *I think it should be better put out there*
209 *because, like me, if I had've known more about it.....* (MF19).

211 **Levels 3 and 4: Personal acceptance and understanding the meaning of risk**

212 Rather than outline how they had (or more typically, had not) assessed and then accepted
213 smoking's risks, most participants explained they had discounted risks by focussing on
214 counter-evidence. Many used examples of smokers who they knew and believed were
215 unscathed by smoking to question risk information, and repeatedly privileged their personal

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

216 observations over health warnings: *I see some people that smoke every day but nothing's*
217 *happened to them* (PF23).
218
219 Evidence that the harms of smoking typically occurred over the long-term enabled some to
220 rationalise their current behaviour by arguing they were unlikely to suffer any immediate
221 harm. These participants used the lack of an instantaneous effect to discount future risks:
222 *.....it was seeing people everywhere smoking and realising but they're not dead and they're*
223 *not... I think it's the fact that it doesn't kill you straight away. And, um, somehow I thought I*
224 *must have just realised that they're smoking and they're not getting sicker; it's not affecting*
225 *them immediately...* (MF22).
226
227 Others reported feeling unconcerned about the risks they had seen on tobacco packages,
228 which had no effect on their behaviour: *I saw pictures of like smoke effects and that, it didn't*
229 *bother me. I just kept on smoking* (PF23). Even participants who had seen family members
230 harmed by smoking did not feel motivated to quit: *Yep. I know more about smoking now only*
231 *because smoking and the causes and the damage that it's done is close to home with me.*
232 *That's why... but... and-and then, and then I look at myself and I'm still smoking so I'm just*
233 *like, well I can't say anything about that but that's just how I feel...* (MF25). Only direct
234 personal experience of harm seemed likely to motivate some participants to believe the risks
235 they had seen were real: *And you know how you even see those pictures on the packs of*
236 *smokes, I don't get put off. It's not enough to put me off. It's like "Oh yeah okay. I won't*
237 *believe it until it happens"* (MF19).
238
239 Overall, while several participants indicated they had a general awareness that smoking poses
240 risks, many struggled to identify specific risks and most used rationalisations to distance

241 themselves from the harms they recognised. These responses created an interesting context in
242 which to explore whether and how they made deliberate decisions, and interpreted tobacco
243 companies' arguments that smoking is an informed choice.

245 **Reflective Decision Making**

246 Several participants spoke about smoking as something that had happened with little or no
247 forethought, reflection or risk acceptance: *Nah I haven't really thought about it. It's just, I*
248 *don't really, I'm... when I'm in the moment I just you know, I don't really think back, I'm like,*
249 *it's just it happened so...(MF19). We were just hanging out in the grounds and we wanted to*
250 *have a smoke... I started from there (PM19a).*

252 Participants' sense of something that had "just happened", typically while they were
253 "hanging out", suggests smoking occurred without active reflection; instead, it was an
254 unthinking transition from other activities. Some later found it difficult to understand their
255 lack of analysis: *Mmmm, I actually thought that, you know, maybe a year later that it was*
256 *strange how little I thought about it, the fact that I was actively taking up a highly addictive,*
257 *you know, substance (MM 26).* Like others, this participant's retrospection positioned him as
258 "actively" taking up a behaviour. However, the "little ...thought" he gave to what he was
259 doing questions how active his behaviour was and suggests other factors shaped participants'
260 actions and how they interpret these.

262 **Social context of smoking**

263 Because most participants, particularly Māori, saw smoking as normal and ubiquitous within
264 their social setting, few reported reflecting on whether they should start smoking: *Cause my*
265 *family, everyone at home, smokes as well. So yeah, I really didn't even think about it for a*

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

266 *second, I just started smoking (PM19a). Because everybody in our family were smoking too,*
267 *so I thought I'd just be like them. I thought it was normal...(MF25).* Participants' social
268 context deterred active consideration, since they had no reason to reflect on a behaviour those
269 around them practised. Not only did their social context dissuade reflection, it promoted
270 smoking uptake, since participants wanted to "be like" those around them.

271
272 A minority reported feeling coerced into experimenting with smoking: *Nah 'cause they kept*
273 *telling me, "Try it, try it, try it." And I thought if I tried it then they'll stop bugging me*
274 *(MF19). Cause my friends they always smoke, cause whenever I see them smoking I just feel*
275 *like smoking too ... I don't want to smoke but they always dare me so I just like I just can't*
276 *take it I just have to smoke (PF19).* These examples suggest some participants felt strong
277 pressure to comply with normative practices, and eventually took the path of least resistance.

278
279 However, even those who argued that starting to smoke was their own decision also
280 acknowledged they were influenced by what they perceived as positive attributes of smoking,
281 particularly the social connections smoking created: *I think it was my own decision, but no-*
282 *one really forced me to smoke but it's just when I keep on seeing, like my friends smoke and*
283 *I'll be like, oh this, that looks cool (PM19c).* For others, "coolness" was associated with
284 sophistication and adult behaviour, as the legal purchase age of tobacco reinforced smoking
285 as an adult activity: *Um, it-it, yeah, I think at that age it made me feel cool 'cause that was*
286 *when you were growing up, that was the "growing up" age and...(MF25).*

287
288 Smoking played an important role in helping participants feel integrated with a social group;
289 displaying the same "cool" behaviours helped them assert their group identity and develop
290 stronger and more meaningful relationships: *Um, I don't know, I guess because my, um, my*

291 *cousin smoked. So most of... some of my friends smoked and it just seemed like it was the in*
292 *thing to do... And um I felt like whenever I went out and listened to the smokers talking, they*
293 *were getting like very in-depth and talking about personal things and it seemed like a cool*
294 *thing just to be able to socialise with people. It was a way to connect for me I think (MF 22).*

295

296 As well as providing a point of connection, some found that smoking counteracted boredom
297 created by unemployment, particularly when they had left school. In situations where young
298 people had little else to do, smoking provided a distraction and united the group: *I dropped*
299 *out of school, yeah so I was staying home and yeah that's when I started smoking every day*
300 *cause yeah, just like the yeah, I was hanging round my mates every day. There was no school*
301 *so we just had a smoke (PM19a).*

302

303 Beliefs that smoking helped manage stress were widespread and several participants saw
304 smoking as a form of self-medication that helped them cope more successfully with stressful
305 settings. *Getting into a new relationship was a lot of stress because you know it's just*
306 *stressful being in a relationship and you always tend to turn to smoking and that was how I*
307 *turned to being a daily smoker (PF24). And then this year I went to Uni and it's my first year*
308 *at Uni so um I needed it for stress, 'cause I was stressing out a lot and I just picked up*
309 *smoking again (MF19).*

310

311 Several participants reported an association between drinking and smoking. Alcohol fuelled
312 greatly increased consumption, particularly among participants who were otherwise lighter
313 smokers: *When I'm sober I'll have one in the morning and one at lunch but when it's a party*
314 *it's like two packets (PF23) and The more you drink, the more you smoke (MF 25).*

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

315 In summary, smoking was a social norm for many participants and was positively reinforced
316 by a sense of group belonging. The perception that smoking alleviated stress further
317 reinforced it while alcohol consumption and boredom fuelled consumption.

318
319 **Addiction**

320 Some participants had great faith in their ability to stop smoking and felt they would quit
321 when they chose, using will power and positive thinking: *I could say easy if I put my mind to*
322 *it...*(MF19). However, others felt less confident because they had become addicted before
323 they realised what was happening and only understood addiction once they had experienced
324 it: *...you don't think about it cos it just sneaks up on you, like I said, it just suddenly, suddenly*
325 *you're addicted and, and you don't quite realise it until it's too late* (MF26). The realisation
326 they were addicted led some to talk regretfully about having started to smoke: *I was just*
327 *thinking I shouldn't have started (laughs), and yeah regretted it* (MM20). Although some
328 participants regretted smoking and a small number had felt pressured into initiating smoking,
329 others saw smoking as a badge of maturity and a behaviour that connected them more
330 strongly to their social groups. For these participants, addiction posed fewer concerns
331 because smoking signalled their social standing. These perceptions influenced how
332 participants interpreted industry arguments.

333
334 **Tobacco Companies' "Informed Choice" Argument**

335 After reflecting on their understanding of smoking, their social context and smoking's
336 addictiveness, we explored participants' reactions to a statement made by Imperial Tobacco:
337 *"The risks associated with smoking are universally known...and smoking is... a matter of*
338 *informed adult choice"*.^[25] Despite many participants stating they had little knowledge of
339 smoking's risks, particularly its addictiveness, most nonetheless agreed that smoking was an

informed choice: *if you're an adult then, you know, it's their choice whether they want to do it or not, ...*(MF24). *...it's an adult choice and it's up to that person if they wanna smoke or not smoke* (PM19b). Several saw smoking as a symbol of adulthood and a means of asserting their independent identity; declaring they had made anything less than a deliberate choice would be inconsistent with the autonomy they valued: *It's my life, I choose what I do, if I want to smoke, I smoke; if I don't want to smoke, I don't smoke* (PF18). Ironically, participants' desire to affirm their independence led them to agree with tobacco companies' position, despite the lack of knowledge they outlined and the contextual factors that had shaped their actions.

DISCUSSION

Many participants had not progressed beyond Chapman and Liberman's first stage of informed choice. However, despite considering they had limited knowledge of smoking's risks, feeling influenced by social factors, and rarely considering future consequences, several nevertheless thought they had made an informed choice. Participants generally learned about the specific risks of smoking from on-pack warnings, which they typically accessed only after becoming addicted. Like many young adults, most dismissed the risks presented as uncertain and unlikely.[26] Even those who had seen family members suffer from diseases caused by smoking, or who had themselves experienced ill-health from smoking, rationalised their experiences, diminished the role played by smoking, and rarely saw risks as relevant to themselves. Participants saw smoking as normal, a means of establishing social connections, and lived in social contexts where *not* smoking could have challenged group norms. The perceived supportive environment for continued smoking, and the importance many participants placed on smoking as a social behaviour that symbolised adulthood, undermined informed decision-making. So too did the strong association between alcohol and smoking;

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

365 alcohol featured strongly in participants’ social environments and compromised their ability
366 to make rational decisions.
367
368 Study limitations include the small sample; while interviewing continued until data saturation
369 had occurred, a larger study is required to assess whether the knowledge patterns and
370 perceptions we identified reflect those of the wider population. Strengths include the use of
371 in-depth interviews, which allowed us to elicit rich data that offer the first insights into how
372 young adults from indigenous and minority ethnicities experience and interpret informed
373 choice.
374
375 Our findings help explain persistent inequalities in smoking prevalence between Māori and
376 Pacific, and New Zealand Europeans (NZE) and highlight important differences between
377 ethnicities. Māori and Pacific participants reported having lower awareness of smoking’s
378 general risks than participants in the NZE sample, where all participants displayed awareness
379 of some risks caused by smoking.[27] Our participants were more likely to comment on the
380 connecting role smoking played in their communities and family networks, which suggests
381 social impediments may also affect how effectively young adult Māori and Pacific may make
382 informed choices. This normative environment may also explain differing perceptions of
383 smoking’s role in their future. While NZE participants typically predicted they were
384 “unlikely to be smoking in the future” and saw smoking as “a lifestyle phase”,[21] Māori and
385 Pacific were less certain that smoking was a temporary part of their lives. They saw smoking
386 as a symbol of adulthood and maturity, and a sign they were capable of making adult
387 decisions. In this context, declaring they had not made informed choices could seem akin to
388 stating they had not yet matured fully. Pacific and Māori were more likely to report using
389 smoking to relieve life circumstances such as stress and boredom. Yet despite these

390 differences, participants shared common attributes with NZE young adults. For all groups,
391 the disinhibiting effects of alcohol undermined active risk evaluation and facilitated smoking
392 uptake.[16, 17] Likewise most participants greatly underestimated smoking's addictiveness
393 even though understanding this concept was pivotal to making an informed choice.[21] In
394 common with NZE participants, many Māori and Pacific reported acting impulsively and
395 without having reflected on the longer term consequences they might face.
396
397 Arguments that smoking is an "informed choice" bear little relationship to the social contexts
398 young adult Māori and Pacific smokers experience. Our findings have important policy
399 implications and highlight the urgent need to change smoking norms within Māori and
400 Pacific communities. While existing policies have denormalised smoking in Māori and
401 Pacific settings, these efforts need expansion and consolidation so they cover all settings, are
402 applied consistently, recognise young adults' social environments, and evolve quickly to
403 replace the current acceptability of smoking. Potential measures include altering
404 environments where smoking uptake occurs, for example, by requiring all areas in bars and
405 restaurants to be smokefree, thus reducing opportunities for tobacco and alcohol co-use.
406 Developing a smokefree generation and increasing the age at which young adults may
407 purchase tobacco may be particularly salient to Māori and Pacific, and will need careful input
408 from these communities.[28, 29]
409
410 Broader policy approaches may also be required to mitigate the risks of smoking being used
411 to counteract stress and boredom.[30] These could include increased employment
412 opportunities and educational initiatives to ensure school success along with more nuanced
413 health education. Low recall of school health programmes raises the possibility that health
414 education messages may not be sufficiently targeted to meet the needs of specific cultural

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

415 groups such as Pacific or Māori, a conclusion advanced in other studies.[31, 32] Some Pacific
416 participants had not grown up in New Zealand, so our results may also indicate a lack of
417 exposure to education programmes run within NZ schools. Furthermore, some Māori and
418 Pacific reported having dropped out of school, thus even those who had attended school in
419 New Zealand may not have been exposed to all the health programmes that demonstrated
420 smoking’s harms.

421
422 Future research could explore the feasibility of these ideas with Māori and Pacific, and, if
423 appropriate, pilot and test potential interventions to assess their uptake and impact on Māori
424 and Pacific. More fundamentally, young adults’ acceptance of smoking as normal and
425 socially binding reflects a need for deeper change within these communities, using culturally
426 relevant mechanisms that community members themselves determine and implement.

427
428 **CONCLUSION**

429 For many young people, smoking uptake occurs quickly, easily and without deliberation.
430 Arguments that smoking is an informed choice overlook young adults’ limited risk
431 knowledge, ignore the social contexts that facilitate initiation and maintain smoking, and take
432 no account of how addiction compromises choice. Two approaches could address the lack of
433 informed choice evident in our findings. First, changing participants’ environments by
434 increasing the legal purchase age to at least 25, a point at which uptake becomes less likely,
435 implementation of smokefree generation proposals, decoupling smoking and drinking,
436 increasing the cost of smoking and decreasing where tobacco may be consumed. Second,
437 important contextual factors relevant to Māori and Pacific communities also require action to
438 reduce the high smoking prevalence among these groups. While broader policies such as
439 those outlined above will work across the whole population, additional efforts are required to

engage with, prioritise, resource and support those with greatest need to create their own interventions.

Competing interests

We have no competing interests but note, for the sake of full disclosure, that we have received funding from the New Zealand Health Research Council, Royal Society of New Zealand Marsden Fund, New Zealand Ministry of Health, Heart Foundation of New Zealand and New Zealand Cancer Society. We have no financial interest in the study and no connection to any organisation that could profit from the study findings.

Funding for the project was provided by the Royal Society of New Zealand Marsden Fund (Grant 11/134). We had full responsibility for the study design, data collection and analysis, report writing and the preparation of this MS. We had full access to all of the data in this study and take complete responsibility for the integrity of the data and the accuracy of the data analysis.

Authors' contributions

HG and JH led this phase of the project; JH conceived the project and, with RE, obtained funding. HG, SE, and DT collected the data reported, HG, SE, JH and RG undertook initial data analyses. HG and JH led the MS development; DT, SE, RG and RE provided feedback on drafts. All authors have approved the submitted MS and agree to be responsible for the data reported.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Authors' information

HG is Director of Whakauae Research Services, an iwi-based Māori Health Research Group. She has an extensive background in Māori health policies and interventions, with specific expertise in tobacco control. She is a theme leader in ASPIRE2025, a University of Otago Research Theme whose members develop, test and evaluate policy measures that support the New Zealand government's goal of becoming a smoke-free nation by 2025.

DT is a Research Fellow at AUT University. He is Associate Director of the Pacific Islands Families Study, which examines factors influencing success within Pacific families. He is a theme leader within the ASPIRE2025 collaboration.

SE is Director of ASH New Zealand and formerly managed Tala Pasifika, the Pacific Smokefree team within the NZ Heart Foundation. She has a strong background in tobacco control and particular interest in reducing smoking prevalence among Māori and Pacific peoples. She is a member of the ASPIRE2025 collaboration.

JH is a Professor of Marketing at the University of Otago. She is co-director of the ASPIRE2025 collaboration and has a long-standing interest in tobacco control policy and public health.

RG is a PhD candidate in the Department of Public Health, University of Otago Wellington. Her research has offered a new definition of informed choice in relation to young adult smokers.

RE is Professor of Public Health, co-head of the Department of Public Health and co-director of the ASPIRE2025 collaboration at the University of Otago, Wellington. He has published extensively in tobacco control and public health.

486 Acknowledgements

487 We wish to acknowledge the research participants whose willingness to be interviewed
488 allowed the study to proceed.

489

490 Funding Statement

491 This work was supported by the Royal Society of New Zealand Marsden Fund (Grant
492 11/134).

493

494 Data Sharing

495 Due to the sensitive nature of the research topic, the researchers undertook to keep the
496 interview transcripts confidential to the research team. For this reason, the data are not
497 available to other researchers. However, the protocol used is provided as a supplementary
498 file.

REFERENCES

[1] New Zealand Parliament. Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Maori, Report of the Maori Affairs Committee. Wellington: New Zealand Parliament 2010.

[2] Ministry of Health. Tobacco Use 2012/13: New Zealand Health Survey. Wellington: Ministry of Health 2014.

[3] Balbach ED, Smith EA, Malone RE. How the health belief model helps the tobacco industry: Individuals, choice, and “information”. *Tobacco Control* 2006;**15**:iv37-iv43

[4] Maubach N, Hoek J, Edwards R, *et al.* “The times are changing”: New Zealand smokers’ perceptions of the tobacco endgame. *Tobacco Control* 2012.

[5] ASH New Zealand. ASH Year 10 Snapshot Survey: ToplineResults. Auckland 2015.

[6] Edwards R, Peace J, Carter K, *et al.* An examination of smoking initiation rates by age: results from a large longitudinal study in New Zealand. *Australia and New Zealand Journal of Public Health* 2013;**37**(6):516-519

[7] Ponniah S, Bloomfield A. Sociodemographic characteristics of New Zealand adult smokers, ex-smokers, and non-smokers: results from the 2006 Census. *The New Zealand medical journal* 2008;**121**:34 - 42.

[8] Greenfield K. The myth of choice: Personal responsibility in a world of limits: Yale University Press 2011.

[9] Hoek J. Informed choice and the nanny state: learning from the tobacco industry. *Public health* 2015;**129**(8):1038-1045.

[10] Perry B. 2013 Household Incomes Report- Key Findings. In: Development MoS, ed. Wellington: Ministry of Social Development 2013.

[11] Barnett R, Pearce J, Moon G. Does social inequality matter? Changing ethnic socio-economic disparities and Maori smoking in New Zealand, 1981–1996. *Social science & medicine* 2005;**60**(7):1515-1526.

[12] McGee R, Williams S, Reeder A. Parental tobacco smoking behaviour and their children’s smoking and cessation in adulthood. *Addiction* 2006;**101**(8):1193-1201.

[13] Teevale T, Denny S, Nosa V, *et al.* Predictors of cigarette use amongst Pacific youth in New Zealand. *Harm reduction journal* 2013;**10**(1):25.

[14] Gifford H, Boulton A. Is sharing tobacco within the home really good manaakitanga? In: Kepa M, Brewin M, Manu’atu L, eds. *Home: Here to Stay*. Wellington: Ngā Pae o te Māramatanga and Huia Publishers 2015:83-95.

[15] 2006 census of population and housing: Socio-economic indexes for area's (SEIFA). Canberra, Australia: Commonwealth of Australia 2008.

[16] Hoek J, Maubach N, Stevenson R, *et al.* Social smokers' management of conflicted identities. *Tob Control* 2013;**22**(4):261-265.

[17] Jiang N, Ling PM. Impact of alcohol use and bar attendance on smoking and quit attempts among young adult bar patrons. *American journal of public health* 2013;**103**(5):e53-e61.

[18] Ministry of Health. Annual Update of Key Results 2013/14: New Zealand Health Survey. In: Ministry of Health, ed. Wellington 2014.

[19] Health Mo. Annual Update of Key Results 2014/15: New Zealand Health Survey. In: Health Mo, ed. Wellington 2015.

[20] Chapman S, Liberman J. Ensuring smokers are adequately informed: Reflections on consumer rights, manufacturer responsibility, and policy implications. *Tobacco Control* 2005;**14**:8-13.

[21] Gray RJ, Hoek J, Edwards R. A qualitative analysis of 'informed choice' among young adult smokers. *Tob Control* 2016;**25**(1):46-51.

- [22] Hoek J, Gifford H, Maubach N, *et al.* A qualitative analysis of messages to promote smoking cessation among pregnant women. *BMJ open* 2014;**4**(11):e006716.
- [23] Dey I. Qualitative data analysis: A user-friendly guide for social scientists: Routledge 1993.
- [24] Pihama L, Cram F, Walker S. Creating methodological space: A literature review of Kaupapa Maori research. *Canadian Journal of Native Education* 2002;**26**(1):30.
- [25] Imperial Tobacco New Zealand Limited. Submission to the Māori Affairs Select Committee Enquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori. 2010.
- [26] Hoek J, Hoek-Sims A, Gendall P. A qualitative exploration of young adult smokers' responses to novel tobacco warnings. *BMC Public Health* 2013;**13**(609).
- [27] Gray R, Hoek J, Edwards R. Do young adults exercise informed choice about smoking? In: Walker N, Grana R, eds. *Society for Nicotine and Tobacco Research*. Chicago: Society for Nicotine and Tobacco Research 2016.
- [28] Winickoff JG, McMillen R, Tanski S, *et al.* Public support for raising the age of sale for tobacco to 21 in the United States. *Tobacco control* 2015:tobaccocontrol-2014-052126.
- [29] Berrick A. The tobacco-free generation proposal. *Tobacco control* 2013;**22**(suppl 1):i22-i26.
- [30] Richardson K. Smoking, low income and health inequalities: thematic discussion document. ASH 2001.
- [31] Tautolo ES, Schluter PJ, Paterson J, *et al.* Acculturation status has a modest effect on smoking prevalence among a cohort of Pacific fathers in New Zealand. *Australian and New Zealand journal of public health* 2011;**35**(6):509-516.
- [32] Lanumata T, Thomson G, Wilson N. Pacific solutions to reducing smoking around Pacific children in New Zealand: a qualitative study of Pacific policymaker views. *New Zealand Medical Journal* 2010;**123**(1308).

Supplementary file

SMOKING AS AN ‘INFORMED CHOICE’

In-depth Focused Interview Protocol

Note for interviewers: each section is marked with a priority (low, medium, high, critical) to given an indication of how much time should be spent prompting answers

Introduction

Hello, my name is ... and this is ..., who will be sitting in on the interview today. Just so you know, the reason we have two people here is that we are in the process of trying out this questionnaire. Bearing that in mind, please do let me know if you find any of the questions difficult to understand or to answer.

Before we start talking about the research topic, I have an information sheet about my work and I would like you to read this so I can answer any questions you might have about my work.

As a participant you retain the right to ask questions at any time, receive a copy of the findings, withdraw from the research at any time and to decline answering any questions.

- Explain recording of the interview and participant’s rights in relation to this. **Once participant has agreed to the recording of the interview turn on dictaphone.**
- Check if participant has any questions about the interview.
- Ask the participant to sign the consent form.
- State their rights on the recorder (right to ask questions at any time; right to withdraw from the work; right to have a copy of the results; right to ask for the recorder to be turned off; remind them that the research is confidential and their comments won’t be attributed to them personally).

“Smoking journey” focused discussion

Priority: LOW – not too much time

1. Looking back, can you tell me about the first time you smoked a cigarette? How old were you? Where were you, who were you with? How did you feel about it? What did you think? What made you want to have that cigarette? How did you feel about smoking at the time?

Priority: MEDIUM

2. How do you describe your smoking at the moment? (social smoker/ occasional/ daily etc) How many cigarettes do you usually smoke per day/ per week?
3. Can you describe the context in which you smoke? Who are you with, where are you, what are you doing (probe for detail about role of alcohol, work, social cues). Are there any particular reasons why you smoke at those times?
4. Can you describe the situations where you don’t smoke? Are there places or times when you don’t smoke? Are there any particular reasons why you don’t smoke in these places and times?

Priority: CRITICAL

5. Tell me about how you moved from being someone who may have /or has had just tried smoking a few times to being someone who smokes most weeks/every day (as appropriate)?
6. How old were you when you started smoking with this pattern? What was happening in your life at that time? (probe: where were you , were you living at home or had you moved away, who were you spending time with, were you working, at college etc)

Smoking decision process**Priority: CRITICAL**

7. Can you tell me about how you made the decision to smoke at that time? (Who influenced that decision, what did you feel at the time, what did you think about?)
8. Can you relate this decision to other decisions you were making at the time? eg drinking alcohol, getting into relationships, job or study decisions?
9. How did you weigh up the decision to smoke or not to smoke at that time?

Knowledge of risk at time of uptake**Priority: CRITICAL**

10. At the time that you started smoking (weekly/daily/whatever): What had you been told about smoking? What had you read? Where? (probe: what specifically do you remember was said about smoking?) Where did you get most of your messages about smoking? (eg friends family etc)
11. You said you'd been told (x,y,z).. what did you think about that, did it seem important/true? Did it concern you? Why?
12. And how did you find smoking compared with what you'd been told about it? (include: addictiveness, effects on your body, health consequences, social consequences)

Knowledge of risk currently**Priority: HIGH**

13. Have you changed your thinking about smoking since you started smoking more regularly? How do you feel about smoking now? What else do you know about smoking now? Does it concern you? Why?
14. If you keep smoking for the rest of your life, what do you think might happen? How do you feel about that? How likely do you think it is that (each thing you mentioned) could happen to you? (very likely, somewhat likely, somewhat unlikely, very unlikely, don't know?)
15. What (other) health effects do you know of that can be caused by smoking? (interviewer – note down each condition mentioned)
16. What do you think having (that condition – each one mentioned at 14 and 15) would be like? What symptoms might a person get, how might it affect their life?)
17. Out of 100 people who have smoked throughout their life, how many of them do you think are likely to end up dying from something related to smoking? (probe discussion: what information did you draw on to come up with that number?)

18. So given what you’ve just described about what you know about risk – how do you do you think your knowledge and understanding at the time that you started smoking regularly compares to what you know now? (Probe: in what way has it changed?)

Thoughts on addiction
Priority: HIGH

19. Of the people in your life – family, friends – do you know people who have quit or tried to quit smoking? What do you think made them try to quit? How did they go about quitting? How did it work out for them?
20. How easy do you think it would be to quit smoking completely (that is, not smoke again in any situation)? Why do you feel that way?
21. Thinking back, what did you think about quitting (did you think you would, how easy did you think it would be?) when you first started smoking (weekly/daily)? (Has your opinion changed since then, if so how?)
22. (if not already mentioned) Cigarettes are sometimes described as “addictive”. What do you think it means to be addicted?
23. Do you think you’ll still be smoking in five years time? Ten years? What makes you think that?

Conclusion
Priority: HIGH

24. You’ve described the circumstances in which you took up smoking, and some of your thoughts about smoking then and now. Do you think, knowing what you do now, if you were faced with the same circumstances (describe) that you would still take up smoking?
25. Can you think of people in your life who are about your age – say siblings or friends – who don’t smoke? Why don’t they/ what do you think are the influences on their decision to not smoke? (Probe: how are the things that influence them different to the things that influenced you?) Do you think, if you had been in the same circumstances/ had the same influences as they do, that you would still have started smoking? Why/ why not?
26. To finish off, I’d like to read you a recent quote from a tobacco company spokesperson in NZ.

“The risks associated with smoking are universally known...and smoking is... a matter of informed adult choice”
(Imperial Tobacco NZ Ltd 2010: Submission to the Māori Affairs Select Committee)

We’d be interested to know what you think about this statement...how does it relate to your experience and what you’ve just described about how you started to smoke?

(unpack: “risks universally known”, “informed” “adult choice”)

27. So in order to make an informed adult choice..What exactly do you think people should know and understand, before they decide to start smoking? How much should they know in order to make that decision?

28. And given that you have said that people should know and understand x,y,z; did you have that knowledge and understanding when you took up smoking? What proportion of people aged xx (whatever age person was when they became a regular smoker) do you think have that knowledge and understanding?

29. Do you have any other comments you'd like to add about what we've been discussing?

I just have a short questionnaire for you to complete, please. Like the rest of the discussion, the information you provide will be completely confidential and only members of the research team will be able to access it.

Thank, assure confidentiality, check that demographic sheet has been filled out, close.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Note for researchers to consider at the close of pilot interview:

How long did each section take?

Were any questions hard to answer? (mark on interview schedule any questions that the participant found difficult)

Have the following all been covered off during the interview?

Level 1: having heard that smoking increases health risks

Level 2: being aware that specific diseases are caused by smoking

Level 3: accurately appreciating the meaning, severity, and probabilities of developing tobacco related diseases

Level 4: personally accepting that the risks inherent in levels 1-3 apply to one’s own risk of contracting such diseases (note: a person’s view of the addictiveness of smoking and confidence in their own ability to quit before suffering harms will come into this)

5: maturity of decision making processes – did they make the choice as an adult, and did they use a rational process to decide?

6: ability to make decision free of social and environmental pressures.

Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.
Enseignement Supérieur (ABES)

BMJ Open

A qualitative analysis of Māori and Pacific smokers' views on informed choice and smoking

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2016-011415.R1
Article Type:	Research
Date Submitted by the Author:	30-Mar-2016
Complete List of Authors:	Gifford, Heather; Whakauae Research for Maori Health and Development, Director's Office Tautolo, El-Shadan; AUT University , Department of Public Health and Psychosocial Studies Erick, Stephanie; ASH New Zealand, Director's office Hoek, Janet; University of Otago, Marketing Gray, Rebecca; University of Otago Wellington, Public Health Edwards, Richard; University of Otago Wellington, Public Health
Primary Subject Heading:	Smoking and tobacco
Secondary Subject Heading:	Public health, Qualitative research
Keywords:	PUBLIC HEALTH, QUALITATIVE RESEARCH, SOCIAL MEDICINE

SCHOLARONE™
Manuscripts

ABSTRACT

Objectives: Tobacco companies frame smoking as an informed choice, a strategy that holds individuals responsible for harms they incur. Few studies have tested this argument, and even fewer have examined how informed indigenous smokers or those from minority ethnicities are when they start smoking. We explored how young adult Māori and Pacific smokers interpreted “informed choice” in relation to smoking.

Participants: Using recruitment via advertising, existing networks and word of mouth, we recruited and undertook qualitative in-depth interviews with 20 Māori and Pacific young adults aged 18-26 who smoked.

Analyses: Data were analysed using an informed-choice framework developed by Chapman and Liberman. We used a thematic analysis approach to identify themes that extended this framework.

Results: Few participants considered themselves well-informed and none met more than the framework’s initial criteria. Most reflected on their unthinking uptake and subsequent addiction, and identified environmental factors that had facilitated uptake. Nonetheless, despite this context, most agreed that they had made an informed choice to smoke.

Conclusions: The discrepancy between participants’ reported knowledge and understanding of smoking’s risks, and their assessment of smoking as an informed choice, reflects their view of smoking as a symbol of adulthood. Policies that make tobacco more difficult to use in social settings could help change social norms around smoking and the ease with which initiation and addiction currently occur.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

48 **Article Summary**

49 **Strengths and limitations of this study**

- 50 • Use of in-depth qualitative methods allowed detailed probing of participants’ smoking
- 51 uptake and their understanding and personal acceptance of smoking’s risks.
- 52 • Our findings illustrate how young adult Māori and Pacific see smoking as usual within
- 53 their communities and highlight potential interventions that could denormalise smoking
- 54 and reduce its perceived acceptability.
- 55 • The study is deliberately exploratory and our findings thus require testing with a wider
- 56 sample before they can be generalised further.

Peer review only

BACKGROUND

The New Zealand Parliament has several Select Committees that comprise members drawn from all political parties [1]. As well as reviewing draft legislation, these committees may establish inquiries into matters of concern to New Zealand. Following prompting by Māori politicians and health advocates, the Māori Affairs Select Committee (MASC) initiated an *Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori*. [2] in October 2010. The Inquiry called for an analysis that examined the toll of tobacco use on Māori, and recognised New Zealand's striking disparities in smoking prevalence, which is much higher among Māori (38%) and Pacific peoples (25%) than among NZ European (15%) [3].

Among other claims advanced to the MASC, tobacco company representatives argued that smoking is an 'informed adult choice'; this argument implies smokers start smoking after appraising the risks and benefits they may incur.[4] By transferring responsibility for future harm back onto smokers themselves, tobacco companies reduce their potential liability and promote beliefs that tobacco control measures undermine individuals' right to smoke.[4, 5] This argument has a superficial appeal and sits easily within the neo-liberal discourse that has dominated New Zealand's political landscape. However, the premises of this argument have not been carefully tested and require closer scrutiny, given tobacco companies' use of this claim to oppose policy measures. Fully informed choices are arguably more important for tobacco than for other products, given how addictive smoking is and the enormous harm tobacco inflicts on users.

Māori and Pacific take up smoking at a younger age than their European counterparts; children as young as 11 years of age may experiment with smoking and smoking may

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

83 become established in children by age 14;[6] for these smokers, starting smoking is clearly
84 not an adult choice. However, smoking uptake also occurs among Māori and Pacific young
85 adults and prevalence remains high among those aged 18–25, despite reductions in adolescent
86 smoking rates.[7, 8] Evidence of increasing smoking uptake among young people aged 18
87 and over, who are legally considered adults in New Zealand, highlights the importance of
88 testing the tobacco industry’s ‘informed choice’ arguments. Specifically, few studies have
89 explored whether young adults, particularly those most impacted by inequalities, make active
90 and informed decisions to start smoking.

91

92 Despite the superficial appeal of ‘informed choice’ arguments, which draw on neo-liberal
93 views of personal responsibility,[9, 10] these overlook important socio-economic and
94 cultural factors that influence Māori and Pacific young adults’ decision-making. For example,
95 Māori and Pacific ethnic groups typically have poverty rates around double those of the
96 European ethnic group, regardless of the measure used, and smoking accounts for a large
97 proportion of economic hardship experienced by Māori and Pacific peoples.[11] Levels of
98 social inequality between Māori and European people have an independent effect on Māori
99 smoking rates.[12] Where smoking prevalence is high, as it is among Māori and Pacific,
100 young adults may regard it as normal, associate it with desirable social benefits,[13-15] and
101 discount the risks communicated in health warnings and through other media. Furthermore,
102 cultural practices such as gift giving and sharing may undermine informed choice by
103 promoting uptake in contexts where refusal to accept or use tobacco may be regarded as
104 impolite, or where sharing is strongly associated with hospitality and generosity.[16]

105

106 Other factors likely to affect European New Zealanders as well as Māori and Pacific young
107 adults, include the widespread association of smoking and drinking.[17] Growing evidence

108 suggests alcohol consumption both facilitates smoking initiation and fuels tobacco use.[17,
109 18] Higher rates of drinking “a large amount of alcohol” among Māori and Pacific peoples
110 thus further undermines young people’s ability to undertake the risk–benefit assessments
111 implicit in informed choices.[19, 20]

113 **Informed Choice Framework**

114 Chapman and Liberman proposed four levels of understanding and knowledge that smokers
115 should possess before they can make an informed choice.[21] First, smokers need to have
116 heard that smoking increases health risks; second, they must be aware that smoking causes
117 specific diseases; third they must accurately appreciate the meaning, severity and
118 probabilities of developing diseases caused by tobacco use. Finally, they must personally
119 accept the risks inherent in levels 1–3 as applicable to themselves. Other factors, such as
120 addiction and social context, may also influence informed choices by circumscribing the
121 options available to young people. We considered these factors, together with young
122 people’s socio-economic and cultural settings, alongside Chapman and Liberman’s criteria,
123 and then used the resulting framework to investigate whether Māori and Pacific young adults
124 make active, informed decisions when they beginning to smoke. We compared and contrasted
125 the results from these analyses with those from a predominately New Zealand European
126 sample, which has been reported separately [22] Our overall research question explored how
127 smoking uptake occurred, particularly the risk awareness and understanding our participants
128 displayed, and the contexts in which their behaviour evolved.

131 **METHODS**

132 **Sample**

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

133 We conducted in-depth interviews with 20 18–26-year-olds (10 Māori and 10 Pacific) who
134 had started smoking since turning 18. Participants were recruited using whanaungatanga or
135 kinship networks, by word of mouth, and via social media and community advertising, using
136 approaches we have previously used successfully.[23] We also recruited via Māori and
137 Pacific health services that offered culturally targeted primary care, where we placed notices
138 about the research. As recruitment proceeded, we used purposive selection to promote
139 diversity and ensure participants varied by age and gender, and displayed varied smoking
140 behaviours (i.e., the sample included both daily and intermittent smokers, and recent
141 quitters).
142
143 Māori participants included students, caregivers, and those in employment; just over half
144 were in paid employment and eight of the ten were living with wider family or friends. Seven
145 of the ten Pacific participants were living with their parents, the majority were in some form
146 of paid employment, and three participants were also studying. (Table 1 summarises
147 participants’ characteristics). Ethics approval was obtained from the University of Otago’s
148 Human Ethics Committee, which undertook a full review of the proposed research (approval
149 11/297). All participants received an information sheet and provided written consent.
150
151

152 **Table 1: Participants' Characteristics**

Participant	Age	Gender	Smoking status
M1	26	Male	Daily
M2	24	Female	Recent quitter
M3	20	Male	Daily
M4 (19a)	19	Female	Intermittent
M5	23	Male	Daily
M6 (25a)	25	Female	Daily
M7 (19b)	19	Female	Daily
M8	22	Female	Daily
M9 (25b)	25	Female	Daily
M10	25	Male	Daily
P1	18	Female	Intermittent
P2	23	Female	Daily
P3	20	Female	Daily
P4	24	Female	Intermittent
P5 (19a) ¹	19	Male	Daily
P6 (19b) ¹	19	Male	Daily
P7 (19Fa)	19	Female	Daily
P8 (19c) ¹	19	Male	Intermittent
P9	19	Male	Intermittent
P10 (19Fb)	19	Female	Daily

153 1. Participants are referred to as 19a, 19b and 19c in the text to differentiate them from each other.

 154 **Protocol and Procedure**

155 We used a semi-structured interview guide to explore participants' smoking initiation and
 156 each component of Chapman and Liberman's informed choice framework. The interview
 157 guide was developed collaboratively within the research team and underwent cognitive pre-
 158 testing before interviewing commenced. Specifically, we explored participants' awareness
 159 and knowledge of smoking's risks, and their acceptance of those risks when they began
 160 smoking. We also probed their reflections on how informed they considered their uptake of
 161 smoking was. To test the framework's completeness, we examined how participants

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

162 understood addiction (particularly prior to smoking), explored whether and how they had
163 considered the risks smoking poses, and reviewed the social and environmental contexts in
164 which their smoking began. A copy of the interview guide is included as a supplementary
165 file. Interviews were carried out by Māori and Pacific interviewers, with Māori and Pacific
166 participants respectively, in late 2011 and early 2012 and took between 25 and 50 minutes.
167 Interviewing continued until no new idea elements had been elicited in two consecutive
168 interviews. With participants' permission, each interview was audio recorded and then
169 transcribed verbatim.

171 **Data Analysis**

172 Interviewers undertook an intensive review of their interview transcripts and developed an
173 initial descriptive classification that drew on the interview guide and was grounded in their
174 own cultural knowledge and perspectives.[24, 25] All interviewers (Māori, Pacific and
175 European) then met face to face to compare and contrast the findings across all three ethnic
176 groups. During this analysis workshop, facilitated by an independent qualitative researcher,
177 we identified over-arching themes within the transcripts and extended the initial descriptive
178 analyses that corresponded largely to the research protocol. This process allowed themes to
179 be cross-validated and nuanced, and the themes reported below reflect a consensus reached
180 by the authors. We make extensive use of participants' own comments, and signal each
181 participant's ethnicity (M – Māori, P- Pacific); gender (F-female, M-male), and age.

183 **RESULTS**

184 We began by identifying themes that corresponded to Chapman and Liberman's theoretical
185 framework[21] and then identified additional themes specific to Māori and Pacific

186 participants. These latter themes provided more nuanced insights into participants' risk
187 acceptance and likelihood of making informed choices.

188

189 **Levels 1 and 2: Awareness of general and specific health risks**

190 Most participants had received some information about smoking's health risks from sources
191 including television advertising, and family and friends. However, as the participant below
192 explained, this information often conflicted with their immediate environment: *Um, just, mum*
193 *and dad, and the tv, like they have all those ads on the TV and, we were just brought*
194 *up, knowing that, it's bad for you, and like, even though like, we had older cousins and that*
195 *doing it* (MF24).

196

197 Others reported learning about smoking's risks from school programmes and, once they
198 started smoking, from warnings on packs: *I was in school, I was in 5th form. People from the*
199 *hospital they came to school and did an interview about smoking and that, and showed us*
200 *some photos of little kids smoking.... it put me off for like, all those pictures* (PF18). Both
201 Māori and Pacific participants reported gleaning information from tobacco packaging, which
202 had had a strong visual impact on them: *The first thing I saw was the packet. How it had all*
203 *those pictures on it* (PM19c). Others went on to read the warning labels and learned about
204 smoking's risks from these: *I learnt more reading off the packets.... How it affects your*
205 *lungs. And as I said you get looks of the pictures. Gangrene on your feet and stuff* (MF19b).
206 *Yeah I read about it (risks of smoking) on the packet* (PM19b).

207

208 Awareness of smoking's specific risks increased once participants had developed a regular
209 smoking pattern and were more frequently exposed to on-pack warnings. As a result, some
210 considered "cutting down" so they could resolve the dissonance their risk knowledge

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

211 aroused: *The first thing I saw was the packet. How it had all those pictures on it, and this*
212 *was when we cut down on smoking.... when I always go for a smoke I always read the pack,*
213 *it has all those lung stuff. That's what I always read* (PM19c).

214

215 While many participants reported receiving information about risks, some felt they had
216 received little information, or reported they were not fully aware of the risks: *Oh I didn't*
217 *know anything when I first started.....when I was 18 I didn't know that you could get killed*
218 *from this stuff. And I didn't notice how bad it affects your body and stuff* (MF 19b). Of those
219 who did possess some risk understanding, most focused generally on cancer and few showed
220 a detailed knowledge of the multiple risks caused by smoking: *That cancer thing, and I don't*
221 *really know that much, ay. I just know that part.* (PM19a).

222

223 Māori participants regretted their lack of knowledge and wondered whether knowing more at
224 a younger age might have helped them remain smokefree: *Yeah, I should've been told about it*
225 *before I picked up my first cigarette* (MM 20). *I think it should be better put out there*
226 *because, like me, if I had've known more about it.....* (MF19a).

227

228 **Levels 3 and 4: Personal acceptance and understanding the meaning of risk**

229 Rather than outline how they had (or more typically, had not) assessed and then accepted
230 smoking's risks, most participants explained they had discounted risks by focussing on
231 counter-evidence. Many used examples of smokers who they knew and believed were
232 unscathed by smoking to question risk information, and repeatedly privileged their personal
233 observations over health warnings: *I see some people that smoke every day but nothing's*
234 *happened to them* (PF23).

235

236 Evidence that the harms of smoking typically occurred over the long-term enabled some to
237 rationalise their current behaviour by arguing they were unlikely to suffer any immediate
238 harm. These participants used the lack of an instantaneous effect to discount future risks:
239it was seeing people everywhere smoking and realising but they're not dead and they're
240 not... I think it's the fact that it doesn't kill you straight away. And, um, somehow I thought I
241 must have just realised that they're smoking and they're not getting sicker; it's not affecting
242 them immediately... (MF22).

244 Others reported feeling unconcerned about the risks they had seen on tobacco packages,
245 which had no effect on their behaviour: I saw pictures of like smoke effects and that, it didn't
246 bother me. I just kept on smoking (PF23). Even participants who had seen family members
247 harmed by smoking did not feel motivated to quit: Yep. I know more about smoking now only
248 because smoking and the causes and the damage that it's done is close to home with me.
249 That's why... but... and-and then, and then I look at myself and I'm still smoking so I'm just
250 like, well I can't say anything about that but that's just how I feel...(MF25). Only direct
251 personal experience of harm seemed likely to motivate some participants to believe the risks
252 they had seen were real: And you know how you even see those pictures on the packs of
253 smokes, I don't get put off. It's not enough to put me off. It's like "Oh yeah okay. I won't
254 believe it until it happens" (MF19a).

256 Overall, while several participants indicated they had a general awareness that smoking poses
257 risks, many struggled to identify specific risks and most used rationalisations to distance
258 themselves from the harms they recognised. These responses created an interesting context in
259 which to explore whether and how they made deliberate decisions, and interpreted tobacco
260 companies' arguments that smoking is an informed choice.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

261

262

263

264

265

266

267

268

269

270

271

272

273

274

275

276

277

278

279

280

281

282

283

284

285

Reflective Decision Making

Several participants spoke about smoking as something that had happened with little or no forethought, reflection or risk acceptance: *Nah I haven't really thought about it. It's just, I don't really, I'm... when I'm in the moment I just you know, I don't really think back, I'm like, it's just it happened so...(MF19b). We were just hanging out in the grounds and we wanted to have a smoke... I started from there (PM19a).*

Participants' sense of something that had "just happened", typically while they were "hanging out", suggests smoking occurred without active reflection; instead, it was an unthinking transition from other activities. Some later found it difficult to understand their lack of analysis: *Mmmm, I actually thought that, you know, maybe a year later that it was strange how little I thought about it, the fact that I was actively taking up a highly addictive, you know, substance (MM 26).* Like others, this participant's retrospection positioned him as "actively" taking up a behaviour. However, the "little ...thought" he gave to what he was doing questions how active his behaviour was and suggests other factors shaped participants' actions and how they interpret these.

Social context of smoking

Because most participants, particularly Māori, saw smoking as normal and ubiquitous within their social setting, few reported reflecting on whether they should start smoking: *Cause my family, everyone at home, smokes as well. So yeah, I really didn't even think about it for a second, I just started smoking (PM19a). Because everybody in our family were smoking too, so I thought I'd just be like them. I thought it was normal...(MF25b).* Participants' social context deterred active consideration, since they had no reason to reflect on a behaviour those

286 around them practised. Not only did their social context dissuade reflection, it promoted
287 smoking uptake, since participants wanted to “be like” those around them.

288

289 A minority reported feeling coerced into experimenting with smoking: *Nah ‘cause they kept*
290 *telling me, “Try it, try it, try it.” And I thought if I tried it then they’ll stop bugging me*
291 *(MF19a). Cause my friends they always smoke, cause whenever I see them smoking I just feel*
292 *like smoking too ... I don’t want to smoke but they always dare me so I just like I just can’t*
293 *take it I just have to smoke* (PF19). These examples suggest some participants felt strong
294 pressure to comply with normative practices, and eventually took the path of least resistance.

295

296 However, even those who argued that starting to smoke was their own decision also
297 acknowledged they were influenced by what they perceived as positive attributes of smoking,
298 particularly the social connections smoking created: *I think it was my own decision, but no-*
299 *one really forced me to smoke but it’s just when I keep on seeing, like my friends smoke and*
300 *I’ll be like, oh this, that looks cool* (PM19c). For others, “coolness” was associated with
301 sophistication and adult behaviour, as the legal purchase age of tobacco reinforced smoking
302 as an adult activity: *Um, it-it, yeah, I think at that age it made me feel cool ‘cause that was*
303 *when you were growing up, that was the “growing up” age and...* (MF25b).

304

305 Smoking played an important role in helping participants feel integrated with a social group;
306 displaying the same “cool” behaviours helped them assert their group identity and develop
307 stronger and more meaningful relationships: *Um, I don’t know, I guess because my, um, my*
308 *cousin smoked. So most of... some of my friends smoked and it just seemed like it was the in*
309 *thing to do... And um I felt like whenever I went out and listened to the smokers talking, they*

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

310 *were getting like very in-depth and talking about personal things and it seemed like a cool*
311 *thing just to be able to socialise with people. It was a way to connect for me I think (MF 22).*
312
313 As well as providing a point of connection, some found that smoking counteracted boredom
314 created by unemployment, particularly when they had left school. In situations where young
315 people had little else to do, smoking provided a distraction and united the group: *I dropped*
316 *out of school, yeah so I was staying home and yeah that's when I started smoking every day*
317 *cause yeah, just like the yeah, I was hanging round my mates every day. There was no school*
318 *so we just had a smoke (PM19a).*
319
320 Beliefs that smoking helped manage stress were widespread and several participants saw
321 smoking as a form of self-medication that helped them cope more successfully with stressful
322 settings. *Getting into a new relationship was a lot of stress because you know it's just*
323 *stressful being in a relationship and you always tend to turn to smoking and that was how I*
324 *turned to being a daily smoker (PF24). And then this year I went to Uni and it's my first year*
325 *at Uni so um I needed it for stress, 'cause I was stressing out a lot and I just picked up*
326 *smoking again (MF19a).*
327
328 Several participants reported an association between drinking and smoking. Alcohol fuelled
329 greatly increased consumption, particularly among participants who were otherwise lighter
330 smokers: *When I'm sober I'll have one in the morning and one at lunch but when it's a party*
331 *it's like two packets (PF23) and The more you drink, the more you smoke (MF 25a).*
332 In summary, smoking was a social norm for many participants and was positively reinforced
333 by a sense of group belonging. The perception that smoking alleviated stress further
334 reinforced it while alcohol consumption and boredom fuelled consumption.

335

336 **Addiction**

337 Some participants had great faith in their ability to stop smoking and felt they would quit
338 when they chose, using will power and positive thinking: *I could say easy if I put my mind to*
339 *it...(MF19)*. However, others felt less confident because they had become addicted before
340 they realised what was happening and only understood addiction once they had experienced
341 it: *...you don't think about it cos it just sneaks up on you, like I said, it just suddenly, suddenly*
342 *you're addicted and, and you don't quite realise it until it's too late* (MF26). The realisation
343 they were addicted led some to talk regretfully about having started to smoke: *I was just*
344 *thinking I shouldn't have started (laughs), and yeah regretted it* (MM20). Although some
345 participants regretted smoking and a small number had felt pressured into initiating smoking,
346 others saw smoking as a badge of maturity and a behaviour that connected them more
347 strongly to their social groups. For these participants, addiction posed fewer concerns
348 because smoking signalled their social standing. These perceptions influenced how
349 participants interpreted industry arguments.

350

351 **Tobacco Companies' "Informed Choice" Argument**

352 After reflecting on their understanding of smoking, their social context and smoking's
353 addictiveness, we explored participants' reactions to a statement made by Imperial Tobacco:
354 *"The risks associated with smoking are universally known...and smoking is... a matter of*
355 *informed adult choice"*. [26] Despite many participants stating they had little knowledge of
356 smoking's risks, particularly its addictiveness, most nonetheless agreed that smoking was an
357 informed choice: *if you're an adult then, you know, it's their choice whether they want to do*
358 *it or not, ...(MF24)*. *...it's an adult choice and it's up to that person if they wanna smoke or*
359 *not smoke* (PM19b). One participant summed up the conflict many experienced; he already

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

360 experienced considerable regret and felt inextricably addicted, but nonetheless asserted
361 ownership of his situation. *For me, I regret having smoked when I was 14, cause, yeah, it just*
362 *spoiled my life from that day, wasting money on it, yeah, but it's just that I can't leave it so.*
363 *Yeah, but it's up to you aye.* (PM19a).

364

365 Several saw smoking as a symbol of adulthood, and it was inconceivable that an adult would
366 not make an informed choice: *like if you're an adult, to me, like you're making an informed*
367 *choice* (MF24. Smoking was also an important means of asserting their independent identity;
368 declaring they had made anything less than a deliberate choice would be inconsistent with the
369 autonomy they valued: *It's my life, I choose what I do, if I want to smoke, I smoke; if I don't*
370 *want to smoke, I don't smoke* (PF18). None of our participants reflected on how tobacco
371 companies' products had constrained and determined their choices; instead they saw
372 independence, adulthood and smoking as intertwined. Ironically, participants' desire to affirm
373 their independence led them to agree with tobacco companies' position, despite the lack of
374 knowledge they outlined and the contextual factors that had shaped their actions.

375

376 **DISCUSSION**

377 Many participants had not progressed beyond Chapman and Liberman's first stage of
378 informed choice. However, despite considering they had limited knowledge of smoking's
379 risks, feeling influenced by social factors, and rarely considering future consequences, most
380 nevertheless thought they had made an informed choice. Participants generally learned about
381 the specific risks of smoking from on-pack warnings, which they typically accessed only after
382 becoming addicted. While developing this knowledge left them more informed, it could not
383 influence their actions retrospectively; paradoxically, participants' assessment of their

384 informedness, occurred after their addiction, when they were more frequently exposed to
385 warning information.

386

387 Like many young adults, most dismissed the risks presented as uncertain and unlikely.[27]

388 Even those who had seen family members suffer from diseases caused by smoking, or who
389 had themselves experienced ill-health from smoking, rationalised their experiences,
390 diminished the role played by smoking, and rarely saw risks as relevant to themselves.

391 Participants saw smoking as normal, a means of establishing social connections, and lived in
392 social contexts where *not* smoking could have challenged group norms. The perceived
393 supportive environment for continued smoking, and the importance many participants placed
394 on smoking as a social behaviour that symbolised adulthood, undermined informed decision-
395 making. So too did the strong association between alcohol and smoking; alcohol featured
396 strongly in participants' social environments and compromised their ability to make rational
397 decisions.

398

399 Study limitations include the small sample; while interviewing continued until data saturation
400 had occurred, a larger study is required to assess whether the knowledge patterns and
401 perceptions we identified reflect those of the wider population. Strengths include the use of
402 in-depth interviews, which allowed us to elicit rich data that offer the first insights into how
403 young adults from indigenous and minority ethnicities experience and interpret informed
404 choice.

405

406 Our findings help explain persistent inequalities in smoking prevalence between Māori and
407 Pacific, and New Zealand Europeans (NZE) and highlight important differences between
408 ethnicities. Māori and Pacific participants reported having lower awareness of smoking's

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

409 general risks than participants in the NZE sample, where all participants displayed awareness
410 of some risks caused by smoking.[28] Our participants were more likely to comment on the
411 connecting role smoking played in their communities and family networks, which suggests
412 social impediments may also affect how effectively young adult Māori and Pacific may make
413 informed choices. This normative environment may also explain differing perceptions of
414 smoking’s role in their future. While NZE participants typically predicted they were
415 “unlikely to be smoking in the future” and saw smoking as “a lifestyle phase”, [22] Māori and
416 Pacific were less certain that smoking was a temporary part of their lives. They were also less
417 likely than NZE participants to reflect critically on the tobacco industry’s role in addicting
418 them and others to a lethal product. Instead, they saw smoking as a symbol of maturity, and a
419 sign they were capable of making adult decisions; in this context, declaring they had not
420 made informed choices could seem akin to stating they had not yet matured fully. Pacific and
421 Māori were more likely to report using smoking to relieve life circumstances such as stress
422 and boredom. Yet despite these differences, participants shared common attributes with NZE
423 young adults. For all groups, the disinhibiting effects of alcohol undermined active risk
424 evaluation and facilitated smoking uptake.[17, 18] Likewise most participants greatly
425 underestimated smoking’s addictiveness even though understanding this concept was pivotal
426 to making an informed choice.[22] In common with NZE participants, many Māori and
427 Pacific reported acting impulsively and without having reflected on the longer term
428 consequences they might face.
429
430 Arguments that smoking is an “informed choice” bear little relationship to the social contexts
431 young adult Māori and Pacific smokers experience. Our findings have important policy
432 implications and highlight the urgent need to change smoking norms within Māori and
433 Pacific communities. While existing tobacco control policies such as smokefree

environments, tobacco taxation, social marketing and supply initiatives have gone some way to denormalising smoking in Māori and Pacific settings, future efforts (including targeted funding and resources) will need to prioritise Māori and Pacific populations if we are to reduce inequalities in smoking rates across New Zealand.

Political and tribal leaders, tobacco control advocates and smokers from indigenous communities are calling for new and innovative measures, including banning tobacco and reducing tobacco supply. Many of these measures were outlined in the original MASC report, but progress in many areas has been disappointingly slow [29]. In addition to these more centralised approaches it is important for Māori and Pacific communities to build social movements where people interact in smokefree settings; examples such as Waka Ama (outrigger canoe racing) already exist. Other measures include altering environments where smoking uptake occurs, for example, (enforcing smokefree policies in schools, creating a home environment where smoking is clearly not accepted as culturally appropriate, and by reducing social supply of tobacco within families and communities). Targeted and well-resourced mass media and social marketing campaigns could illustrate the harms of smoking (including addiction), decrease social supply, increase positive messages about “smoking not being part of our culture”, and expose the role of the tobacco companies in the smoking epidemic for Māori and Pacific. Requiring all areas in bars and restaurants to be smokefree, will reduce opportunities for tobacco and alcohol co-use. Developing a smokefree generation and increasing the age at which young adults may purchase tobacco may be particularly salient to Māori and Pacific, and will need careful input from these communities.[30, 31]

Broader policy approaches may also be required to mitigate the risks of smoking being used to counteract stress and boredom.[32] These could include increased employment

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

459 opportunities and educational initiatives to ensure school success along with more nuanced
460 health education. Low recall of school health programmes raises the possibility that health
461 education messages may not be sufficiently targeted to meet the needs of specific cultural
462 groups such as Pacific or Māori, a conclusion advanced in other studies.[33, 34] Some Pacific
463 participants had not grown up in New Zealand, so our results may also indicate a lack of
464 exposure to education programmes run within NZ schools. Furthermore, some Māori and
465 Pacific reported having dropped out of school, thus even those who had attended school in
466 New Zealand may not have been exposed to all the health programmes that demonstrated
467 smoking's harms.

468
469 Future research could explore the feasibility of these ideas with Māori and Pacific, and, if
470 appropriate, pilot and test potential interventions to assess their uptake and impact on Māori
471 and Pacific. More fundamentally, young adults' acceptance of smoking as normal and
472 socially binding reflects a need for deeper change within these communities, using culturally
473 relevant mechanisms that community members themselves determine and implement.

474
475 **CONCLUSION**

476 For many young people, smoking uptake occurs quickly, easily and without deliberation.
477 Arguments that smoking is an informed choice overlook young adults' limited risk
478 knowledge, ignore the social contexts that facilitate initiation and maintain smoking, and take
479 no account of how addiction compromises choice. Two approaches could address the lack of
480 informed choice evident in our findings. First, changing participants' environments by
481 increasing the legal purchase age to at least 25, a point at which uptake becomes less likely,
482 implementation of smokefree generation proposals, decoupling smoking and drinking,
483 increasing the cost of smoking and decreasing where tobacco may be consumed. Second,

important contextual factors relevant to Māori and Pacific communities also require action to reduce the high smoking prevalence among these groups. Encouraging even greater participation in indigenous smokefree social movements could provide Māori and Pacific role models who re-inforce smokefree messages. More fundamentally, however, tobacco control funding must recognise Māori and Pacific needs more effectively, and the New Zealand government must be held accountable for achieving the smokefree 2025 goal, so clearly outlined in the MASC report.

491

492 **Competing interests**

493 We have no competing interests but note, for the sake of full disclosure, that we have
494 received funding from the New Zealand Health Research Council, Royal Society of New
495 Zealand Marsden Fund, New Zealand Ministry of Health, Heart Foundation of New Zealand
496 and New Zealand Cancer Society. We have no financial interest in the study and no
497 connection to any organisation that could profit from the study findings.

498

499 Funding for the project was provided by the Royal Society of New Zealand Marsden Fund
500 (Grant 11/134). We had full responsibility for the study design, data collection and analysis,
501 report writing and the preparation of this MS. We had full access to all of the data in this
502 study and take complete responsibility for the integrity of the data and the accuracy of the
503 data analysis.

504

505

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

506 **Authors' contributions**

507 HG and JH led this phase of the project; JH conceived the project and, with RE, obtained
508 funding. HG, SE, and DT collected the data reported, HG, SE, JH and RG undertook initial
509 data analyses. HG and JH led the MS development; DT, SE, RG and RE provided feedback
510 on drafts. All authors have approved the submitted MS and agree to be responsible for the
511 data reported.

513 **Authors' information**

514 HG is Director of Whakauae Research Services, an iwi-based Māori Health Research Group.
515 She has an extensive background in Māori health policies and interventions, with specific
516 expertise in tobacco control. She is a theme leader in ASPIRE2025, a University of Otago
517 Research Theme whose members develop, test and evaluate policy measures that support the
518 New Zealand government's goal of becoming a smoke-free nation by 2025.

519 DT is a Research Fellow at AUT University. He is Associate Director of the Pacific Islands
520 Families Study, which examines factors influencing success within Pacific families. He is a
521 theme leader within the ASPIRE2025 collaboration.

522 SE is Director of ASH New Zealand and formerly managed Tala Pasifika, the Pacific
523 Smokefree team within the NZ Heart Foundation. She has a strong background in tobacco
524 control and particular interest in reducing smoking prevalence among Māori and Pacific
525 peoples. She is a member of the ASPIRE2025 collaboration.

526 JH is a Professor of Marketing at the University of Otago. She is co-director of the
527 ASPIRE2025 collaboration and has a long-standing interest in tobacco control policy and
528 public health.

529 RG is a PhD candidate in the Department of Public Health, University of Otago Wellington.
530 Her research has offered a new definition of informed choice in relation to young adult
531 smokers.

532 RE is Professor of Public Health, co-head of the Department of Public Health and co-director
533 of the ASPIRE2025 collaboration at the University of Otago, Wellington. He has published
534 extensively in tobacco control and public health.

535

536 Acknowledgements

537 We wish to acknowledge the research participants whose willingness to be interviewed
538 allowed the study to proceed.

539

540 Funding Statement

541 This work was supported by the Royal Society of New Zealand Marsden Fund (Grant
542 11/134).

543

544 Data Sharing

545 No additional data available.

REFERENCES

[1] New Zealand Parliament. Parliamentary business: Select committees. Wellington: New Zealand Parliament 2016.

[2] New Zealand Parliament. Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Maori, Report of the Maori Affairs Committee. Wellington: New Zealand Parliament 2010.

[3] Ministry of Health. Annual Update of Key Results 2014/15: New Zealand Health Survey. In: Ministry of Health, ed. Wellington 2015.

[4] Balbach ED, Smith EA, Malone RE. How the health belief model helps the tobacco industry: Individuals, choice, and “information”. *Tobacco Control* 2006;**15**:iv37-iv43

[5] Maubach N, Hoek J, Edwards R, *et al.* “The times are changing”: New Zealand smokers’ perceptions of the tobacco endgame. *Tobacco Control* 2012;**22**(6):395-400.

[6] ASH New Zealand. ASH Year 10 Snapshot Survey: ToplineResults. Auckland 2015.

[7] Edwards R, Peace J, Carter K, *et al.* An examination of smoking initiation rates by age: results from a large longitudinal study in New Zealand. *Australia and New Zealand Journal of Public Health* 2013;**37**(6):516-519

[8] Ponniah S, Bloomfield A. Sociodemographic characteristics of New Zealand adult smokers, ex-smokers, and non-smokers: results from the 2006 Census. *The New Zealand medical journal* 2008;**121**:34 - 42.

[9] Greenfield K. The myth of choice: Personal responsibility in a world of limits: Yale University Press 2011.

[10] Hoek J. Informed choice and the nanny state: learning from the tobacco industry. *Public health* 2015;**129**(8):1038-1045.

[11] Perry B. 2013 Household Incomes Report- Key Findings. In: Development MoS, ed. Wellington: Ministry of Social Development 2013.

[12] Barnett R, Pearce J, Moon G. Does social inequality matter? Changing ethnic socio-economic disparities and Maori smoking in New Zealand, 1981–1996. *Social science & medicine* 2005;**60**(7):1515-1526.

[13] McGee R, Williams S, Reeder A. Parental tobacco smoking behaviour and their children’s smoking and cessation in adulthood. *Addiction* 2006;**101**(8):1193-1201.

[14] Teevale T, Denny S, Nosa V, *et al.* Predictors of cigarette use amongst Pacific youth in New Zealand. *Harm reduction journal* 2013;**10**(1):25.

[15] Gifford H, Boulton A. Is sharing tobacco within the home really good manaakitanga? In: Kepa M, Brewin M, Manu’atu L, eds. *Home: Here to Stay*. Wellington: Ngā Pae o te Māramatanga and Huia Publishers 2015:83-95.

[16] 2006 census of population and housing: Socio-economic indexes for area's (SEIFA). Canberra, Australia: Commonwealth of Australia 2008.

[17] Hoek J, Maubach N, Stevenson R, *et al.* Social smokers' management of conflicted identities. *Tob Control* 2013;**22**(4):261-265.

[18] Jiang N, Ling PM. Impact of alcohol use and bar attendance on smoking and quit attempts among young adult bar patrons. *American journal of public health* 2013;**103**(5):e53-e61.

[19] Ministry of Health. Annual Update of Key Results 2013/14: New Zealand Health Survey. In: Ministry of Health, ed. Wellington 2014.

[20] Health Mo. Annual Update of Key Results 2014/15: New Zealand Health Survey. In: Health Mo, ed. Wellington 2015.

[21] Chapman S, Liberman J. Ensuring smokers are adequately informed: Reflections on consumer rights, manufacturer responsibility, and policy implications. *Tobacco Control* 2005;**14**:8-13.

- [22] Gray RJ, Hoek J, Edwards R. A qualitative analysis of 'informed choice' among young adult smokers. *Tob Control* 2016;**25**(1):46-51.
- [23] Hoek J, Gifford H, Maubach N, *et al.* A qualitative analysis of messages to promote smoking cessation among pregnant women. *BMJ open* 2014;**4**(11):e006716.
- [24] Dey I. Qualitative data analysis: A user-friendly guide for social scientists: Routledge 1993.
- [25] Pihama L, Cram F, Walker S. Creating methodological space: A literature review of Kaupapa Maori research. *Canadian Journal of Native Education* 2002;**26**(1):30.
- [26] Imperial Tobacco New Zealand Limited. Submission to the Māori Affairs Select Committee Enquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori. 2010.
- [27] Hoek J, Hoek-Sims A, Gendall P. A qualitative exploration of young adult smokers' responses to novel tobacco warnings. *BMC Public Health* 2013;**13**(609).
- [28] Gray R, Hoek J, Edwards R. Do young adults exercise informed choice about smoking? In: Walker N, Grana R, eds. *Society for Nicotine and Tobacco Research*. Chicago: Society for Nicotine and Tobacco Research 2016.
- [29] Ball J, Edwards R, Waa A, *et al.* Is the NZ Government responding adequately to the Māori Affairs Select Committee's 2010 recommendations on tobacco control? A brief review. *New Zealand Medical Journal* 2016;**129**(1428):93-97.
- [30] Winickoff JG, McMillen R, Tanski S, *et al.* Public support for raising the age of sale for tobacco to 21 in the United States. *Tobacco control* 2015;tobaccocontrol-2014-052126.
- [31] Berrick A. The tobacco-free generation proposal. *Tobacco control* 2013;**22**(suppl 1):i22-i26.
- [32] Richardson K. Smoking, low income and health inequalities: thematic discussion document. ASH 2001.
- [33] Tautolo ES, Schluter PJ, Paterson J, *et al.* Acculturation status has a modest effect on smoking prevalence among a cohort of Pacific fathers in New Zealand. *Australian and New Zealand journal of public health* 2011;**35**(6):509-516.
- [34] Lanumata T, Thomson G, Wilson N. Pacific solutions to reducing smoking around Pacific children in New Zealand: a qualitative study of Pacific policymaker views. *New Zealand Medical Journal* 2010;**123**(1308).

626

Supplementary file

SMOKING AS AN ‘INFORMED CHOICE’

In-depth Focused Interview Protocol

Note for interviewers: each section is marked with a priority (low, medium, high, critical) to given an indication of how much time should be spent prompting answers

Introduction

Hello, my name is ... and this is ..., who will be sitting in on the interview today. Just so you know, the reason we have two people here is that we are in the process of trying out this questionnaire. Bearing that in mind, please do let me know if you find any of the questions difficult to understand or to answer.

Before we start talking about the research topic, I have an information sheet about my work and I would like you to read this so I can answer any questions you might have about my work.

As a participant you retain the right to ask questions at any time, receive a copy of the findings, withdraw from the research at any time and to decline answering any questions.

- Explain recording of the interview and participant’s rights in relation to this. **Once participant has agreed to the recording of the interview turn on dictaphone.**
- Check if participant has any questions about the interview.
- Ask the participant to sign the consent form.
- State their rights on the recorder (right to ask questions at any time; right to withdraw from the work; right to have a copy of the results; right to ask for the recorder to be turned off; remind them that the research is confidential and their comments won’t be attributed to them personally).

“Smoking journey” focused discussion

Priority: LOW – not too much time

1. Looking back, can you tell me about the first time you smoked a cigarette? How old were you? Where were you, who were you with? How did you feel about it? What did you think? What made you want to have that cigarette? How did you feel about smoking at the time?

Priority: MEDIUM

2. How do you describe your smoking at the moment? (social smoker/ occasional/ daily etc) How many cigarettes do you usually smoke per day/ per week?
3. Can you describe the context in which you smoke? Who are you with, where are you, what are you doing (probe for detail about role of alcohol, work, social cues). Are there any particular reasons why you smoke at those times?
4. Can you describe the situations where you don’t smoke? Are there places or times when you don’t smoke? Are there any particular reasons why you don’t smoke in these places and times?

Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies. Enseignement Supérieur (ABES).

Priority: CRITICAL

5. Tell me about how you moved from being someone who may have /or has had just tried smoking a few times to being someone who smokes most weeks/every day (as appropriate)?
6. How old were you when you started smoking with this pattern? What was happening in your life at that time? (probe: where were you, were you living at home or had you moved away, who were you spending time with, were you working, at college etc)

Smoking decision process**Priority: CRITICAL**

7. Can you tell me about how you made the decision to smoke at that time? (Who influenced that decision, what did you feel at the time, what did you think about?)
8. Can you relate this decision to other decisions you were making at the time? eg drinking alcohol, getting into relationships, job or study decisions?
9. How did you weigh up the decision to smoke or not to smoke at that time?

Knowledge of risk at time of uptake**Priority: CRITICAL**

10. At the time that you started smoking (weekly/daily/whatever): What had you been told about smoking? What had you read? Where? (probe: what specifically do you remember was said about smoking?) Where did you get most of your messages about smoking? (eg friends family etc)
11. You said you'd been told (x,y,z).. what did you think about that, did it seem important/true? Did it concern you? Why?
12. And how did you find smoking compared with what you'd been told about it? (include: addictiveness, effects on your body, health consequences, social consequences)

Knowledge of risk currently**Priority: HIGH**

13. Have you changed your thinking about smoking since you started smoking more regularly? How do you feel about smoking now? What else do you know about smoking now? Does it concern you? Why?
14. If you keep smoking for the rest of your life, what do you think might happen? How do you feel about that? How likely do you think it is that (each thing you mentioned) could happen to you? (very likely, somewhat likely, somewhat unlikely, very unlikely, don't know?)
15. What (other) health effects do you know of that can be caused by smoking? (interviewer – note down each condition mentioned)
16. What do you think having (that condition – each one mentioned at 14 and 15) would be like? What symptoms might a person get, how might it affect their life?)
17. Out of 100 people who have smoked throughout their life, how many of them do you think are likely to end up dying from something related to smoking? (probe discussion: what information did you draw on to come up with that number?)

18. So given what you’ve just described about what you know about risk – how do you do you think your knowledge and understanding at the time that you started smoking regularly compares to what you know now? (Probe: in what way has it changed?)

Thoughts on addiction
Priority: HIGH

19. Of the people in your life – family, friends – do you know people who have quit or tried to quit smoking? What do you think made them try to quit? How did they go about quitting? How did it work out for them?
20. How easy do you think it would be to quit smoking completely (that is, not smoke again in any situation)? Why do you feel that way?
21. Thinking back, what did you think about quitting (did you think you would, how easy did you think it would be?) when you first started smoking (weekly/daily)? (Has your opinion changed since then, if so how?)
22. (if not already mentioned) Cigarettes are sometimes described as “addictive”. What do you think it means to be addicted?
23. Do you think you’ll still be smoking in five years time? Ten years? What makes you think that?

Conclusion
Priority: HIGH

24. You’ve described the circumstances in which you took up smoking, and some of your thoughts about smoking then and now. Do you think, knowing what you do now, if you were faced with the same circumstances (describe) that you would still take up smoking?
25. Can you think of people in your life who are about your age – say siblings or friends – who don’t smoke? Why don’t they/ what do you think are the influences on their decision to not smoke? (Probe: how are the things that influence them different to the things that influenced you?) Do you think, if you had been in the same circumstances/ had the same influences as they do, that you would still have started smoking? Why/ why not?
26. To finish off, I’d like to read you a recent quote from a tobacco company spokesperson in NZ.

“The risks associated with smoking are universally known...and smoking is... a matter of informed adult choice”
(Imperial Tobacco NZ Ltd 2010: Submission to the Māori Affairs Select Committee)

We’d be interested to know what you think about this statement...how does it relate to your experience and what you’ve just described about how you started to smoke?

(unpack: “risks universally known”, “informed” “adult choice”)

27. So in order to make an informed adult choice..What exactly do you think people should know and understand, before they decide to start smoking? How much should they know in order to make that decision?

28. And given that you have said that people should know and understand x,y,z; did you have that knowledge and understanding when you took up smoking? What proportion of people aged xx (whatever age person was when they became a regular smoker) do you think have that knowledge and understanding?

29. Do you have any other comments you'd like to add about what we've been discussing?

I just have a short questionnaire for you to complete, please. Like the rest of the discussion, the information you provide will be completely confidential and only members of the research team will be able to access it.

Thank, assure confidentiality, check that demographic sheet has been filled out, close.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Note for researchers to consider at the close of pilot interview:

How long did each section take?

Were any questions hard to answer? (mark on interview schedule any questions that the participant found difficult)

Have the following all been covered off during the interview?

Level 1: having heard that smoking increases health risks

Level 2: being aware that specific diseases are caused by smoking

Level 3: accurately appreciating the meaning, severity, and probabilities of developing tobacco related diseases

Level 4: personally accepting that the risks inherent in levels 1-3 apply to one’s own risk of contracting such diseases (note: a person’s view of the addictiveness of smoking and confidence in their own ability to quit before suffering harms will come into this)

5: maturity of decision making processes – did they make the choice as an adult, and did they use a rational process to decide?

6: ability to make decision free of social and environmental pressures.

Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies.
Enseignement Supérieur (ABES)

BMJ Open

A qualitative analysis of Māori and Pacific smokers' views on informed choice and smoking

Journal:	<i>BMJ Open</i>
Manuscript ID	bmjopen-2016-011415.R2
Article Type:	Research
Date Submitted by the Author:	19-Apr-2016
Complete List of Authors:	Gifford, Heather; Whakauae Research for Maori Health and Development, Director's Office Tautolo, El-Shadan; AUT University , Department of Public Health and Psychosocial Studies Erick, Stephanie; ASH New Zealand, Director's office Hoek, Janet; University of Otago, Marketing Gray, Rebecca; University of Otago Wellington, Public Health Edwards, Richard; University of Otago Wellington, Public Health
Primary Subject Heading:	Smoking and tobacco
Secondary Subject Heading:	Public health, Qualitative research
Keywords:	PUBLIC HEALTH, QUALITATIVE RESEARCH, SOCIAL MEDICINE

SCHOLARONE™
Manuscripts

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

1 **A qualitative analysis of Māori and Pacific smokers’ views on informed choice and**
2 **smoking**

4 Heather Gifford¹, El-Shadan Tautolo², Stephanie Erick³, Janet Hoek⁴, Rebecca Gray⁵,
5 Richard Edwards⁵

- 6 1. Whakauae Research Services, Director’s Office, Whanganui, New Zealand
7 2. AUT University, Department of Public Health and Psychosocial Studies, Auckland, New
8 Zealand
9 3. ASH New Zealand, Director’s Office, Auckland, New Zealand
10 4. Department of Marketing, University of Otago, Dunedin, New Zealand
11 5. Department of Public Health, University of Otago Wellington, Wellington, New Zealand

14 **Corresponding Author:**
15 Janet Hoek
16 Department of Marketing
17 University of Otago
18 PO Box 56
19 Dunedin 9054
20 New Zealand
21 Email: Janet.hoek@otago.ac.nz

23 Number of Tables: 1
24 Number of Figures: 0

25 **Word Count: 5067** (Excluding title page, abstract, summary, references and table)

27 ABSTRACT

28 **Objectives:** Tobacco companies frame smoking as an informed choice, a strategy that holds
29 individuals responsible for harms they incur. Few studies have tested this argument, and even
30 fewer have examined how informed indigenous smokers or those from minority ethnicities
31 are when they start smoking. We explored how young adult Māori and Pacific smokers
32 interpreted “informed choice” in relation to smoking.

33 **Participants:** Using recruitment via advertising, existing networks and word of mouth, we
34 recruited and undertook qualitative in-depth interviews with 20 Māori and Pacific young
35 adults aged 18-26 who smoked.

36 **Analyses:** Data were analysed using an informed-choice framework developed by Chapman
37 and Liberman. We used a thematic analysis approach to identify themes that extended this
38 framework.

39 **Results:** Few participants considered themselves well-informed and none met more than the
40 framework’s initial two criteria. Most reflected on their unthinking uptake and subsequent
41 addiction, and identified environmental factors that had facilitated uptake. Nonetheless,
42 despite this context, most agreed that they had made an informed choice to smoke.

43 **Conclusions:** The discrepancy between participants’ reported knowledge and understanding
44 of smoking’s risks, and their assessment of smoking as an informed choice, reflects their
45 view of smoking as a symbol of adulthood. Policies that make tobacco more difficult to use
46 in social settings could help change social norms around smoking and the ease with which
47 initiation and addiction currently occur.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

48 **Article Summary**

49 **Strengths and limitations of this study**

- 50 • Use of in-depth qualitative methods allowed detailed probing of participants’ smoking
51 uptake and their understanding and personal acceptance of smoking’s risks.
- 52 • Our findings illustrate how young adult Māori and Pacific see smoking as usual within
53 their communities and highlight potential interventions that could denormalise smoking
54 and reduce its perceived acceptability.
- 55 • The study is deliberately exploratory and our findings thus require testing with a wider
56 sample before they can be generalised further.

Peer review only

BACKGROUND

The New Zealand Parliament has several Select Committees that comprise members drawn from all political parties [1]. As well as reviewing draft legislation, these committees may establish inquiries into matters of concern to New Zealand. Following prompting by Māori politicians and health advocates, the Māori Affairs Select Committee (MASC) initiated an *Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori*. [2] in October 2010. The Inquiry called for an analysis that examined the toll of tobacco use on Māori, and recognised New Zealand's striking disparities in smoking prevalence, which is much higher among Māori (38%) and Pacific peoples (25%) than among NZ European (15%) [3].

Among other claims advanced to the MASC, tobacco company representatives argued that smoking is an 'informed adult choice'; this argument implies smokers start smoking after appraising the risks and benefits they may incur.[4] By transferring responsibility for future harm back onto smokers themselves, tobacco companies reduce their potential liability and promote beliefs that tobacco control measures undermine individuals' right to smoke.[4, 5] This argument has a superficial appeal and sits easily within the neo-liberal discourse that has dominated New Zealand's political landscape. However, the premises of this argument have not been carefully tested and require closer scrutiny, given tobacco companies' use of this claim to oppose policy measures. Fully informed choices are arguably more important for tobacco than for other products, given how addictive smoking is and the enormous harm tobacco inflicts on users.

Māori and Pacific take up smoking at a younger age than their European counterparts; children as young as 11 years of age may experiment with smoking and smoking may

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

83 become established in children by age 14;[6] for these smokers, starting smoking is clearly
84 not an adult choice. However, smoking uptake also occurs among Māori and Pacific young
85 adults and prevalence remains high among those aged 18–25, despite reductions in adolescent
86 smoking rates.[7, 8] Evidence of increasing smoking uptake among young people aged 18
87 and over, who are legally considered adults in New Zealand, highlights the importance of
88 testing the tobacco industry’s ‘informed choice’ arguments. Specifically, few studies have
89 explored whether young adults, particularly those most impacted by inequalities, make active
90 and informed decisions to start smoking.

91

92 Despite the superficial appeal of ‘informed choice’ arguments, which draw on neo-liberal
93 views of personal responsibility,[9, 10] these overlook important socio-economic and
94 cultural factors that influence Māori and Pacific young adults’ decision-making. For example,
95 Māori and Pacific ethnic groups typically have poverty rates around double those of the
96 European ethnic group, regardless of the measure used, and smoking accounts for a large
97 proportion of economic hardship experienced by Māori and Pacific peoples.[11] Levels of
98 social inequality between Māori and European people have an independent effect on Māori
99 smoking rates.[12] Where smoking prevalence is high, as it is among Māori and Pacific,
100 young adults may regard it as normal, associate it with desirable social benefits,[13-15] and
101 discount the risks communicated in health warnings and through other media. Furthermore,
102 cultural practices such as gift giving and sharing may undermine informed choice by
103 promoting uptake in contexts where refusal to accept or use tobacco may be regarded as
104 impolite, or where sharing is strongly associated with hospitality and generosity.[16]

105

106 Other factors likely to affect European New Zealanders as well as Māori and Pacific young
107 adults, include the widespread association of smoking and drinking.[17] Growing evidence

108 suggests alcohol consumption both facilitates smoking initiation and fuels tobacco use.[17,
109 18] Higher rates of drinking “a large amount of alcohol” among Māori and Pacific peoples
110 thus further undermines young people’s ability to undertake the risk–benefit assessments
111 implicit in informed choices.[19, 20]

112

113 **Informed Choice Framework**

114 Chapman and Liberman proposed four levels of understanding and knowledge that smokers
115 should possess before they can make an informed choice.[21] First, smokers need to have
116 heard that smoking increases health risks; second, they must be aware that smoking causes
117 specific diseases; third they must accurately appreciate the meaning, severity and
118 probabilities of developing diseases caused by tobacco use. Finally, they must personally
119 accept the risks inherent in levels 1–3 as applicable to themselves. Other factors, such as
120 addiction and social context, may also influence informed choices by circumscribing the
121 options available to young people. We considered these factors, together with young
122 people’s socio-economic and cultural settings, alongside Chapman and Liberman’s criteria,
123 and then used the resulting framework to investigate whether Māori and Pacific young adults
124 make active, informed decisions when they beginning to smoke. We compared and contrasted
125 the results from these analyses with those from a predominately New Zealand European
126 sample, which has been reported separately [22] Our overall research question explored how
127 smoking uptake occurred, particularly the risk awareness and understanding our participants
128 displayed, and the contexts in which their behaviour evolved.

129

130

131 **METHODS**

132 **Sample**

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

133 We conducted in-depth interviews with 20 18–26-year-olds (10 Māori and 10 Pacific) who
134 had started smoking since turning 18. Participants were recruited using whanaungatanga or
135 kinship networks, by word of mouth, and via social media and community advertising, using
136 approaches we have previously used successfully.[23] We also recruited via Māori and
137 Pacific health services that offered culturally targeted primary care, where we placed notices
138 about the research. As recruitment proceeded, we used purposive selection to promote
139 diversity and ensure participants varied by age and gender, and displayed varied smoking
140 behaviours (i.e., the sample included both daily and intermittent smokers, and recent
141 quitters).
142
143 Māori participants included students, caregivers, and those in employment; just over half
144 were in paid employment and eight of the ten were living with wider family or friends. Seven
145 of the ten Pacific participants were living with their parents, the majority were in some form
146 of paid employment, and three participants were also studying. (Table 1 summarises
147 participants’ characteristics). Ethics approval was obtained from the University of Otago’s
148 Human Ethics Committee, which undertook a full review of the proposed research (approval
149 11/297). All participants received an information sheet and provided written consent.
150
151

152 **Table 1: Participants' Characteristics**

Participant Code ¹	Ethnicity	Age	Gender	Smoking status
MM26	Māori	26	Male	Daily
MF24	Māori	24	Female	Recent quitter
MM20	Māori	20	Male	Daily
MF19a	Māori	19	Female	Intermittent
MM23	Māori	23	Male	Daily
MF25a	Māori	25	Female	Daily
MF19b	Māori	19	Female	Daily
MF22	Māori	22	Female	Daily
MF25b	Māori	25	Female	Daily
MM25	Māori	25	Male	Daily
PF18	Pacific	18	Female	Intermittent
PF23	Pacific	23	Female	Daily
PF20	Pacific	20	Female	Daily
PF24	Pacific	24	Female	Intermittent
PM19a	Pacific	19	Male	Daily
PM19b	Pacific	19	Male	Daily
PF19a	Pacific	19	Female	Daily
PM19c	Pacific	19	Male	Intermittent
PM19d	Pacific	19	Male	Intermittent
PF19b	Pacific	19	Female	Daily

1. We have used the codes shown to attribute quotations, but note that we did not quote each respondent, thus not all codes are used in the Results section.

156 Protocol and Procedure

157 We used a semi-structured interview guide to explore participants' smoking initiation and
 158 each component of Chapman and Liberman's informed choice framework. The interview
 159 guide was developed collaboratively within the research team and underwent cognitive pre-
 160 testing before interviewing commenced. Specifically, we explored participants' awareness
 161 and knowledge of smoking's risks, and their acceptance of those risks when they began

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

162 smoking. We also probed their reflections on how informed they considered their uptake of
163 smoking was. To test the framework’s completeness, we examined how participants
164 understood addiction (particularly prior to smoking), explored whether and how they had
165 considered the risks smoking poses, and reviewed the social and environmental contexts in
166 which their smoking began. A copy of the interview guide is included as a supplementary
167 file. Interviews were carried out by Māori and Pacific interviewers, with Māori and Pacific
168 participants respectively, in late 2012 and early 2013 and took between 25 and 50 minutes.
169 Interviewing continued until no new idea elements had been elicited in two consecutive
170 interviews. With participants’ permission, each interview was audio recorded and then
171 transcribed verbatim.

172

173 **Data Analysis**

174 Interviewers undertook an intensive review of their interview transcripts and developed an
175 initial descriptive classification that drew on the interview guide and was grounded in their
176 own cultural knowledge and perspectives.[24, 25] All interviewers (Māori, Pacific and
177 European) then met face to face to compare and contrast the findings across all three ethnic
178 groups. During this analysis workshop, facilitated by an independent qualitative researcher,
179 we identified over-arching themes within the transcripts and extended the initial descriptive
180 analyses that corresponded largely to the research protocol. This process allowed themes to
181 be cross-validated and nuanced, and the themes reported below reflect a consensus reached
182 by the authors. We make extensive use of participants’ own comments, and signal each
183 participant using the codes outlined in Table 1.

184

185

RESULTS

We began by identifying themes that corresponded to Chapman and Liberman's theoretical framework[21] and then identified additional themes specific to Māori and Pacific participants. These latter themes provided more nuanced insights into participants' risk acceptance and likelihood of making informed choices.

Levels 1 and 2: Awareness of general and specific health risks

Most participants had received some information about smoking's health risks from sources including television advertising, and family and friends. However, as the participant below explained, this information often conflicted with their immediate environment: *Um, just, mum and dad, and the tv, like they have all those ads on the TV and, we were just brought up, knowing that, it's bad for you, and like, even though like, we had older cousins and that doing it* (MF24).

Others reported learning about smoking's risks from school programmes and, once they started smoking, from warnings on packs: *I was in school, I was in 5th form. People from the hospital they came to school and did an interview about smoking and that, and showed us some photos of little kids smoking.... it put me off for like, all those pictures* (PF18). Both Māori and Pacific participants reported gleaning information from tobacco packaging, which had had a strong visual impact on them: *The first thing I saw was the packet. How it had all those pictures on it* (PM19c). Others went on to read the warning labels and learned about smoking's risks from these: *I learnt more reading off the packets.... How it affects your lungs. And as I said you get looks of the pictures. Gangrene on your feet and stuff* (MF19b). *Yeah I read about it (risks of smoking) on the packet* (PM19b).

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

211 Awareness of smoking’s specific risks increased once participants had developed a regular
212 smoking pattern and were more frequently exposed to on-pack warnings. As a result, some
213 considered “cutting down” so they could resolve the dissonance their risk knowledge
214 aroused: *The first thing I saw was the packet. How it had all those pictures on it, and this*
215 *was when we cut down on smoking.... when I always go for a smoke I always read the pack,*
216 *it has all those lung stuff. That’s what I always read* (PM19c).

217

218 While many participants reported receiving information about risks, some felt they had
219 received little information, or reported they were not fully aware of the risks: *Oh I didn’t*
220 *know anything when I first started.....when I was 18 I didn’t know that you could get killed*
221 *from this stuff. And I didn’t notice how bad it affects your body and stuff* (MF19b). Of those
222 who did possess some risk understanding, most focused generally on cancer and few showed
223 a detailed knowledge of the multiple risks caused by smoking: *That cancer thing, and I don’t*
224 *really know that much, ay. I just know that part.* (PM19a).

225

226 Māori participants regretted their lack of knowledge and wondered whether knowing more at
227 a younger age might have helped them remain smokefree: *Yeah, I should’ve been told about it*
228 *before I picked up my first cigarette* (MM20). *I think it should be better put out there*
229 *because, like me, if I had’ve known more about it.....* (MF19a).

230

231 **Levels 3 and 4: Personal acceptance and understanding the meaning of risk**

232 Rather than outline how they had (or more typically, had not) assessed and then accepted
233 smoking’s risks, most participants explained they had discounted risks by focussing on
234 counter-evidence. Many used examples of smokers who they knew and believed were
235 unscathed by smoking to question risk information, and repeatedly privileged their personal

236 observations over health warnings: *I see some people that smoke every day but nothing's*
237 *happened to them* (PF23).

238

239 Evidence that the harms of smoking typically occurred over the long-term enabled some to
240 rationalise their current behaviour by arguing they were unlikely to suffer any immediate
241 harm. These participants used the lack of an instantaneous effect to discount future risks:
242 *.....it was seeing people everywhere smoking and realising but they're not dead and they're*
243 *not... I think it's the fact that it doesn't kill you straight away. And, um, somehow I thought I*
244 *must have just realised that they're smoking and they're not getting sicker; it's not affecting*
245 *them immediately...* (MF22).

246

247 Others reported feeling unconcerned about the risks they had seen on tobacco packages,
248 which had no effect on their behaviour: *I saw pictures of like smoke effects and that, it didn't*
249 *bother me. I just kept on smoking* (PF23). Even participants who had seen family members
250 harmed by smoking did not feel motivated to quit: *Yep. I know more about smoking now only*
251 *because smoking and the causes and the damage that it's done is close to home with me.*
252 *That's why... but... and-and then, and then I look at myself and I'm still smoking so I'm just*
253 *like, well I can't say anything about that but that's just how I feel...* (MF25). Only direct
254 personal experience of harm seemed likely to motivate some participants to believe the risks
255 they had seen were real: *And you know how you even see those pictures on the packs of*
256 *smokes, I don't get put off. It's not enough to put me off. It's like "Oh yeah okay. I won't*
257 *believe it until it happens"* (MF19a).

258

259 Overall, while several participants indicated they had a general awareness that smoking poses
260 risks, many struggled to identify specific risks and most used rationalisations to distance

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

261 themselves from the harms they recognised. These responses created an interesting context in
262 which to explore whether and how they made deliberate decisions, and interpreted tobacco
263 companies' arguments that smoking is an informed choice.

264
265 **Reflective Decision Making**

266 Several participants spoke about smoking as something that had happened with little or no
267 forethought, reflection or risk acceptance: *Nah I haven't really thought about it. It's just, I*
268 *don't really, I'm... when I'm in the moment I just you know, I don't really think back, I'm like,*
269 *it's just it happened so...(MF19b). We were just hanging out in the grounds and we wanted*
270 *to have a smoke... I started from there (PM19a).*

271
272 Participants' sense of something that had "just happened", typically while they were
273 "hanging out", suggests smoking occurred without active reflection; instead, it was an
274 unthinking transition from other activities. Some later found it difficult to understand their
275 lack of analysis: *Mmmm, I actually thought that, you know, maybe a year later that it was*
276 *strange how little I thought about it, the fact that I was actively taking up a highly addictive,*
277 *you know, substance (MM 26).* Like others, this participant's retrospection positioned him as
278 "actively" taking up a behaviour. However, the "little ...thought" he gave to what he was
279 doing questions how active his behaviour was and suggests other factors shaped participants'
280 actions and how they interpret these.

281
282 **Social context of smoking**

283 Because most participants, particularly Māori, saw smoking as normal and ubiquitous within
284 their social setting, few reported reflecting on whether they should start smoking: *Cause my*
285 *family, everyone at home, smokes as well. So yeah, I really didn't even think about it for a*

286 *second, I just started smoking (PM19a). Because everybody in our family were smoking too,*
287 *so I thought I'd just be like them. I thought it was normal...(MF25b).* Participants' social
288 context deterred active consideration, since they had no reason to reflect on a behaviour those
289 around them practised. Not only did their social context dissuade reflection, it promoted
290 smoking uptake, since participants wanted to "be like" those around them.

291
292 A minority reported feeling coerced into experimenting with smoking: *Nah 'cause they kept*
293 *telling me, "Try it, try it, try it." And I thought if I tried it then they'll stop bugging me*
294 *(MF19a). Cause my friends they always smoke, cause whenever I see them smoking I just feel*
295 *like smoking too ... I don't want to smoke but they always dare me so I just like I just can't*
296 *take it I just have to smoke (PF19).* These examples suggest some participants felt strong
297 pressure to comply with normative practices, and eventually took the path of least resistance.

298
299 However, even those who argued that starting to smoke was their own decision also
300 acknowledged they were influenced by what they perceived as positive attributes of smoking,
301 particularly the social connections smoking created: *I think it was my own decision, but no-*
302 *one really forced me to smoke but it's just when I keep on seeing, like my friends smoke and*
303 *I'll be like, oh this, that looks cool (PM19c).* For others, "coolness" was associated with
304 sophistication and adult behaviour, as the legal purchase age of tobacco reinforced smoking
305 as an adult activity: *Um, it-it, yeah, I think at that age it made me feel cool 'cause that was*
306 *when you were growing up, that was the "growing up" age and...(MF25b).*

307
308 Smoking played an important role in helping participants feel integrated with a social group;
309 displaying the same "cool" behaviours helped them assert their group identity and develop
310 stronger and more meaningful relationships: *Um, I don't know, I guess because my, um, my*

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

311 *cousin smoked. So most of... some of my friends smoked and it just seemed like it was the in*
312 *thing to do... And um I felt like whenever I went out and listened to the smokers talking, they*
313 *were getting like very in-depth and talking about personal things and it seemed like a cool*
314 *thing just to be able to socialise with people. It was a way to connect for me I think (MF22).*
315
316 As well as providing a point of connection, some found that smoking counteracted boredom
317 created by unemployment, particularly when they had left school. In situations where young
318 people had little else to do, smoking provided a distraction and united the group: *I dropped*
319 *out of school, yeah so I was staying home and yeah that's when I started smoking every day*
320 *cause yeah, just like the yeah, I was hanging round my mates every day. There was no school*
321 *so we just had a smoke (PM19a).*
322
323 Beliefs that smoking helped manage stress were widespread and several participants saw
324 smoking as a form of self-medication that helped them cope more successfully with stressful
325 settings. *Getting into a new relationship was a lot of stress because you know it's just*
326 *stressful being in a relationship and you always tend to turn to smoking and that was how I*
327 *turned to being a daily smoker (PF24). And then this year I went to Uni and it's my first year*
328 *at Uni so um I needed it for stress, 'cause I was stressing out a lot and I just picked up*
329 *smoking again (MF19a).*
330
331 Several participants reported an association between drinking and smoking. Alcohol fuelled
332 greatly increased consumption, particularly among participants who were otherwise lighter
333 smokers: *When I'm sober I'll have one in the morning and one at lunch but when it's a party*
334 *it's like two packets (PF23) and The more you drink, the more you smoke (MF 25a).*

335 In summary, smoking was a social norm for many participants and was positively reinforced
336 by a sense of group belonging. The perception that smoking alleviated stress further
337 reinforced it while alcohol consumption and boredom fuelled consumption.

338

339 **Addiction**

340 Some participants had great faith in their ability to stop smoking and felt they would quit
341 when they chose, using will power and positive thinking: *I could say easy if I put my mind to*
342 *it...*(MF19). However, others felt less confident because they had become addicted before
343 they realised what was happening and only understood addiction once they had experienced
344 it: *...you don't think about it cos it just sneaks up on you, like I said, it just suddenly, suddenly*
345 *you're addicted and, and you don't quite realise it until it's too late* (MF26). The realisation
346 they were addicted led some to talk regretfully about having started to smoke: *I was just*
347 *thinking I shouldn't have started (laughs), and yeah regretted it* (MM20). Although some
348 participants regretted smoking and a small number had felt pressured into initiating smoking,
349 others saw smoking as a badge of maturity and a behaviour that connected them more
350 strongly to their social groups. For these participants, addiction posed fewer concerns
351 because smoking signalled their social standing. These perceptions influenced how
352 participants interpreted industry arguments.

353

354 **Tobacco Companies' "Informed Choice" Argument**

355 After reflecting on their understanding of smoking, their social context and smoking's
356 addictiveness, we explored participants' reactions to a statement made by Imperial Tobacco:
357 *"The risks associated with smoking are universally known...and smoking is... a matter of*
358 *informed adult choice"*. [26] Despite many participants stating they had little knowledge of
359 smoking's risks, particularly its addictiveness, most nonetheless agreed that smoking was an

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

360 informed choice: *if you're an adult then, you know, it's their choice whether they want to do*
361 *it or not, ...*(MF24). *...it's an adult choice and it's up to that person if they wanna smoke or*
362 *not smoke* (PM19b). One participant summed up the conflict many experienced; he already
363 experienced considerable regret and felt inextricably addicted, but nonetheless asserted
364 ownership of his situation. *For me, I regret having smoked when I was 14, cause, yeah, it just*
365 *spoiled my life from that day, wasting money on it, yeah, but it's just that I can't leave it so.*
366 *Yeah, but it's up to you aye.* (PM19a).

367
368 Several saw smoking as a symbol of adulthood, and it was inconceivable that an adult would
369 not make an informed choice: *like if you're an adult, to me, like you're making an informed*
370 *choice* (MF24). Smoking was also an important means of asserting their independent identity;
371 declaring they had made anything less than a deliberate choice would be inconsistent with the
372 autonomy they valued: *It's my life, I choose what I do, if I want to smoke, I smoke; if I don't*
373 *want to smoke, I don't smoke* (PF18). None of our participants reflected on how tobacco
374 companies' products had constrained and determined their choices; instead they saw
375 independence, adulthood and smoking as intertwined. Ironically, participants' desire to affirm
376 their independence led them to agree with tobacco companies' position, despite the lack of
377 knowledge they outlined and the contextual factors that had shaped their actions.

378
379 **DISCUSSION**

380 Many participants had not progressed beyond Chapman and Liberman's first stage of
381 informed choice. However, despite considering they had limited knowledge of smoking's
382 risks, feeling influenced by social factors, and rarely considering future consequences, most
383 nevertheless thought they had made an informed choice. Participants generally learned about
384 the specific risks of smoking from on-pack warnings, which they typically accessed only after

385 becoming addicted. While developing this knowledge left them more informed, it could not
386 influence their actions retrospectively; paradoxically, participants' assessment of their
387 informedness, occurred after their addiction, when they were more frequently exposed to
388 warning information.

389
390 Like many young adults, most dismissed the risks presented as uncertain and unlikely.[27]
391 Even those who had seen family members suffer from diseases caused by smoking, or who
392 had themselves experienced ill-health from smoking, rationalised their experiences,
393 diminished the role played by smoking, and rarely saw risks as relevant to themselves.
394 Participants saw smoking as normal, a means of establishing social connections, and lived in
395 social contexts where *not* smoking could have challenged group norms. The perceived
396 supportive environment for continued smoking, and the importance many participants placed
397 on smoking as a social behaviour that symbolised adulthood, undermined informed decision-
398 making. So too did the strong association between alcohol and smoking; alcohol featured
399 strongly in participants' social environments and compromised their ability to make rational
400 decisions.

401
402 Study limitations include the small sample; while interviewing continued until data saturation
403 had occurred, a larger study is required to assess whether the knowledge patterns and
404 perceptions we identified reflect those of the wider population. Strengths include the use of
405 in-depth interviews, which allowed us to elicit rich data that offer the first insights into how
406 young adults from indigenous and minority ethnicities experience and interpret informed
407 choice.

408

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

409 Our findings help explain persistent inequalities in smoking prevalence between Māori and
410 Pacific, and New Zealand Europeans (NZE) and highlight important differences between
411 ethnicities. Māori and Pacific participants reported having lower awareness of smoking’s
412 general risks than participants in the NZE sample, where all participants displayed awareness
413 of some risks caused by smoking.[28] Participants were more likely to comment on the
414 connecting role smoking played in their communities and family networks, which suggests
415 social impediments influence Māori and Pacific young adults’ actions. This normative
416 environment may also explain differing perceptions of smoking’s role in their future. While
417 NZE participants typically predicted they were “unlikely to be smoking in the future” and
418 saw smoking as “a lifestyle phase”, [22] Māori and Pacific were less certain that smoking was
419 a temporary part of their lives. They were also less likely than NZE participants to reflect
420 critically on the tobacco industry’s role in addicting them and others to a lethal product.
421 Instead, they saw smoking as a symbol of maturity, and a sign they were capable of making
422 adult decisions; in this context, declaring they had not made informed choices could seem
423 akin to stating they had not yet matured fully.
424
425 Pacific and Māori were more likely to report using smoking to relieve life circumstances such
426 as stress and boredom. Yet despite these differences, participants shared common attributes
427 with NZE young adults. For all groups, the disinhibiting effects of alcohol undermined active
428 risk evaluation and facilitated smoking uptake.[17, 18] Likewise most participants greatly
429 underestimated smoking’s addictiveness even though understanding this concept was pivotal
430 to making an informed choice.[22] In common with NZE participants, many Māori and
431 Pacific reported acting impulsively and without having reflected on the longer term
432 consequences they might face. Nor do “informed choice” arguments correspond to the social

contexts young adult Māori and Pacific smokers experience, where smoking is less a choice than a rite of passage.

Our findings suggest “informed choice” arguments propose an illusory concept; young people cannot choose addiction when they do not understand what it will entail any more than they can accept risks they do not believe will affect them. Engaging with tobacco companies’ claims that smokers should make “informed choices” deflects attention from the industry’s role in developing highly addictive and lethal products. Furthermore, “informed choice” arguments erroneously suggest education will enhance young adults’ decision-making. Crucially, these arguments overlook the role of regulatory measures in creating environments that recognise smoking uptake is neither rational nor informed, and that protect young people from addiction to a product that will reduce their well-being. As well as highlighting the crucial role of policy measures to change environments that facilitate smoking uptake, our findings also reveal the urgent need to change smoking norms within Māori and Pacific communities. While existing tobacco control policies such as smokefree environments, tobacco taxation, social marketing and supply initiatives have gone some way to denormalising smoking in Māori and Pacific settings, future efforts (including targeted funding and resources) will need to prioritise Māori and Pacific populations if we are to reduce inequalities in smoking rates across New Zealand.

Political and tribal leaders, tobacco control advocates and smokers from indigenous communities are calling for new and innovative measures, including banning tobacco and reducing tobacco supply. Many of these measures were outlined in the original MASC report, but progress in many areas has been disappointingly slow [29]. In addition to these more centralised approaches it is important for Māori and Pacific communities to build social

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

458 movements where people interact in smokefree settings; examples such as Waka Ama
459 (outrigger canoe racing) already exist. Other measures include altering environments where
460 smoking uptake occurs, for example, (enforcing smokefree policies in schools, creating a
461 home environment where smoking is clearly not accepted as culturally appropriate, and by
462 reducing social supply of tobacco within families and communities). Targeted and well-
463 resourced mass media and social marketing campaigns could illustrate the harms of smoking
464 (including addiction), decrease social supply, increase positive messages about “smoking not
465 being part of our culture”, and expose the role of the tobacco companies in the smoking
466 epidemic for Māori and Pacific. Requiring all areas in bars and restaurants to be smokefree,
467 will reduce opportunities for tobacco and alcohol co-use. Developing a smokefree generation
468 and increasing the age at which young adults may purchase tobacco may be particularly
469 salient to Māori and Pacific, and will need careful input from these communities.[30, 31]
470
471 Broader policy approaches may also be required to mitigate the risks of smoking being used
472 to counteract stress and boredom.[32] These could include increased employment
473 opportunities and educational initiatives to ensure school success along with more nuanced
474 health education. Low recall of school health programmes raises the possibility that health
475 education messages may not be sufficiently targeted to meet the needs of specific cultural
476 groups such as Pacific or Māori, a conclusion advanced in other studies.[33, 34] Some Pacific
477 participants had not grown up in New Zealand, so our results may also indicate a lack of
478 exposure to education programmes run within NZ schools. Furthermore, some Māori and
479 Pacific reported having dropped out of school, thus even those who had attended school in
480 New Zealand may not have been exposed to all the health programmes that demonstrated
481 smoking’s harms.
482

Future research could explore the feasibility of these ideas with Māori and Pacific, and, if appropriate, pilot and test potential interventions to assess their uptake and impact on Māori and Pacific. More fundamentally, young adults' acceptance of smoking as normal and socially binding reflects a need for deeper change within these communities, using culturally relevant mechanisms that community members themselves determine and implement.

CONCLUSION

For many young people, smoking uptake occurs quickly, easily and without deliberation. Arguments that smoking is an informed choice overlook young adults' limited risk knowledge, ignore the social contexts that facilitate initiation and maintain smoking, and take no account of how addiction compromises choice. Two approaches could address the lack of informed choice evident in our findings. First, changing participants' environments by increasing the legal purchase age to at least 25, a point at which uptake becomes less likely, implementation of smokefree generation proposals, decoupling smoking and drinking, and increasing the cost of smoking and decreasing where tobacco may be consumed. Second, important contextual factors relevant to Māori and Pacific communities also require action to reduce the high smoking prevalence among these groups. Encouraging even greater participation in indigenous smokefree social movements could provide Māori and Pacific role models who re-inforce smokefree messages. More fundamentally, however, tobacco control funding must recognise Māori and Pacific needs more effectively, and the New Zealand government must be held accountable for achieving the smokefree 2025 goal, so clearly outlined in the MASC report.

Competing interests

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

We have no competing interests but note, for the sake of full disclosure, that we have received funding from the New Zealand Health Research Council, Royal Society of New Zealand Marsden Fund, New Zealand Ministry of Health, Heart Foundation of New Zealand and New Zealand Cancer Society. We have no financial interest in the study and no connection to any organisation that could profit from the study findings.

Funding for the project was provided by the Royal Society of New Zealand Marsden Fund (Grant 11/134). We had full responsibility for the study design, data collection and analysis, report writing and the preparation of this MS. We had full access to all of the data in this study and take complete responsibility for the integrity of the data and the accuracy of the data analysis.

Authors' contributions

HG and JH led this phase of the project; JH conceived the project and, with RE, obtained funding. HG, SE, and DT collected the data reported, HG, SE, JH and RG undertook initial data analyses. HG and JH led the MS development; DT, SE, RG and RE provided feedback on drafts. All authors have approved the submitted MS and agree to be responsible for the data reported.

Authors' information

HG is Director of Whakauae Research Services, an iwi-based Māori Health Research Group. She has an extensive background in Māori health policies and interventions, with specific expertise in tobacco control. She is a theme leader in ASPIRE2025, a University of Otago

530 Research Theme whose members develop, test and evaluate policy measures that support the
531 New Zealand government's goal of becoming a smoke-free nation by 2025.

532 DT is a Research Fellow at AUT University. He is Associate Director of the Pacific Islands
533 Families Study, which examines factors influencing success within Pacific families. He is a
534 theme leader within the ASPIRE2025 collaboration.

535 SE is Director of ASH New Zealand and formerly managed Tala Pasifika, the Pacific
536 Smokefree team within the NZ Heart Foundation. She has a strong background in tobacco
537 control and particular interest in reducing smoking prevalence among Māori and Pacific
538 peoples. She is a member of the ASPIRE2025 collaboration.

539 JH is a Professor of Marketing at the University of Otago. She is co-director of the
540 ASPIRE2025 collaboration and has a long-standing interest in tobacco control policy and
541 public health.

542 RG is a PhD candidate in the Department of Public Health, University of Otago Wellington.
543 Her research has offered a new definition of informed choice in relation to young adult
544 smokers.

545 RE is Professor of Public Health, co-head of the Department of Public Health and co-director
546 of the ASPIRE2025 collaboration at the University of Otago, Wellington. He has published
547 extensively in tobacco control and public health.

548

549 Acknowledgements

550 We wish to acknowledge the research participants whose willingness to be interviewed
551 allowed the study to proceed.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

552

553

554

555

556

Funding Statement

This work was supported by the Royal Society of New Zealand Marsden Fund (Grant 11/134).

Data Sharing

Due to the sensitive nature of the research topic, the researchers undertook to keep the interview transcripts confidential to the research team. For this reason, the data are not available to other researchers. However, the protocol used is provided as a supplementary file.

REFERENCES

- [1] New Zealand Parliament. Parliamentary business: Select committees. Wellington: New Zealand Parliament 2016.
- [2] New Zealand Parliament. Inquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Maori, Report of the Maori Affairs Committee. Wellington: New Zealand Parliament 2010.
- [3] Ministry of Health. Annual Update of Key Results 2014/15: New Zealand Health Survey. In: Ministry of Health, ed. Wellington 2015.
- [4] Balbach ED, Smith EA, Malone RE. How the health belief model helps the tobacco industry: Individuals, choice, and “information”. *Tobacco Control* 2006;**15**:iv37-iv43
- [5] Maubach N, Hoek J, Edwards R, *et al.* “The times are changing”: New Zealand smokers’ perceptions of the tobacco endgame. *Tobacco Control* 2012;**22**(6):395-400.
- [6] ASH New Zealand. ASH Year 10 Snapshot Survey: ToplineResults. Auckland 2015.
- [7] Edwards R, Peace J, Carter K, *et al.* An examination of smoking initiation rates by age: results from a large longitudinal study in New Zealand. *Australia and New Zealand Journal of Public Health* 2013;**37**(6):516-519
- [8] Ponniah S, Bloomfield A. Sociodemographic characteristics of New Zealand adult smokers, ex-smokers, and non-smokers: results from the 2006 Census. *The New Zealand medical journal* 2008;**121**:34 - 42.
- [9] Greenfield K. The myth of choice: Personal responsibility in a world of limits: Yale University Press 2011.
- [10] Hoek J. Informed choice and the nanny state: learning from the tobacco industry. *Public health* 2015;**129**(8):1038-1045.
- [11] Perry B. 2013 Household Incomes Report- Key Findings. In: Development MoS, ed. Wellington: Ministry of Social Development 2013.
- [12] Barnett R, Pearce J, Moon G. Does social inequality matter? Changing ethnic socio-economic disparities and Maori smoking in New Zealand, 1981–1996. *Social science & medicine* 2005;**60**(7):1515-1526.
- [13] McGee R, Williams S, Reeder A. Parental tobacco smoking behaviour and their children’s smoking and cessation in adulthood. *Addiction* 2006;**101**(8):1193-1201.
- [14] Teevale T, Denny S, Nosa V, *et al.* Predictors of cigarette use amongst Pacific youth in New Zealand. *Harm reduction journal* 2013;**10**(1):25.
- [15] Gifford H, Boulton A. Is sharing tobacco within the home really good manaakitanga? In: Kepa M, Brewin M, Manu’atu L, eds. *Home: Here to Stay*. Wellington: Ngā Pae o te Māramatanga and Huia Publishers 2015:83-95.
- [16] 2006 census of population and housing: Socio-economic indexes for area's (SEIFA). Canberra, Australia: Commonwealth of Australia 2008.
- [17] Hoek J, Maubach N, Stevenson R, *et al.* Social smokers' management of conflicted identities. *Tob Control* 2013;**22**(4):261-265.
- [18] Jiang N, Ling PM. Impact of alcohol use and bar attendance on smoking and quit attempts among young adult bar patrons. *American journal of public health* 2013;**103**(5):e53-e61.
- [19] Ministry of Health. Annual Update of Key Results 2013/14: New Zealand Health Survey. In: Ministry of Health, ed. Wellington 2014.
- [20] Health Mo. Annual Update of Key Results 2014/15: New Zealand Health Survey. In: Health Mo, ed. Wellington 2015.
- [21] Chapman S, Liberman J. Ensuring smokers are adequately informed: Reflections on consumer rights, manufacturer responsibility, and policy implications. *Tobacco Control* 2005;**14**:8-13.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

[22] Gray RJ, Hoek J, Edwards R. A qualitative analysis of 'informed choice' among young adult smokers. *Tob Control* 2016;**25**(1):46-51.

[23] Hoek J, Gifford H, Maubach N, *et al.* A qualitative analysis of messages to promote smoking cessation among pregnant women. *BMJ open* 2014;**4**(11):e006716.

[24] Dey I. Qualitative data analysis: A user-friendly guide for social scientists: Routledge 1993.

[25] Pihama L, Cram F, Walker S. Creating methodological space: A literature review of Kaupapa Maori research. *Canadian Journal of Native Education* 2002;**26**(1):30.

[26] Imperial Tobacco New Zealand Limited. Submission to the Māori Affairs Select Committee Enquiry into the tobacco industry in Aotearoa and the consequences of tobacco use for Māori. 2010.

[27] Hoek J, Hoek-Sims A, Gendall P. A qualitative exploration of young adult smokers' responses to novel tobacco warnings. *BMC Public Health* 2013;**13**(609).

[28] Gray R, Hoek J, Edwards R. Do young adults exercise informed choice about smoking? In: Walker N, Grana R, eds. *Society for Nicotine and Tobacco Research*. Chicago: Society for Nicotine and Tobacco Research 2016.

[29] Ball J, Edwards R, Waa A, *et al.* Is the NZ Government responding adequately to the Māori Affairs Select Committee's 2010 recommendations on tobacco control? A brief review. *New Zealand Medical Journal* 2016;**129**(1428):93-97.

[30] Winickoff JG, McMillen R, Tanski S, *et al.* Public support for raising the age of sale for tobacco to 21 in the United States. *Tobacco control* 2015;tobaccocontrol-2014-052126.

[31] Berrick A. The tobacco-free generation proposal. *Tobacco control* 2013;**22**(suppl 1):i22-i26.

[32] Richardson K. Smoking, low income and health inequalities: thematic discussion document. ASH 2001.

[33] Tautolo ES, Schluter PJ, Paterson J, *et al.* Acculturation status has a modest effect on smoking prevalence among a cohort of Pacific fathers in New Zealand. *Australian and New Zealand journal of public health* 2011;**35**(6):509-516.

[34] Lanumata T, Thomson G, Wilson N. Pacific solutions to reducing smoking around Pacific children in New Zealand: a qualitative study of Pacific policymaker views. *New Zealand Medical Journal* 2010;**123**(1308).

Supplementary file

SMOKING AS AN 'INFORMED CHOICE'

In-depth Focused Interview Protocol

Note for interviewers: each section is marked with a priority (low, medium, high, critical) to given an indication of how much time should be spent prompting answers

Introduction

Hello, my name is ... and this is ..., who will be sitting in on the interview today. Just so you know, the reason we have two people here is that we are in the process of trying out this questionnaire. Bearing that in mind, please do let me know if you find any of the questions difficult to understand or to answer.

Before we start talking about the research topic, I have an information sheet about my work and I would like you to read this so I can answer any questions you might have about my work.

As a participant you retain the right to ask questions at any time, receive a copy of the findings, withdraw from the research at any time and to decline answering any questions.

- Explain recording of the interview and participant's rights in relation to this. **Once participant has agreed to the recording of the interview turn on dictaphone.**
- Check if participant has any questions about the interview.
- Ask the participant to sign the consent form.
- State their rights on the recorder (right to ask questions at any time; right to withdraw from the work; right to have a copy of the results; right to ask for the recorder to be turned off; remind them that the research is confidential and their comments won't be attributed to them personally).

"Smoking journey" focused discussion

Priority: LOW – not too much time

1. Looking back, can you tell me about the first time you smoked a cigarette? How old were you? Where were you, who were you with? How did you feel about it? What did you think? What made you want to have that cigarette? How did you feel about smoking at the time?

Priority: MEDIUM

2. How do you describe your smoking at the moment? (social smoker/ occasional/ daily etc) How many cigarettes do you usually smoke per day/ per week?
3. Can you describe the context in which you smoke? Who are you with, where are you, what are you doing (probe for detail about role of alcohol, work, social cues). Are there any particular reasons why you smoke at those times?
4. Can you describe the situations where you don't smoke? Are there places or times when you don't smoke? Are there any particular reasons why you don't smoke in these places and times?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Priority: CRITICAL

- 5. Tell me about how you moved from being someone who may have /or has had just tried smoking a few times to being someone who smokes most weeks/every day (as appropriate)?
- 6. How old were you when you started smoking with this pattern? What was happening in your life at that time? (probe: where were you , were you living at home or had you moved away, who were you spending time with, were you working, at college etc)

Smoking decision process

Priority: CRITICAL

- 7. Can you tell me about how you made the decision to smoke at that time? (Who influenced that decision, what did you feel at the time, what did you think about?)
- 8. Can you relate this decision to other decisions you were making at the time? eg drinking alcohol, getting into relationships, job or study decisions?
- 9. How did you weigh up the decision to smoke or not to smoke at that time?

Knowledge of risk at time of uptake

Priority: CRITICAL

- 10. At the time that you started smoking (weekly/daily/whatever): What had you been told about smoking? What had you read? Where? (probe: what specifically do you remember was said about smoking?) Where did you get most of your messages about smoking? (eg friends family etc)
- 11. You said you'd been told (x,y,z).. what did you think about that, did it seem important/true? Did it concern you? Why?
- 12. And how did you find smoking compared with what you'd been told about it? (include: addictiveness, effects on your body, health consequences, social consequences)

Knowledge of risk currently

Priority: HIGH

- 13. Have you changed your thinking about smoking since you started smoking more regularly? How do you feel about smoking now? What else do you know about smoking now? Does it concern you? Why?
- 14. If you keep smoking for the rest of your life, what do you think might happen? How do you feel about that? How likely do you think it is that (each thing you mentioned) could happen to you? (very likely, somewhat likely, somewhat unlikely, very unlikely, don't know?)
- 15. What (other) health effects do you know of that can be caused by smoking? (interviewer – note down each condition mentioned)
- 16. What do you think having (that condition – each one mentioned at 14 and 15) would be like? What symptoms might a person get, how might it affect their life?)
- 17. Out of 100 people who have smoked throughout their life, how many of them do you think are likely to end up dying from something related to smoking? (probe discussion: what information did you draw on to come up with that number?)

18. So given what you've just described about what you know about risk – how do you do you think your knowledge and understanding at the time that you started smoking regularly compares to what you know now? (Probe: in what way has it changed?)

Thoughts on addiction

Priority: HIGH

19. Of the people in your life – family, friends – do you know people who have quit or tried to quit smoking? What do you think made them try to quit? How did they go about quitting? How did it work out for them?
20. How easy do you think it would be to quit smoking completely (that is, not smoke again in any situation)? Why do you feel that way?
21. Thinking back, what did you think about quitting (did you think you would, how easy did you think it would be?) when you first started smoking (weekly/daily)? (Has your opinion changed since then, if so how?)
22. (if not already mentioned) Cigarettes are sometimes described as “addictive”. What do you think it means to be addicted?
23. Do you think you'll still be smoking in five years time? Ten years? What makes you think that?

Conclusion

Priority: HIGH

24. You've described the circumstances in which you took up smoking, and some of your thoughts about smoking then and now. Do you think, knowing what you do now, if you were faced with the same circumstances (describe) that you would still take up smoking?
25. Can you think of people in your life who are about your age – say siblings or friends – who don't smoke? Why don't they/ what do you think are the influences on their decision to not smoke? (Probe: how are the things that influence them different to the things that influenced you?) Do you think, if you had been in the same circumstances/ had the same influences as they do, that you would still have started smoking? Why/ why not?
26. To finish off, I'd like to read you a recent quote from a tobacco company spokesperson in NZ.

“The risks associated with smoking are universally known...and smoking is... a matter of informed adult choice”

(Imperial Tobacco NZ Ltd 2010: Submission to the Māori Affairs Select Committee)

We'd be interested to know what you think about this statement...how does it relate to your experience and what you've just described about how you started to smoke?

(unpack: “risks universally known”, “informed” “adult choice”)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

27. So in order to make an informed adult choice..What exactly do you think people should know and understand, before they decide to start smoking? How much should they know in order to make that decision?
28. And given that you have said that people should know and understand x,y,z; did you have that knowledge and understanding when you took up smoking? What proportion of people aged xx (whatever age person was when they became a regular smoker) do you think have that knowledge and understanding?
29. Do you have any other comments you'd like to add about what we've been discussing?

I just have a short questionnaire for you to complete, please. Like the rest of the discussion, the information you provide will be completely confidential and only members of the research team will be able to access it.

Thank, assure confidentiality, check that demographic sheet has been filled out, close.

Protected by copyright, including for uses related to text and data mining, AI training, and similar technologies. Enseignement Supérieur (ABES).

Note for researchers to consider at the close of pilot interview:

How long did each section take?

Were any questions hard to answer? (mark on interview schedule any questions that the participant found difficult)

Have the following all been covered off during the interview?

Level 1: having heard that smoking increases health risks

Level 2: being aware that specific diseases are caused by smoking

Level 3: accurately appreciating the meaning, severity, and probabilities of developing tobacco related diseases

Level 4: personally accepting that the risks inherent in levels 1-3 apply to one's own risk of contracting such diseases (note: a person's view of the addictiveness of smoking and confidence in their own ability to quit before suffering harms will come into this)

5: maturity of decision making processes – did they make the choice as an adult, and did they use a rational process to decide?

6: ability to make decision free of social and environmental pressures.