

# Title

"I just saw it as something that would pull you down, rather than lift you up": Resilience in neversmokers with mental illness.

# **Running Title**

Resilience in never-smokers with mental illness.

# **Authors**

Lawn S. Department of Psychiatry, Flinders University, PO Box 2100, Adelaide, South Australia, 5001, Australia

Hersch D. Speech Pathology, School of Psychology and Social Science, Edith Cowan University, Joondaloop, Western Australia, 6027, Australia

Ward P.R. Discipline of Public Health, Flinders University, PO Box 2100, Adelaide, South Australia, 5001, Australia

Tsourtos G. Discipline of Public Health, Flinders University, PO Box 2100, Adelaide, South Australia, 5001, Australia

Muller R. Discipline of Public Health, Flinders University, PO Box 2100, Adelaide, South Australia, 5001, Australia

Winefield A.H. School of Psychology, University of South Australia, City East Campus, North Terrace Adelaide, South Australia, 5000, Australia

Coveney J. Discipline of Public Health, Flinders University, PO Box 2100, Adelaide, South Australia, 5001, Australia

# Key Words

Smoking, Resilience, Mental Illness, Health Promotion

# **Acknowledgements**

We would like to thank the study participants for sharing their stories. We would also like to thank Jodie Waite for administrative support for the study, the Reference Group members for feedback on early analyses, and the funders of the project.

Word count (excluding abstract, tables, refs)

## **Abstract**

Why people smoke despite the health risks is an important public health question. Equally important is why and how some people resist smoking in spite of circumstances that clearly place them at high risk of becoming smokers. This study used in-depth interviews to explore the narratives of 12 people diagnosed with mental illness, who had made conscious decisions not to smoke. This was despite most of them growing up in smoking families or being from population groups at high risk of smoking. A qualitative grounded theory methodology was used to analyse common themes around protective behaviours and attitudes within a model of resilience. Themes included strong negative reactions to smoking as children which have persisted into adulthood; strong lasting associations with smoking; a clear sense of 'self' separate from peers from an early age (internal resilience); and developing a range of coping strategies and external supports not related to smoking (external resilience). Understanding resilience holds potential lessons for health promotion and primary health care professionals supporting the prevention of smoking uptake and supporting smoking cessation by at risk groups.

# **Introduction**

This study explored the narratives of 12 people diagnosed with mental illness, who had made conscious decisions not to smoke. This was despite most of them growing up in smoking families or being from population groups at high risk of smoking. By examining their reasons for never choosing to smoke, this paper highlights common themes around protective behaviours and attitudes within a model of resilience. Why people smoke despite the health risks is an important public health question. Equally important is why and how some people resist smoking in spite of circumstances that clearly place them at high risk of becoming smokers.

# **Defining Resilience**

The resilience construct [1,2] examines the reasons why many individuals, regardless of negative factors in their lives, are able somehow to draw upon a range of resources to assist them to deal with negative experiences and situations. Ungar [2] argues for an approach that seeks to understand meanings that individuals bring to their lives around resilience by listening to them tell their own stories, what helps them to face adversity, bounce back and, in some cases, to prosper.

From our critical review of the literature, we propose the following definition of resilience as: "the interaction between the internal properties of the individual, and the set of external conditions, that allow individual adaptation, or resistance, to different forms of adversity at different points in the life course" [3]. People are not necessarily born resilient neither does it necessarily remain as a stable trait through life. Resilience may be built in fairly unpredictable ways, and may be a 'storehouse' of tools and strategies that a person builds up, through facing difficulties, which may be useful in some, but not all, future situations.

## **Resilience and Smoking**

Australia, like many other countries, has seen a general decrease in population smoking rates, but these benefits have not been consistent across the board. Research internationally has consistently found that, in high income countries, social disadvantage poses significant increased risks of people becoming smokers with disproportionately high smoking rates still apparent for low socioeconomic status (SES) populations [4,5]. Siahpush et al [6] studied socio-economic variations in tobacco consumption among male smokers in Thailand and Malaysia and cautioned that disparities in smoking observed in high-income countries should not be generalized readily to other countries.

Smoking by those living in low SES environments may be perceived as more acceptable due to the normative influence of being surrounded by greater numbers of smokers and limited exposure to negative smoking norms experienced by the wider community. Low SES populations may also smoke more due to the fact the community binds people together through adversity, therefore people smoke to cope with exclusion and disadvantage [7].

Since resilience has been linked to the social determinants of health [8], an important focus is to increase community and individual resilience within the population, to act as a buffer against smoking. If we can increase resilience to smoking in those with higher risk of smoking, we may be able to improve health and social outcomes. Indeed, a key factor for the success of current policy initiatives is workforce up-skilling to support clients to self-manage their health and psychosocial needs [9].

# **Becoming a Smoker**

Understanding perceptions, beliefs and experiences of smoking as part of how people describe their life histories helps us to understand why some go on to become smokers and others do not. Decisions about smoking and not smoking appear to develop in childhood and adolescence. Therefore, literature from these stages provide key contexts to understandings the processes and paths people take in deciding whether or not to become smokers. For this reason, research on adolescent smoking is voluminous and based on well established models that involve complex interactions between a range of internal, external, environmental, and developmental factors [10]. Adolescents report that significant influences on smoking uptake are peer pressure, curiosity, identity construction, opportunity to experiment, mass media, and stress [10].

A Canadian study [11] of 1543 grade 8 students (age 13 years) surmised that life stressors occurring during adolescence, "may have a substantial negative impact on emotional wellbeing and result in the adoption of unhealthy or maladaptive behaviours" (p.463). Self-esteem, social support, mastery, social conformity and rebelliousness, as well as smoking by others within the young person's immediate environment, have been found to be associated with smoking. In addition, stress and smoking by parents, siblings or peers, have been found to be the most salient risk factors for smoking by adolescents [11,12], though exposure to traumatic events per se, does not increase the risk for dependence on nicotine or other drugs [13].

A longitudinal study of 11-16 year olds across Ireland and Spain looking at children's and adolescents' perceptions, beliefs and motivations regarding smoking, found a number of well understood reasons for initiation to smoking during adolescence; to be cool, to fit in with peers, and as part of the normal perceived transition to adulthood [14]. Addressing these pro-smoking perceptions is indicated, given these children largely held negative views of smoking during childhood. A New Zealand study of 13-14 year olds [15] found similar social pressure to become smokers and a Hungarian study of 215 14-18 year old schoolchildren found significant links between adolescent smoking and depression and anxiety, especially in boys [16].

The focus of all these studies has been on factors promoting smoking. Few studies have looked into what protects those in high risk group from becoming smokers in spite of their circumstances. The UK longitudinal National Child Development Study found that social disadvantage was associated with more negative experience of care as children and psychological distress as adults. Resiliency factors discussed included high IQ, success in school, presence of both parents, and effective partner relationships in adulthood which compensated for adversity in childhood [17].

## Smoking, Mental Illness and Resilience

Smoking prevalence is particularly high for people with mental illness with rates three times that of the general non-mentally ill population. People with mental illness disproportionately make up those who continue to smoke as well as generally smoking more heavily and for longer than their non-mentally illness smoking counterparts. A meta-analysis of over 40 studies conducted in 20 countries found that, in most studies, smokers with schizophrenia and other types of severe mental illness were significantly heavier smokers than smokers within the general population [18]. In the US, more than 44% of all cigarettes smoked are smoked by people with mental illness [19]. In Australia, people with mental illness comprise 38.3% of all adult smokers and account for more than 42% of all cigarettes consumed [20].

The link between nicotine, alcohol and drug dependence, and psychiatric comorbidity is well recognised [19,21]. Mechanisms underlying the relationship between smoking and depression are also the subject of extensive research, though they continue to be not well understood. This association may be due to genetic predisposition [22]. A study by Malpass and Higgs [23] has hypothesised that, by using smoking to cope with their depressed mood, smokers with depression close off other options for learning alternative coping skills and strategies, thus maintaining their depression and their smoking. What is known is that, once smoking commences, psychological and physical addiction takes over and quitting can be extremely difficult. Added to this, a significant culture in which cigarettes have been traditionally used by mental health staff and systems of care to

clinically and behaviourally manage patients and by patients to manage their psychosocial needs in the absence of other supports, serves to perpetuate and reinforce smoking among psychiatric populations [24]. Such dependencies clearly move smoking out of the realm of a physiological addiction, into a complex web of needs that smoking fulfils, particularly for people with mental illnesses.

Understanding why some people are resistant to pressures to become smokers offers many opportunities for prevention. Yet, the literature on smoking and resilience is sparse. The literature on smoking, mental illness and resilience is even more so. Why do some people not become smokers in spite of these complex forces that would otherwise put them on this seemingly inevitable path to becoming smokers?

## **Method**

## **Participants**

This study explored responses from a subset of participants in a larger two-year study into why some people, from populations with high smoking rates, never take up smoking, or give up smoking when others continue to smoke. Smokers, ex-smokers and never smokers from low SES locations from Aboriginal, mental health and youth populations (N=96) were involved in the larger study, which was funded by the State government (2007-9). Ethics approval was gained from the Flinders University Social and Behavioural Research Ethics Committee.

The study involved in-depth interviews with a purposive sample of 12 participants who resided in low SES areas (lowest SEIFA tertile; Social Economic Indexes for Areas) in the Adelaide metropolitan area, and recruited from general practices, and public and non-government mental health services. All participants reported never smoking (a single incident of smoking, for example, as an adolescent, was allowed). All participants had a self-reported diagnosis of depression (sometimes with other co-occurring mental illness such as schizophrenia). All had sought health professional support for this condition, either from a general practitioner (GP), a counselor, or from mental health services.

#### Procedure

This study is the first to look at perceptions of people with depression who experience social disadvantage and why they did not become smokers despite their circumstances. To do this we used life history methodology [25], retrospective account described as "conscious recall of personal experience through autobiographical memory" [7] (p.472). This methodology was highly suited to this study because it involves a model of questioning that suits the need to look back and reflect over the lifespan, to understand an individual's current attitudes and behaviours and how they may have been influenced by initial decisions made at another time and in another place [26]. Qualitative research is the most appropriate way of examining an area about which little is known; the aim is to gain in-depth knowledge about experiences of participants, expressed in their own words [27]. Therefore qualitative research was highly suited to exploring the area of smoking, mental health and resilience.

All interviews were audio-recorded and transcribed. Data validation was achieved by matching samples of transcriptions against audio recordings. All interviews were analysed for emerging themes and patterns through the use of NVivo version 8, a qualitative data analysis software package. Components of grounded theory such as the constant comparative method [28], and open and axial coding [29] were used to develop the qualitative methodological approach, which enabled similarities and differences to be discovered between and within interview transcripts.

## **Results**

The six men and six women participants were aged from 17 to 60 years. Their stories about upbringing were characterised by traumatic experiences and adversity. A third had a parent with mental illness and nearly a quarter had experienced some form of abuse. Most had grown up in smoking households. Further participant information is shown in Table 1.

[insert Table 1]

# **Themes**

Nine of the 12 participants reported having had significant smoking influences around them as children with one or both parents being smokers. Many reported socialising with non-smokers at school, finding social environments where it did not feature, and to have found non-smoking partners. Those that did try a puff early tended to find it an unsatisfying or even unpleasant experience. They often reported reacting badly to smoke because of asthma, or because passive smoking made them cough or feel sick. Their stories suggest early decisions disliking smoking sufficiently to decide consciously never to touch it. They tended to be resistant to peer pressure and were also unlikely to be drinkers or drug-takers. Several people talked about valuing their health for fitness and sporting reasons, being put off by seeing others smoking, or thinking from a young age that smoking was a waste of money. An analysis of the stories from this group of 12 people revealed common themes:

- Strong negative reactions to smoking as children which have persisted into adulthood;
- Strong lasting associations with smoking;
- Internal resilience: Self-confidence and self-determination involving a clear sense of 'self' separate from peers from an early age;
- External resilience: Developing a range of coping strategies and external supports not related to smoking.

# Negative and persisting reactions to smoking

Several participants expressed negative reactions to smoking which they were highly aware of as children; specifically, memories of their own health issues, breathing or coughing. For example, Brian remembered his home being smoky, not only from his parents' heavy smoking, but also from their friends. As a small child he: "noticed mum and dad's smoking being a problem. I'd always get tonsillitis..." But Brian had to seek external verification of this link before he could persuade his parents to make any concessions:

I asked Dr X, could my mum and dad's smoking make my throat sore? He thought about it for a while and said, "Yes." So the joke was "I told you!" I'd got to 12 before I was able to convince dad

to leave the front door open if he was going to smoke. He didn't smoke anywhere near as much as mum.

Danielle saw a clear connection between smoke, coughing and feeling sick:

Everyday there was dope smoke. My mum smoked a lot, my dad smoked a lot, my aunties and uncles all smoked. In fact, they still do... It made me cough.... And, actually to be honest I probably got a little bit high as well...which has definitely affected me. I really don't like altering my state of consciousness now, so I don't like painkillers, I don't ever do drugs, I don't like drinking, I don't like anything that alters my perceptions.

Danielle's aversion to smoking felt logical, even as a young child:

In fact, I don't even know whether, at that stage anybody knew if smoking was bad for you, but it just didn't make logical sense to me that you could put that stuff into your lungs which were made for air...I've often used my own common sense and totally ignored what's going on around me in order to sort of say "look, let's look at A, let's look at B, does it make sense?" And if it doesn't make sense I'd get very suspicious.

Another example of a negative reaction was from Felicity who also told her parents that she thought their smoking was having an effect on her health:

I didn't like it at all and I would say to them that it was affecting my health. Even as an 8 or 9 year old, I would actually say that, you know, "your smoke is affecting my health". Even though there were no physical signs, it just made sense. I don't know... I hated it.

It was striking how clearly Felicity's early attitude to smoking continued into her adult life. For example, she said that she once had a relationship with a smoker (the only time she had done this) and that "for the first nine months that I was involved with him I had one chest infection after the other." This attitude was also evident in her work environment and continued to influence her social choices.

## Strong lasting associations with smoking

Participants' stories also reflected associations that went beyond their early physical reactions to smoke but involved other concerns about smoking. For example, Graham did not refer to smoking

affecting his health as a very young child directly, but he was aware of his non-smoking father's reaction to it and, by his teens, he was very worried about his mother's health; a view enhanced by his growing recognition of the links between smoking and health:

*I knew my mum was putting herself at risk of cancer, yeah. And before my mother left, my father used to say "Oh there's your dirty cigarettes" to my mum.* 

This became an important ongoing issue for him:

I've gone completely the other way. Not only not smoking or not drinking to vegan...it worries me, you know, you see some of these in hospitals and slowly dying and all that. I thought I don't want to go through that. I want to stay as healthy as long as I can.

Andrea had a close, loving relationship with her mother but her father was more distant and often violent. He was a heavy smoker and Andrea associated his smoking with hunger because she realised early that money that could have been spent on food went on cigarettes. She expressed this in terms of her father's selfishness:

The baker would come up to the farm where we were congregated in the afternoons and he (father) would buy two (pastries) from the baker, and he would cut up however many we were in one, and he would have one for himself. But we were lucky to get a little slither like this, you know? To me, that was selfish. He smoked a lot, and that took money away from the household. My mum smoked cigars too and dad said that she should stop smoking and she said, "No, you're smoking. And if it's good enough for you, it's good enough for me." And she wasn't a heavy smoker. She'd probably have two or three cigars a day or something, you know? But dad was a heavy smoker. That was him being selfish.

Andrea also associated smoking with lying. She made it clear that she would have been happier had her husband been a non-smoker but, despite his attempts to deny it, he continued to smoke:

The bugger did (smoke) behind my back! And I was very cross with him because, well, adults (should) be open. He knew that I wouldn't like it because I detest the smell. Can't stand the smell, you know, so we had a little bit of trouble over that because he was always coughing chunky and I could always smell this but he swore blank on me that he wasn't smoking, but he was...Just not going to stink next to me, thank you very much.

Ian, who became unwell after a serious accident in his teens, was also influenced by strong antismoking influences and positive support within his family:

When I was going through the years after the accident when things turned really dark and heavy going, dad would say to me...He'd give me this advice because my older sister had gone through pretty bad depression but she'd taken up smoking, so he'd say to me, "Whatever you do, like as bad as it gets, just don't take up smoking."

Janet relayed multiple experiences that reinforced her recognition of the negative impacts of smoking and her dislike of smoking across several points in her life.

[On her early experience as a nurse] You couldn't sit down and have a coffee without [other nurses] blowing [smoke] in your face...[On the smell of smoke] It gets in the clothes, in the hair and it gets stale...I couldn't stand it...I never did like the fact that smoking discoloured peoples' hands and teeth...I suppose I was always fussy...I didn't have very good shaped teeth so I wanted them to look as clean and bright as they could just to make up for that and to me smoking would just make it more laborious to keep my skin and teeth looking better.

She readily recounted her many relatives who smoked, describing their deaths as painful and with significant impacts on the family generally:

Later on in life, my mum's people became very sick and a lot them because of the smoke...My mother's brother was a chain smoker... his wife didn't smoke but she ended up getting a brain tumour ... If my uncle had known that it was because of him that she was dying he would never have been able to forgive himself...he died eventually from emphysema...my mother's sister had a stroke in her 50s and I was about 10 then and I remember that night...To this day my family smokes; all of them. My uncle's on an oxygen machine, he still smokes. He's got emphysema. He's such an idiot. My nanna and poppa still smoked and poppa had emphysema and nanna would still puff away around him, and they both smoked. She had strokes and still smoked and they both died young. That's kind of like, nice reinforcement evidence not to smoke.

Another aspect to smoking and its associations appeared to relate to the experience of growing up in a smoking environment. Participants' insights into the smokers around them, and the pros and cons of smoking, remained powerful, but not sufficiently so to make them want to smoke themselves. A clear example of this was offered by Danielle who could see the strong relationship between smoking and relief of stress:

I think because I've been around passive smoking so much that I can, sometimes feel the relief that a smoker would feel by sucking in that smoke into their lungs... I have been tempted quite a few times, in that sense 'cause... I saw the relief on their faces, and I saw their body posture change and they looked so clearly more relaxed with the smoke and I really do understand why people smoke...What an instant solution! And sometimes I felt pretty desperate... But then again you end up with all those long term problems...and you know you're giving up a portion of your body just to, sort of feel temporary relief. It's like slowly committing suicide. I wouldn't do it.

# Internal Resilience

Another theme which was common to all the people in this group was their self-assessment of confidence and being self-determined. People spoke in very definite terms, for example, about being non-smokers. As Evelyn said: "there was never an instance where I would ever consider doing it; very clear on that". Brian also stated, "I was never at risk of being a smoker." Graham was similar in the face of pressure to smoke from work colleagues:

In fact when I started my apprenticeship they said, because a couple of the others started smoking when they did their apprenticeship, and they said "oh we'll have you smoking". "No you won't!" and I didn't.

Andrea described having to be self-reliant. Her father died when she was 12 years old which she suggested made her "more independent" because she felt she should help her mother with the younger children. She carried this attitude into her adult life with comments in the interview such as "it's easier for me to do it myself" and "if I'm saddled with this, I may as well try and make the best out of what I've got".

Callum also viewed himself as self-assured and positive:

I've always been that kind of person...I'm not somebody who is of a passive nature and I normally speak my mind so I think that that kind of carries me through. And knowing that, yes, I've got a problem but it's not the end of the world... And I guess just looking forward.

Callum felt that this attitude helped him to resist taking up smoking:

[On peer pressure at school There'd be the odd smoker and they'd be like 'oh, look, have a smoke' and I'd be like 'no thanks' and they're going 'you'll never be a man until you have a smoke' and I'm like 'well, I guess I'll never be a man then'...I've always had a very independent mind. Like a lot of kids will smoke because of peer pressure...I just look at people like 'why the hell would you even pick one up when you know what it does? You know you're going to become addicted' ...A lot of kids end up - because of peer pressure but I just have the independent mind of not doing it. Same with alcohol as well, never touched it, just no need for it.

Keith also described a childhood where he learned early to deal with his own problems, largely because the family never stayed in one place long enough for him to establish larger networks of support and friendships. He became clearly self-reliant from an early age and able to resist peer pressure to smoke:

My parents split when I was 2 or 3...We moved around quite a lot so I just never had the same group of friends all the time...I feel I grew up a lot; I grew up quite early....[Making new friends] was always a challenge. It was always like "What's the point of it?" Something's going to happen or maybe we'll move again... [On seeking support] I didn't tend to actually take people up on that. I keep most issues and problems to myself, generally, try to deal with it myself first...I just made a lot of decisions that I would stay true to who I am and yeah, I wouldn't change that for anything...I found it hard to make friends and I had to rely on myself quite a lot.

## External Resilience

In addition to strong signs of internal resilience described above, participants described important external factors which helped them, not only to counter their mental illness, but also to avoid smoking. For most people, these supports were combinations of social contact with family and friends, and being active, either physically or through some leisure interest. Andrea's strategies included having strong family connections, being hospitable, listening to music, hypnosis and walking. Graham kept busy attending psychiatric day services, volunteering for the hospital as a driver and attending church. Evelyn found great support in her marriage and managed to cope with stress with only a low dose of antidepressants by doing exercise, gardening, watching science fiction films and reading. Her home was very important to her sense of wellbeing, particularly because she felt so disjointed by moving so frequently as a child. Lachlan clearly described how his artistic drawing and going out for bike rides have alleviated loneliness and kept him calm throughout his life so far.

Despite many years in and out of psychiatric institutions, Brian was able to draw on a range of external supports. A key support for him was: "Loving my parents. Mum and dad went out of their way to make me feel content and safe at home." He also relied on a small group of close friends: "Company made me stay off smoking". Brian managed to find some direction, after many years of illness, following his decision to deal with his obesity, become fitter, be more social and avoid trouble. He clearly linked his decision not to smoke with his ability to manage financially and make something of his life:

Now I'm in a position in my life where I've got close friends, a home, I pay tax. I haven't been in hospital now for almost 11 years now and it's all good. So if I'd been a smoker, all those things wouldn't have happened... I'm valued at judo...and college. So life right now is pretty darn close to the life I would have liked for myself when I was growing up.

Callum found support from a small group of good friends where he could be open about his illness. He also described coping better with his depression when he was able to balance his medication and keep busy with work:

I think my main thing is to know and admit that you do suffer from depression and realise that. I think that's a really big thing. And I think – like I take medication and that pretty much staves it off. Every day is a burden. I think the medication helps me not getting as depressed as much. I know if I miss my medication because by the end of the day I'd be like – oh God, you know, be in tatters.

Felicity was determined to manage her depression without medication and used exercise, meditation, travel, getting back to nature and working as a mentor for mental health services. She stressed the need to stay busy and physically active:

When I was unwell with the depression one of the coping mechanisms for me was exercise...that's huge for me, absolutely huge... If I'm not active it just gets worse and worse and worse and it affects my self esteem and my confidence and I need to feel like I'm making a difference.

Like Lachlan, Danielle found ways to counter her feelings of sadness as a child:

I actually, purposely started reading comics, and joke books, and stuff like that and I tried to better myself by reading new words in the dictionary. And I also really got into my studies, and concentrated on that.

She said that, after the chaos of her home life, she "used to hang around the teachers because they seemed to be sensible". She volunteered at the library during her recess and lunch hours: "I'd just go there to retreat". Danielle's external supports continued through life by following her love of learning, reading and returning to university as a mature student and then for work. She re-married a non-smoker and surrounded herself with friends who were also non-smokers:

Helen, who grew up on a farm and came from a large family with many relatives nearby described having many role models for positive ways of coping with life generally:

Life wasn't a problem for me. I had friends, brothers, sisters, so any problem was water off my back... When we were growing up, we learned to treat other people with respect... We were given the freedom to speak, but at the same time we knew all the rules...[On now having adult children with significant disabilities] You just deal with it...No problem is too big; you just deal with what you can, use your friends, learn what you can about it and deal with it...So many times you think, 'I can't cope another day', but kids don't know that, they come around, you come around, my life hasn't ended, her life hasn't ended, we were all still alive.

#### **Discussion**

The results reveal a clear aversion towards smoking, strong childhood concern about parents' smoking, confidence and self-determination resulting in ability to resist peer pressure and other resilient processes at play in this sample of people with mental illness. Of interest is whether this resilience towards smoking would be the same for other persons from low SES and high smoking backgrounds, but without a mental illness history, or whether it would be the same for people with mental illness but without this kind of social environment. The results of this study may well be transferable to these other at risk populations. What makes this mental health group of even greater interest is the additional pressures and risks inherent in also having a mental illness and exposure to further environments and processes that reinforce smoking, yet remaining non-smokers in spite of these many factors.

A key point to emerge from the results is the dynamic interaction between internal and external influences on resilience to smoking for these participants. For example, to surround oneself with

non-smoking friends, and reject the smoking ones, not only changes the external supports but also requires an internal drive.

Another point is the strength that many of these people showed as children. As we anticipated, many participants gained a sense of autonomy quite early in life, often through facing adverse circumstances. This enabled them to develop particular coping skills for resisting smoking, even though they went on to develop mental health issues. That is, they acquired resilience to certain events and circumstances but not others, though many were clearly attempting to draw on their storehouse of tools and strategies to cope with this also. From an early age, many of these participants consciously attempted to distance themselves physically from their parents' smoking. This has important implications for supporting and educating young people given that environmental tobacco smoke and the proportion of nicotine absorbed has been shown to be a strong predictor of becoming a teenage smoker [30].

Dowrick and colleagues [31] propose two key elements of resilience which enable people to cope and flourish despite experiencing emotional distress. These are: drawing on existing social supports and bonds of affection; and building on personal strengths and expanding positive emotions. Such individuals have "a strong preference for personal over professional approaches to dealing with mental health problems" (p.439). Several of our participants demonstrated this through their clear sense of self from an early age and their use of positive and external coping styles. Such findings support Malpass and Higgs' hypothesis regarding depression management, smoking and coping skills development [23]. Similar to other research on resilience and depression [31, 32] our participants appeared to have a clear sense of personal agency (the belief that we can influence our environment), interest in and ability to analyse their own thoughts and feelings, and capacity to form caring relationships. Of interest and for further study would be an investigation of whether such factors are transferable to understanding resilience in those with alternative primary mental

health diagnoses and understanding resilience to other adverse health behaviours for high risk groups generally.

Results also suggest important work for parents, health professionals, teachers and others in contact with young people. Our participants were clearly receptive to health promotion education messages from an early age and they took this information with them through life, in spite often being surrounded by adult relatives who smoked.

The other striking finding was the presence of positive peer interactions for many of these participants, suggesting that there are also health promotion education opportunities to positively influence peer dynamics during both adolescence and potentially for mental health settings where there is strong peer pressure to smoke. Goldberg, Moll and Washington's study of more than 100 psychiatric outpatients [33] found that peer influence was a key factor in maintaining smoking and, among the never smokers with schizophrenia, family members were major influences on their decision not to start smoking. A number of our participants had clear non-smoking parental role models which, along with peers, have been found to be important in predicting adolescent smoking [34].

#### **Limitations**

We believe that this is the first attempt to map the life course narratives of successful resistance to smoking despite membership of a high risk group, and to do so with a focus on mental illness populations specifically. Participants reflected those with a range of levels of disability as a result of their mental health conditions. The study is limited by being exploratory only and involving a purposive sample, hence there is potential for bias and lack of representativeness. The large age range when comparing life experiences of participants, where some have had more time to develop resilience strategies, may limit the ability to compare their experiences. Gender issues were not

considered. The potential for diagnostic differences and their impact on resilience were not considered in this study, though others have proposed significant differences exist amongst smokers with different mental health diagnoses [35] and the same might apply in resilience. This study explored the experiences of the participants using a specific qualitative methodology. A detailed investigation of the interactions between non-smoking, smoking, mental illness and resilience would require further epidemiological work to test the relative interaction between these variables. Finally, the study relied on retrospective account(s) by those with diagnosed depression, a mood condition which may influence their perceptions of past events. These limitations indicate that further, focused research controlling for the range of potential confounding variables is needed before a fuller understanding can be gained of the internal and external conditions that may enhance resilience to smoking uptake for this high risk group.

## **Conclusion**

This study has highlighted the importance of attending to participants' narratives in order to examine smoking in the context of people's lives. These participants shared negative and persisting reactions and associations to smoking which they carried through life. Despite smoking parents and childhood environments that increased their risk of becoming smokes, and then smoking peers, presence of mental illness and mental health treatment and psychosocial environments which further increased their risk of becoming smokers, this group was able to employ different coping strategies to resist smoking. Smoking is a complex habit, notoriously addictive and difficult to give up. We suggest that, in addition to clinical and medical solutions, the prevention and treatment of smoking within mental health populations needs social solutions and needs to be part of more general supports, group programs and community options that assist with the adoption of resilience strategies as part of healthy lifestyle change. Resilience for adolescents, at risk of becoming smokers and of developing mental illness, in making these important decisions is an important issue and may well lead us to provide learning opportunities for adolescent specific programs

encouraging resilient, independent approaches for a whole range of peer behaviours that lead to problems. Understanding the experiences of non-smokers with mental illness is important for smoking prevention in this high risk group. Understanding resilience is also useful for a holistic approach to smoking cessation in this population, with potential lessons for health promotion and primary health care professionals supporting the prevention of smoking uptake and supporting smoking cessation by this and other at risk groups.

## **References**

- 1. Luthar SS, Cichetti D, Becker B. The construct of resilience: a critical evaluation and guidelines for future work. *Child Dev* 2000; **71**: 543-562.
- 2. Ungar MT. A constructionist discourse on resilience. Youth Soc 2004; 35: 341-365.
- Muller R, Ward PR, Winefield T, et al. The importance of resilience to primary care practitioners: an interactive psycho-social model. *Australas Med J* 2009; 1: 1-15. Doi:10.4066/amj.2009.23
- Siahpush M, Borland R, Yong HH, Kin F, Sirirassamee B. Socio-economic variations in tobacco consumption, intention to quit and self-efficacy to quit among male smokers in Thailand and Malaysia: results from the International Tobacco Control-South-East Asia (ITC-SEA) survey. *Addiction*. 2008; 103: 502-8.
- Siahpush M, McNeill A, Borland R, Fong GT. Socioeconomic variations in nicotine dependence, self-efficacy, and intention to quit across four countries: findings from the International Tobacco Control (ITC) Four Country Survey. *Tob Control*. 2006; 15 Suppl 3: iii71-5.
- Wilkinson R, Marmot M. Social Determinants of Health: The Solid Facts. 2nd edition, Denmark: World Health Organisation, 2003..

- 7. Stead M., MacAskill S, MacKintosh, et al. "It's as if you're locked in": qualitative explanations for area effects on smoking in disadvantaged communities. *Health Place* 2001;
  7: 333-343.
- Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the CSDH. Geneva: World Health Organisation, 2008.
- Ward PR. A case for reorienting health systems and investing in primary healthcare in Australia. *Australas Med J* 2009; 1: 1-21. Doi 10.4066/AMJ.2009.52
- 10. Delorme DE, Kreshel PJ, Reid LN. Lighting up: young adults' autobiographical accounts of their first smoking experiences. *Youth Soc* 2003; **34**: 468-495.
- Koval JJ, Pederson LL, Mills CA, et al. Models of the relationship of stress, depression, and other psychosocial factors to smoking behaviour: a comparison of a cohort of students in grade 6 & 8. *Prev Med* 2000; **30**: 463-477.
- Clark DB, Cornelius J. Childhood psychopathology and adolescent cigarette smoking: A prospective survival analysis in children at high risk for substance use disorders. *Addit Behav* 2004; 29: 837-841.
- Breslau N, Davis GC, Schultz LR. Post-traumatic stress disorder and the incidence of nicotine, alcohol and other drug disorders in persons who have experienced trauma. *JAMA* 2003; 60: 289-294.

- Treacy MP, Hyde A, Boland J, et al. Children talking: emergency perspectives and experiences of cigarette smoking. *Qual Health Res* 2007; 17: 238-249.
- 15. Plumridge EW, Fitzgerald LJ. Abel GM. Performing coolness: smoking refusal and adolescent identities. *Health Educ Res* 2002; **17**:167-179.
- Dudas RB. Hans K, Barabas K. Anxiety, depression and smoking in school childrenimplications for smoking prevention. *J R Soc Promo Health* 2005; **125**: 87-92.
- 17. Buchanan A, Brinke JT, Flouri E. Parental background, social disadvantage, public "care" and psychological problems in adolescence and adulthood. *Child Adol* 2000; **39**: 1415-1423.
- de Leon J, Diaz FJ. A meta-analysis of worldwide studies demonstrates an association between schizophrenia and tobacco smoking behaviors. *Schizophr Res* 2005; **76**:135-157.
- 19. Lasser K, Boyd JW, Woolhandler S, Smoking and mental illness; a population-based prevalence study. *JAMA* 2000; 284: 2606-2610.
- 20. Access Economics. Smoking and Mental Illness: Costs. Report by Access Economics Pty Ltd for SANE Australia, 2007. Accessed 23<sup>rd</sup> Aug 2010 http://www.sane.org/images/stories/information/research/0712\_info\_smokecosts.pdf
- 21. Farrell M, Howes S, Bebbington P, et al. Nicotine, alcohol and drug dependence and psychiatric comorbity. *Brit J Psychiat* 2001; 179: 432-437.

- Audain-McGovern JA, Lerman C, Wileyto EP, et al. Interacting effects of genetic predisposition and depression on adolescent smoking progression. *Am J Psychiat* 2004; 161: 1224-1230.
- 23. Malpass D, Higgs S. How is cigarette smoking maintained in depression? Experiences of cigarette smoking in people diagnosed with depression. *Addict Res Theory* 2009; 17: 64-79.
- 24. Lawn SJ. Systemic barriers to quitting smoking among institutionalised public mental health service populations: a comparison of two Australian sites. *Int J Soc Psychiat* 2004; **50**: 204-215.
- 25. Legard R, Keegan J, Ward K. In-depth interviews. In J. Ritchie & J. Lewis (eds.), *Qualitative Research Practice*. Sage: London, 2003.
- Hagemaster JN. Life history: a qualitative method of research. J Adv Nursing 2006; 17: 1122-1128.
- 27. Patton MQ. *Qualitative research and evaluation methods*. Sage: Thousand Oaks, California, 2002.
- 28. Bluff R. Grounded theory: the methodology. In I. Holloway (ed). Qualitative research in *health care*. Berkshire, England: Open University Press (McGraw-Hill), 2005, 147-167.
- 29. Strauss A, Corbin J. Basics of qualitative grounded research: Grounded theory procedures and techniques. Thousand Oaks, CA: Sage, 1990.

- 30. Becklake MR, Ghezzo HE. Childhood predictors of smoking in adolescence: a follow-up study of Montreal schoolchildren. *CMAJ* 2005; **173**: 377 379.
- 31. Dowrick C, Kokanovic R, Hegarty K, et al. Resilience and depression perspectives from primary care. *Health* 2008; **12**: 439-452.
- 32. Hauser ST, Allen JP, Golden E. *Out of the woods*. Cambridge, MA: Harvard University Press, 2006.
- 33. Goldberg JO, Moll S. Washington A. Exploring the challenge of tobacco use and schizophrenia. *Psychiat Rehabil Skills* 1996; **1**: 51-63.
- 34. Kristjansson AL, Sigfusdottir ID, James JE, et al. Perceived parental reactions and peer respect as predictors of adolescent cigarette smoking and alcohol use. *Addict Beh* 2009; 35: 256-259.
- 35. Lawn SJ, Pols RG, Barber JG. Smoking and quitting: a qualitative study with communityliving psychiatric clients. *Soc Sci Med* 2002; 54: 93- 104.

Pseudonym, age and gender of participant	Mental Health Diagnosis	Parental smoking	Biographical information
Andrea (58 years / Female)	Depression	Both parents smoked heavily	Raised into very large, poor family in Northern Europe. Good relationship with mother but father was violent. Father died when she was 12. Married a smoker.
Brian (46 years / Male)	Bipolar depression	Both parents smoked heavily	Adopted. Close relationship with parents. Took up martial arts after being badly bullied at school. Spent many years in psychiatric institutions. Recently married.
Callum (34 years / Male)	Depression	Mother heavy smoker	Good relationship with parents. Happy childhood. Many years in the mental health system. Lives alone.
Danielle (36 years / Female)	Depression	Both mother and step father smoked heavily	Strained relationship with parents. Spent a lot of time with extended family. One child by first marriage. Second marriage to non-smoker.
Evelyn (41 years / Female)	Depression	Father quit smoking when Evelyn was young. Mother smoked socially	Good but disjointed childhood with many moves. Married to a non-smoker.
Felicity (42 years / Female)	Depression and anxiety	Both parents smoked heavily	Happy childhood although parents' marriage was not happy. Works in mental health services. Lives alone.
Graham (45 years / Male)	Depression and schizophrenia	Father non- smoker. Mother smoked but quit when he was 14.	Parents split when he was 10 and he lived with his mother and brother. Many years in psychiatric hospitals and still attends regularly as day patient. Lives alone.
Helen ( 60 years / Female)	Depression and Anxiety	Neither parent smoked	<ul><li>Happy home during childhood, large family.</li><li>Hated school and was bullied.</li><li>Extensive contact with psychiatric services.</li><li>Lives alone, separated with ongoing contact from husband and family.</li></ul>
Ian (37 years / Male)	Depression and schizophrenia	Mother never smoked. Father quit before Ian was born	Happy childhood though moved several times. Extensive contact with psychiatric services. Lives alone.
Janet (57 years	Depression	Neither parent	Entered into a career in nursing in late

Table 1: Participant information

/ Female)		smoked.	adolescence, where she was 'surrounded by smokers'. Lives alone.
Keith (21 years / Male)	Depression	Mother smoked socially	Parents separated when Keith was an infant. Childhood described as isolated and tough. Lived with mother and moved a lot. Several primary schools. Lives with mother and sibling.
Lachlan (17 years / Male)	Depression	Both parents smoked though didn't believe in smoking around children	Parents separated when Lachlan was early adolescent. Described normal childhood; describing himself as a loner; family didn't mix much. Lives with father (with schizophrenia) who he cares for.