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## Letter to the Editor

# Why are smokers so unhappy?

Happiness is an important positive psychological dimension providing people with hope, and is known to affect behaviour. The relationship between happiness and smoking is complex and data are scarce. Ex-smokers are happier than current smokers, and happiness is similar among ex-smokers and never smokers.<sup>1</sup> The common mindset that smoking helps to alleviate stress, and that smoking cessation removes a valuable coping management tool must be challenged. In highly dependent smokers, regardless of the immediate effects of smoking on perceived stress, smoking cessation is associated with lowering of stress.<sup>2</sup>

The authors investigated the relationship between smoking and happiness in the US population. State-specific data on smoking prevalence in 2009 were obtained from the Centers for Disease Control and Prevention.<sup>3</sup> Gallup and Healthways' Well-Being Index was used to determine happiness; this calculates well-being on a scale of 0–100 (ideal well-being).<sup>4</sup>

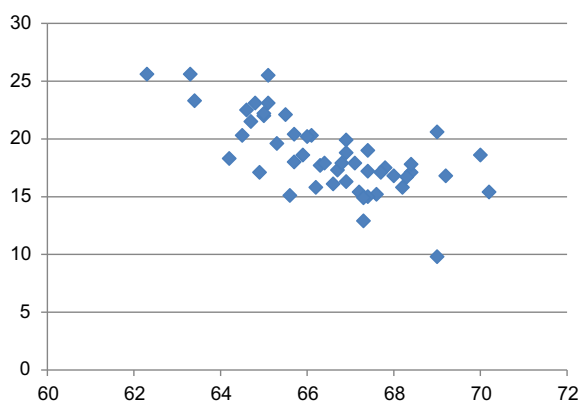
Smoking prevalence ranged from 9.8% in Utah to 25.6% in Kentucky and West Virginia. Residents in Hawaii were the happiest, scoring 70.2 on the Well-Being Index, while residents in West Virginia reported the lowest rate for happiness at 62.3.

Smoking prevalence and happiness were highly inversely correlated ( $r = -0.69$ ;  $P = 0.00000002$ ) (Fig. 1).

The high level of inverse correlation between smoking and happiness is puzzling. First, a limitation of the observation may be that calculation of the Well-Being Index includes smoking. Indeed, the Well-Being Index is an average of six subindexes, which individually examine life evaluation, emotional health, work environment, physical health, healthy behaviours and

access to basic necessities. Smoking accounts for one-quarter of the healthy behaviours subindex, which also computes weekly exercise frequency, eating healthily and weekly consumption of fruits and vegetables. Accordingly, smoking must only account for 1/24th (0.04) of the overall Well-Being Index. This is 10-fold less than the variance observed (0.47). Therefore, the correlation is a true finding.

Second, when working with correlations, one must never assume that a correlation means that a one variable explains another variable. It is unlikely that smoking per se can explain well-being, as smoking and well-being are multifactorial. However, it is hypothesized that a low prevalence of smoking may indirectly reveal the dedication of politicians to improve well-being. Indeed, implementation of evidence-based tobacco control policies is the main determinant for smoking prevalence. Accordingly, states that protect their citizens from the deadly effects of tobacco and 'fly in the face' of the vested interests of the tobacco industry are likely to implement public policies aimed at social determinants such as improving access to basic necessities and providing a better environment. With 10,000 tobacco-growing farms, the USA is a leading producer of tobacco and is in the top four countries (after China, Brazil and India) that produce more than two-thirds of the world's tobacco.<sup>5</sup> The largest tobacco-producing state in the USA is Kentucky.



**Fig. 1 – State-specific prevalence of cigarette smoking in 2009 (left ordinate axis) vs Gallup–Healthways Well-Being Index in 2011 (right left ordinate axis).**

## Author statements

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None sought.

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### Competing interest

None declared.

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