

Attitudes towards suntanning 1994-2003

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Introduction

Exposure to the sun is the most significant and modifiable risk factor for skin cancer prevention (Ministry of Health & The New Zealand Cancer Control Trust, 2003). Therefore, a positive attitude towards sun tanning is undesirable, as this may lead to risky sun exposure behaviours.

An Australian study by the Centre for Behavioural and Research in Cancer, Anti-Cancer Council of Victoria, on which the current study is based, found that over the three year period 1988–1990, there was a decrease in undesirable attitudes regarding tanning such as “I feel more attractive with a tan” (Hill, White, Marks, & Borland, 2002). However, despite this decrease, this and other research on attitudes towards tanning, showed that in general, many people still perceive themselves, and others as more attractive and healthy with a tan (Amir, Wright, Kernohan, & Hart, 2000; Banks, Silverman, Schwartz, & Tunnessen, 1992). Furthermore, people are still intending to sunbathe to get a tan, despite knowledge of skin cancer and its prevention (Hanley, Pierce, & Gayton, 1996). It appears that, for these individuals, the positive psychological benefits of having or obtaining a tan outweigh the knowledge regarding the risk of developing skin cancer (Bridges & Ehrlich, 2005).

The present study aims to analyse the association between attitudes and beliefs regarding tanning, and variables such as age, sex, ethnicity, highest qualification, occupation, city, and year in a New Zealand setting across time.

Method

This study analysed the Triennial Sun Survey data extracted from telephone interviews conducted in five New Zealand cities: Auckland, Wellington, Hamilton, Christchurch and Dunedin. The surveys conducted in 1994 (n=1243), 1997 (n=1193), 2000 (n=1250), and 2003 (n=1250) have followed the same format, and the content has been consistently maintained to enable the data to be compared across time. A quota system ensured that the sample comprised equally of each sex, and each of the five cities contributed 20% of both adolescents aged 15-17 and adults aged 18-69 years.

Respondents were asked to rate, on a five point scale, their degree of agreement with statements (1=Strongly Disagree to 5=Strongly Agree) to seven attitude and belief

statements: I feel more healthy with a suntan; A suntan makes me feel better about myself; A suntan makes me feel more attractive to others; This summer I intend to sunbathe

regularly to get a suntan; Most of my close family think that a suntan is a good thing; Most of my friends think a suntan is a good thing; A suntan protects you against melanoma and other skin cancers.

Results

Two analyses were conducted on the data. The first analysis consisted of creating a total score from the seven attitude and belief variables. A factor analysis showed that these seven variables could be loaded on to the same *Pro-Tan* factor; therefore, it was reasonable to sum each variable to produce a total score indicating agreement with Pro-Tan statements. This score was log transformed, and modelled using age, sex, ethnicity, occupation, highest qualification, city and year. The results showed that age ($p<.001$), and sex ($p<.001$), specifically younger males, were significant in predicting this Pro-Tan score. City ($p=.054$) and year ($p=.063$) displayed tendencies to predict scores, and indicated that Pro-Tan attitudes were highest in Auckland and Dunedin, and lowest in Christchurch. In addition, undesirable Pro-Tan attitudes peaked in 1997 but have subsequently declined.

The second analysis was conducted on each attitude variable individually, and modelled using the same variables as the first analysis. The results showed that across all the attitude variables, younger people, in particular males under 29 years old, were more likely to have Pro-Tan attitudes. In addition, compared to New Zealand Europeans, Māori and Asian ethnicities were less likely to think a tan will make them feel more attractive. Māori were more likely to feel their friends think a tan is desirable, while Asians were less likely to indicate their close family will think a tan is desirable. Of most concern were the individuals who believed a tan would protect them from melanoma and other skin cancers. This belief was more likely to be endorsed by the Asian respondents.

Conclusions

Overall, this research will provide valuable feedback to help inform skin cancer awareness and behaviour modification programmes in the future. In particular, groups (e.g. younger people, males) have emerged that appear to more urgently require education to change

undesirable attitude and beliefs. It was also possible identify areas in which incorrect beliefs exist, in particular the Asian ethnic groups who believe that a tan has protective qualities against skin cancer.

Unfortunately, this study did not find the decrease in the undesirable attitudes and beliefs that the Australian version of this study documented (Hill, White, Marks, & Borland, 2002), however, with the addition of the 2006 Triennial Sun Survey data, a clearer picture of the trends in attitudes may emerge.

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