Sun-related Prototypes And Their Influence On Incidental Sun Exposure: A Prospective Study

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Introduction: Behavioural approaches to skin cancer prevention have largely focused on sun protection and deliberate sunbathing. In comparison, little attention has been paid to factors that contribute toward incidental sun exposure. The current study adopts the prototype willingness (PW) model as a framework for predicting incidental exposure in an extreme ultra-violet radiation (UVR) environment. Method: A longitudinal study was conducted to examine whether community members’ (N=231) perceptions of sun-related prototypes influenced prospective incidental sun exposure. In this study, incidental sun exposure was assessed with a comprehensive sun diary, and skin reflectance spectrophotometry was used to measure skin colour at baseline, and again at 1-month follow-up. Outcomes: Results of this research suggest that deliberate sunbathing is perceived negatively, while sun protection and incidental exposure is evaluated favourably. A path analysis was conducted to examine the relationships between prototype perceptions, other cognitive variables in the model, and incidental exposure behaviours. Findings indicated that perceptions surrounding sun protection were related to intentions and willingness to incidentally expose. More specifically, perceived dissimilarity to the typical sun protector was directly associated with greater intentions and willingness to expose, and indirectly associated with greater incidental exposure. Relevance: Overall, these findings suggest that the PW model can aid the prediction of incidental sun exposure in North Queensland. Furthermore, perceptions of similarity to the typical sun protector were found to impact upon sun exposure. This finding has implications for skin cancer prevention messages in this high-risk region, whereby future health promotion strategies could focus on increasing perceptions of similarity to the sun protector prototype. Further theoretical and practical implications will also be discussed.