Greetings!

This report summarises the results of a study that we conducted on decision-making for using sun-protection. We appreciate your help with our research, and we are happy to have the opportunity to tell you about the results. The first part of the study was conducted by Patricia King, an honours student under the supervision of Dr. Winnifred Louis, and additional data was collected the following year by Angela Nickerson and Janie Busby, research assistants for Dr. Louis. If you would like to ask questions, to comment on what you read, or to find out more, you can contact project staff by phoning (07) 3346 9515, by e-mailing w.louis@psy.uq.edu.au, or by writing to Dr. Winnifred Louis, School of Psychology, McElwain Building / University of Queensland / St. Lucia, QLD 4072. You can also read about other studies that we’ve done on attitudes and decision-making at http://www.psy.uq.edu.au/~wlouis/.

SUMMARY OF RESULTS: THE IMPACT OF NORMS ON SUN-PROTECTION ATTITUDES AND ACTIONS
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WHAT WE WERE LOOKING FOR
The primary aim of this study was to investigate the role of norms, which are informal standards or rules for behaviour, in influencing attitudes and actions for sun-protection (e.g., sunscreen, sunglasses, hats, etc.). We started from a model called the theory of planned behaviour (e.g., Ajzen, 1991) which says that people will do something if they see it as beneficial and not costly, if they think significant others support the action, and if they think the behaviour is under their control. We also had in mind the “referent informational influence” model, which says that over and above individual factors such as those listed in the planned behaviour model, group level variables are important, and specifically norms coming from groups that we belong to (e.g., student norms) play a key role in guiding our action (e.g., Terry & Hogg, 1996). Referent informational influence theory says that people will act when other people in our group support the behaviour (a positive injunctive norm) and do the behaviour themselves (a positive descriptive norm). But what about the situation if people support something and don’t actually do it? We thought this was interesting to examine – e.g., what if people think other students support sun-protection in theory, and don’t actually do anything about it in practice? So we ran a study about this, as well as looking at a variety of personality factors as control variables.

SOME DEMOGRAPHIC INFORMATION ABOUT PARTICIPANTS
Data collection occurred between August 2004-May 2005, with each participant scheduled to complete two sessions two weeks apart. There were 218 participants in the first wave; 166 participants completed both sessions. Most participants were first-year psychology students who were given course credit for their participation. Their average age was 20.73 years ($SD = 5.87$, range = 16-55, median = 19). Most participants were women (86.6%), and all of them were UQ students.
WHAT WE FOUND

1. PRE-MEASURES. We wanted to measure the usual attitudes and behavioural intentions participants had on sun-protection to get an idea of how they felt about it before we presented them with the experimental manipulations.

A. PLANNED BEHAVIOUR VARIABLES. An overwhelming proportion (100%) of participants believed in the benefits of sun-protection. Most participants (95%) felt using sun-protection was something they could control. A large number of participants (89%) believed that important people in their lives want them to use sun-protection. However, only 57% of participants believed their significant others would use sun-protection themselves. So as predicted, the discrepancy between approval and action is coming through very clearly for this behaviour.

B. GROUP NORMS. Focusing on the group level, a high number of people (93%) identified strongly as UQ students. However, only 47% participants thought other UQ students would want them to use sun-protection, and only 30% believed other UQ students would use sun-protection themselves. So as we predicted, uni students are seen as quite slack about this behaviour!

C. INTENTIONS AND BEHAVIOURS. A majority of participants (77%) intended to use sun-protection in the subsequent two weeks. But only 33% of participants reported they consistently used sun-protection in the past.

2. NORM MANIPULATIONS. Depending on condition, participants were shown scripts that manipulated the injunctive and descriptive norms on sun-protection supposedly held by other UQ students. In the injunctive norm condition participants were informed that most UQ students approved of the sun-protective behaviours; in the descriptive norm condition participants read that most UQ students engaged in sun-protective behaviours themselves; in the combined condition there were both blurbs; and the control condition had no blurbs given.

A. POST-MEASURES. Respondents’ perceptions of injunctive and descriptive norms, attitudes and behavioural intentions toward sun-protection were measured again immediately after the manipulations. But these results were a bit disappointing. Changes to perceived norms were mixed, while attitudes and behavioural intentions on sun-protective behaviours were not influenced by the manipulations at all.

B. PERSONALITY VARIABLES. Most participants felt positive towards successful people (92.2%), felt good about themselves (92.1%), believed that authority was important (68.7%), felt good about the groups they belonged to (96.9%), and believed in equality (egalitarianism: 87.5%, low social dominance orientation: 85.2%). None of these personality variables were consistently linked to sun protection, though somewhat strangely self-esteem was associated with more sun protection on some of the variables.

3. SECOND WAVE MEASURES. In the follow-up session two weeks later, participants’ attitudes and intentions on sun-protective behaviours were measured again. Their responses were evaluated in light of the injunctive and descriptive norm manipulations (see above) performed two weeks earlier and measured perceptions of these social norms.

A. TIME 2 VARIABLES AS A RESULT OF THE MANIPULATIONS. Despite the mixed results from the post-measures right after the manipulation, we found that on attitudes and actions two weeks later, significant effects were found. Overall, when the positive descriptive norm had been presented (saying that uni students used sun-protection behaviour themselves), participants had more favourable attitudes on sun-protection and reported they had used more sun-protection than when the script was not presented. Further more, on the day of testing, participants used the
most sun-protective measures if they had previously received the combined condition (that students approved of sun-protection and used it themselves).

B. PREDICTORS OF SUN-PROTECTIVE DECISIONS. We also considered participants’ reported Time 1 intentions and Time 2 behaviour as a function of their previously recorded Time 1 Planned Behaviour and Referent informational influence variables. All three planned behaviour variables measured at Time 1 (i.e., perceiving sun protection as beneficial, supported by significant others, and under participants’ control) were reliable predictors of intentions at Time 1 and of self-reported behaviour at Time 2. In addition, measured student group norms interacted to predict Time 1 intentions, even after planned behaviour variables were controlled, such that if people perceived students didn’t engage in sun protection and didn’t approve, intentions were lower than if either approval or usage or both were perceived as high. The measured referent variables didn’t predict Time 2 variables independently, but this is probably due to the intervening manipulation of group norms reported above.

CONCLUSIONS
Overall, the importance of looking at injunctive and descriptive norms separately was supported in the present data, because for both significant others and for students approval of sun-protection was seen as higher than actual behaviour was. The planned behaviour variables were strong and consistent predictors of sun-protection attitudes and actions. In addition, the value of looking at group norms over and above individualistic variables like the planned behaviour model was supported for Time 1 intentions, and manipulated group norms also changed attitudes and reported behaviour two weeks later. These long-term effects of the manipulation are quite nifty, given the relatively trivial manipulation and the fact that post-measures right after the manipulation didn’t show much happening.

THANKS AGAIN…
So that’s a description of what we found in the study. If you have any questions, or would like a copy of the longer write-up when we get that done (in several months) please get in touch. And thank you again for your participation and interest!