

**Testing of the 'UV Alert' and 'Bell-Curve' Concepts for the
National Skin Cancer Committee**

By Owen Carter

CBRCC Report 051109

November 2005

THE CANCER COUNCIL OF AUSTRALIA

**Testing the ‘UV Alert’
and ‘Bell-Curve’ Concepts
for the National Skin Cancer Committee**

by

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1 Background

The National Skin Cancer Committee (NSCC) of The Cancer Council Australia and the Bureau of Meteorology (BoM) have been working in partnership to increase salience of the UV Index such that more Australians will take sun protection measures appropriate to daily UV conditions. To this end the NSCC developed two UV Index concepts, '*UV Alert*', and '*Bell-curve*'. Both concepts were designed for inclusion on the daily weather forecast pages of newspapers throughout Australia.

A 'soft' launch of these concepts occurred on 1 October 2005 with 17 newspapers adopting the square variant of *UV Alert*, four adopting the elongated variant, and six adopting the *UV Alert Bell-curve*. A publicised 'hard' launch of these concepts is scheduled for 1 December 2005. On 20 October 2005 the NSCC appointed the Centre for Behavioural Research in Cancer Control (CBRCC) to test these concepts prior to the hard launch.

2 Methodology

Sample

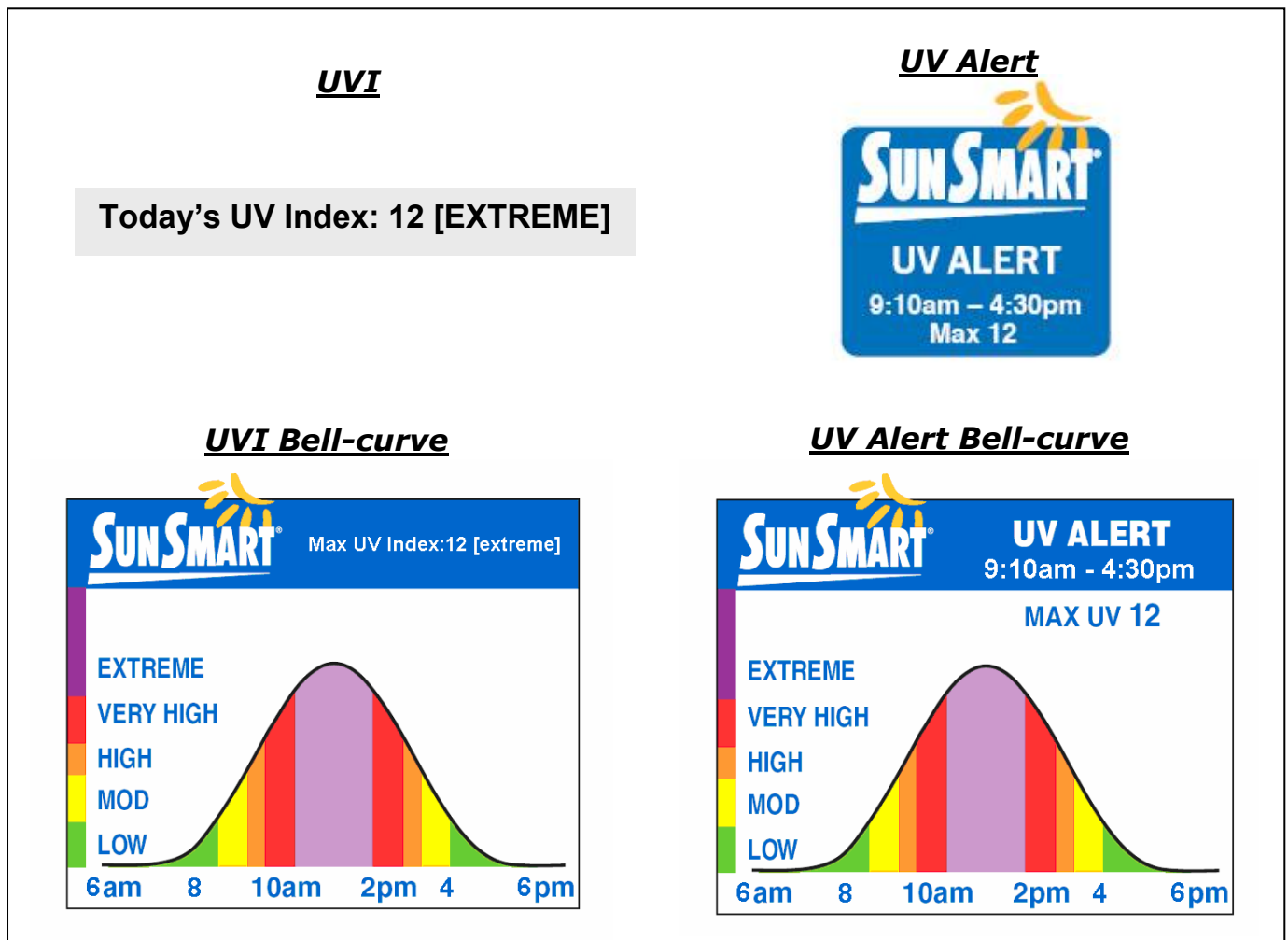
A convenience sample was recruited via intercept interviews in the central business district of Perth between the 21st and 29th of October 2005. All participants were screened to ensure that they were Australian residents between the ages of 18–44 years who had been sunburnt on at least one occasion within the previous year. Stratified sampling targets were set for each concept to ensure there were equal numbers of males and females and equal numbers between the age clusters of 18–29 years and 30–44 years. In total, 2197 people were approached and asked to take part in a "university health study". There were 1336 refusals, 217 who were not Australian residents, 152 who fell outside of the targeted age group, 137 who had not been sunburnt, 56 who spoke insufficient English, had already completed the survey before, or for whom the stratified quotas were already full, and 300 who completed interviews. The ratio of refusals to completed interviews represents a consent rate of 18%, which is low for such studies. This is likely to

have resulted from most people being dissuaded from participating due to the unseasonably wet conditions experienced in Perth over the interview period.

Materials

The 'UV Alert' and 'Bell-curve' test concepts depicting a UV Index of 12 in Perth conditions was provided by BoM and printed in colour onto a single laminated piece of A4 sized paper. For the sake of economy it was decided to test only the square variant of *UV Alert*, as the majority of newspapers had adopted this version, and as the text is identical, it was felt the results would be entirely applicable to the elongated version of the same. In order to provide some basis for comparison, the traditional text-based method of reporting the UV Index was also tested (e.g. *Today's UV Index: 12 [EXTREME]*), and the 'Bell-curve' concept with the statement 'Max UV 12 [extreme]' replacing the 'UV Alert' component was also tested. The four test concepts are displayed in Figure 1 below.

Figure 1: The four UV Index test concepts



A standardised questionnaire was devised, comprising of seven demographic questions plus six open-ended and five closed-ended items assessing people's initial reactions to the concept, their understanding of it, the things about it that they liked, disliked and found confusing, and the extent to which they associated it with sun protection behaviours. A copy of the questionnaire is included as an appendix.

Procedure

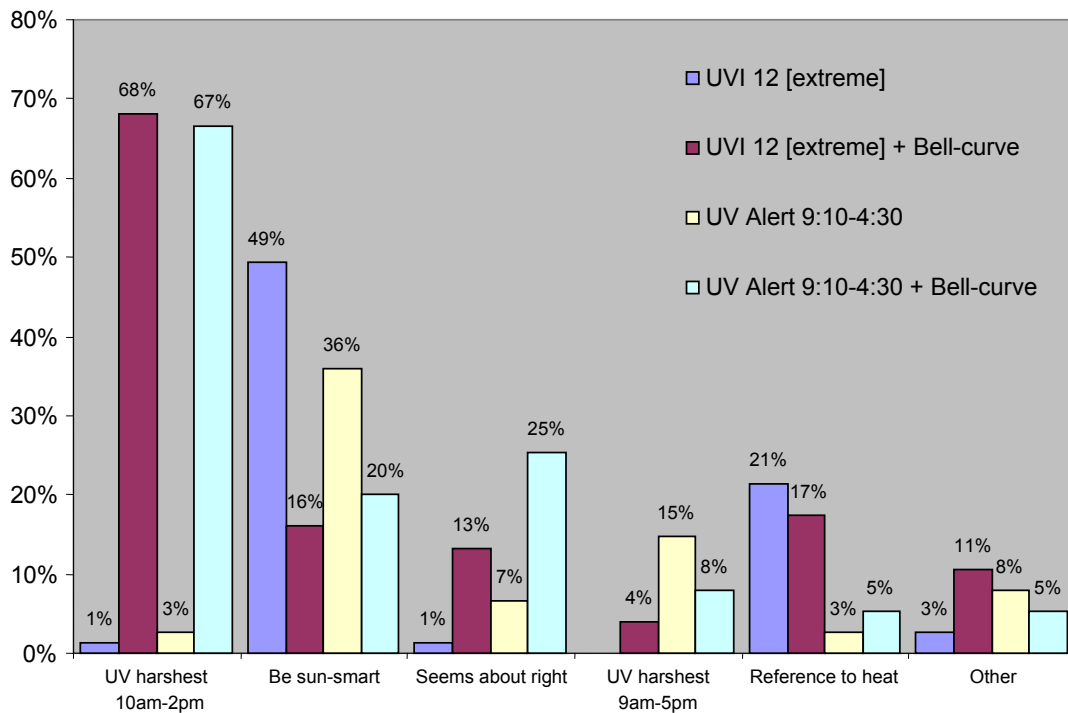
All participants who met the selection criteria were handed a copy of one of the four test concepts. They were asked to study the information before them and then the interviewers proceeded to ask them each item in the questionnaire. Participant responses to open-ended items were written down verbatim by the interviewers. For items requiring participants to respond along a rating scale, interviewers showed participants each scale printed on the pages of a flip chart and then recorded participants' choices. Each interview took between five and seven minutes to complete. Each of the four concepts was tested on 75 participants, totalling 300 participants in all. No participant viewed more than one of the concepts. The six open-ended items were later coded and entered alongside the closed-ended items into a database and analysed using the Statistical Package for the Social Sciences (SPSS V13).

3 Results

A preliminary comparison of the demographic data suggested that none of the participant groups viewing either of the four concepts varied significantly by sex, age, ethnicity, education or employment status.

Unprompted thoughts and feelings Participants were initially asked to describe their thoughts and feelings about each concept in an open-ended manner. Multiple responses were recorded and afterwards coded into congruent themes. Results are displayed in Figure 2.

Figure 2: Unprompted thoughts and feelings elicited by test concepts



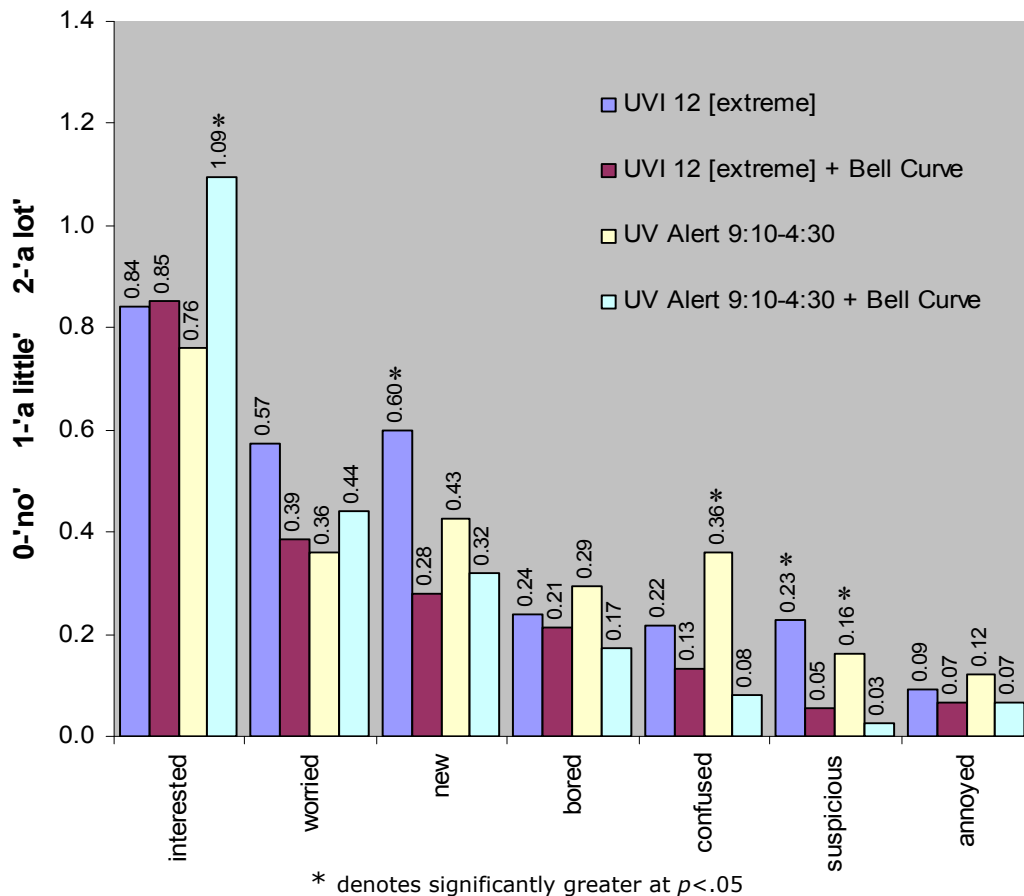
The attention of two-thirds of respondents viewing either of the bell-curve concepts was immediately drawn to the purple aspect of the graphs highlighting the time of the day when UV conditions are 'extreme' (10am–2pm). The explicit '9:10am to 4:30pm' text of the *UV Alert* and *UV Alert Bell-curve* concepts was mentioned much less frequently by comparison, suggesting the graphical images made a higher impact than the text messages. The tendency of respondents viewing either of the text-based concepts (*UVI* and *UV Alert*) was to mention non-specific thoughts of sun protection. It is interesting to note that over three-times as many respondents thought that *UV Alert Bell-curve* reflected what they already

knew about UV conditions ('seems about right'), in comparison to *UV Alert*. This suggests that providing respondents with more information, via the bell-curve, allowed for better understanding of the "9:10am to 4:30pm" message.

A much higher proportion of respondents viewing either the *UVI* or *UVI Bell-curve* concepts made an irrelevant reference to heat, such as 'it's going to be hot today', in comparison to those viewing either the *UV Alert* or *UV Alert Bell-curve* concepts. The direct association of UV conditions with heat is a common misconception held by around half the population (Carter, 2005), but there is no obvious reason why this misconception was less prevalent in those viewing the *UV Alert* concepts in comparison to the *UVI* concepts. One possibility is that because the *UV Alert* concepts contained more information to discuss, *non sequiturs* about heat were made less frequently.

Prompted thoughts and feelings Participants were next read a list of seven feelings and asked whether they felt each while studying the concept before them. Responses were recorded as either 'no' (0), or if 'yes' then participants were asked "would that be 'yes - a little' (1) or 'yes - a lot' (2)". The mean response per concept is displayed below in Figure 3.

Figure 3: Prompted thoughts and feelings elicited by each concept

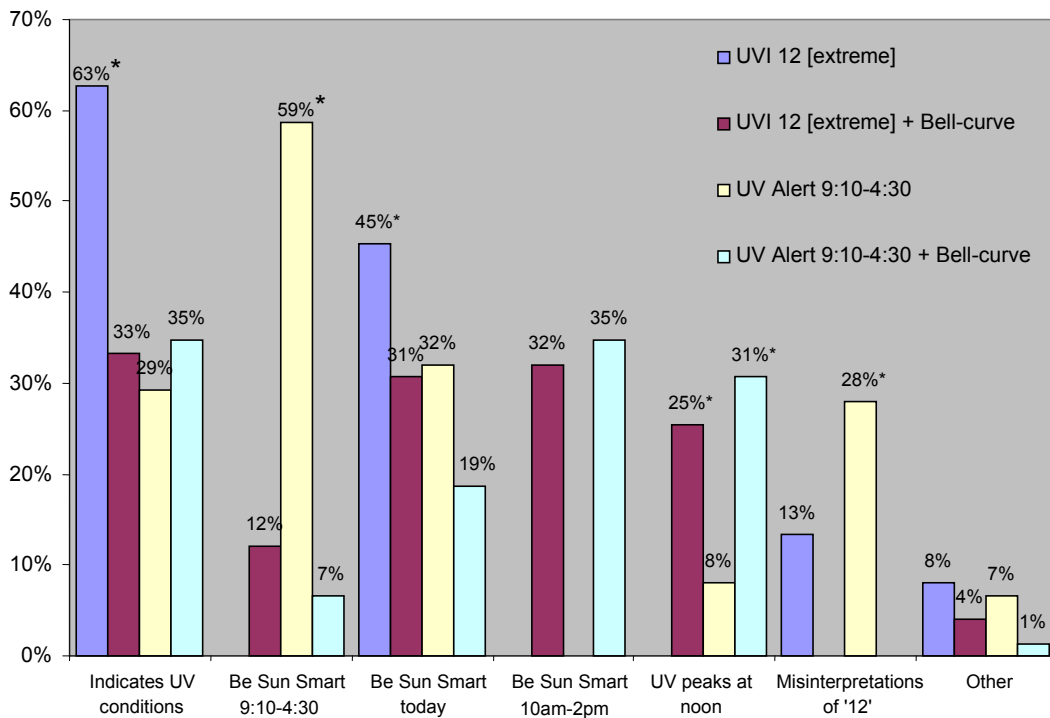


Of all the concepts tested, the *UV Alert* rated the most poorly. It was rated as significantly more *confusing* than the other concepts and more *suspicious* than either of the bell-curve concepts. To a non-significant extent it was also rated as least *interesting* and *worrisome*, and the most *boring* and *annoying*. In contrast, the *UV Alert Bell-curve* concept was rated significantly more *interesting* than any other concept, and to a non-significant extent least *boring*, *confusing*, *suspicious* and *annoying*. The *UVI* concept was rated as significantly more *new* than any of the other concepts. This is an unusual result when one considers that it is the only concept of all four that was not in fact new, and reinforces previous data that suggests the UV Index suffers from low salience (Carter, 2005). It was also non-significantly rated as most *worrisome* but also most *suspicious*, suggesting that the [extreme] category label is motivating but poorly understood.

Prompted thoughts and feelings

Participants were next asked to relate what the concept was actually telling them. Multiple responses were recorded in an open-ended manner, and later collated into themes, as outlined in Figure 4 below.

Figure 4: What is this information telling you?



* denotes significantly greater at $p < .05$

Respondents viewing *UVI* suggested broad and generic messages about UV conditions and sun protection. In contrast, the other three concepts elicited responses surrounding more specific information about the day's UV conditions, such as the times when UV conditions are higher. It is interesting to note that while a majority of participants viewing *UV Alert* interpreted that they should take sun precautions between 9:10am and 4:30pm, only a small proportion of those viewing *UV Alert Bell-curve* did so. Indeed the proportion was similar to that for *UVI Bell-curve*, which contained no explicit message to this effect. This again suggests that the information contained within the images had greater impact than the text.

It is also very interesting to note that over one-quarter of respondents who saw *UV Alert* made some kind of misinterpretation of 'Max 12', either believing it referred to the hour of the day which the UV would be at its maximum (e.g. "*the maximum UV will be at 12*") (n=13), the maximum temperature in degrees Celsius (n=3), or maximum recommended sun exposure in minutes (n=1). Participants who viewed *UV Alert* and made statements about UV conditions peaking around midday that were seemingly not inspired by the 'Max 12' statement (e.g. "*the UV will be worst at around 12:30pm*") were coded separately (n=6).

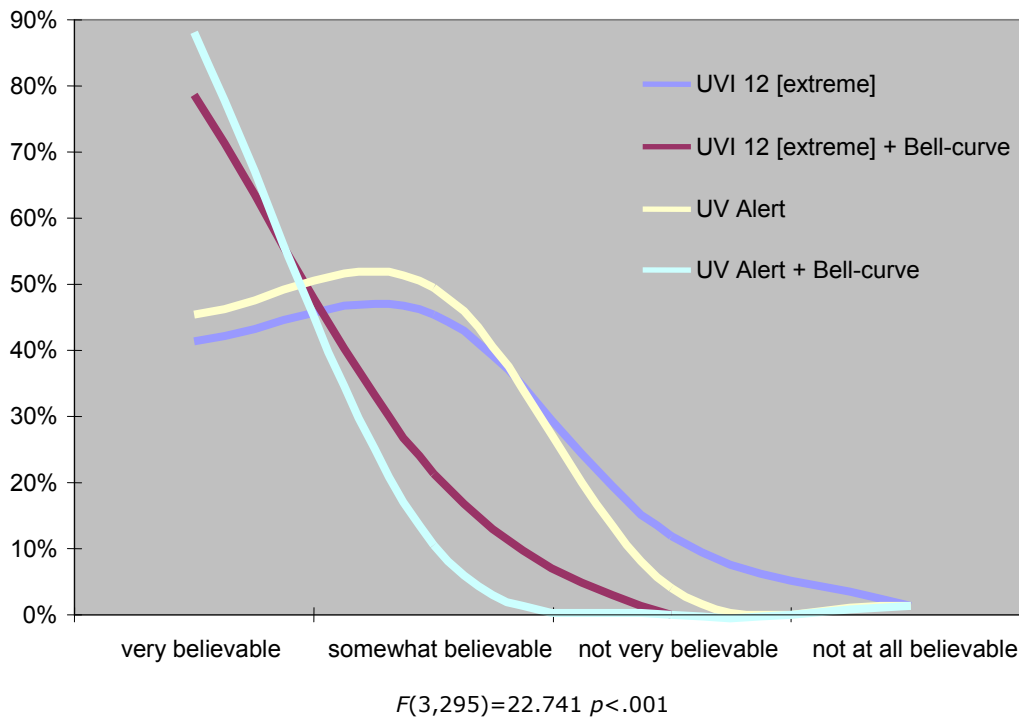
Half as many respondents viewing *UVI* (n=8) made similar inferences about the integer '12' as respondents viewing *UV Alert*. It is likely that the [extreme] categorisation included with the *UVI* concept helped to avoid much of this confusion. In reference to the bell-curve concepts, no participants made overt statements to the effect that they thought 'Max 12' referred to a time of the day but large proportions *did* infer from the concepts that UV conditions would peak at around noon. One might expect that they derived this information from the apex of the bell-curve corresponding to midday. However it is difficult to separate the proportions who were inspired by the graphs versus the 'Max 12' statement, or the extent to which one reinforced the other. Future research that repeated the present experiment could depict a UV Index condition other than 12 in order to clarify this unexpectedly equivocal result.

Regardless of such esoteric academic musings, the present results strongly advocate that in order to minimise confusion, the UV Alert concepts should be modified such that the UV Index integer is clearly labelled as such and includes a category label (e.g. 'UV Index: 12 [extreme]').

Perceived Credibility

Participants were next asked to rate how believable they considered the information contained in each concept. Responses were recorded along a four-point scale from 'not at all believable', to 'not very believable', 'somewhat believable' or 'very believable'. Mean responses for each concept are displayed in Figure 5.

Figure 5: How believable is this information?

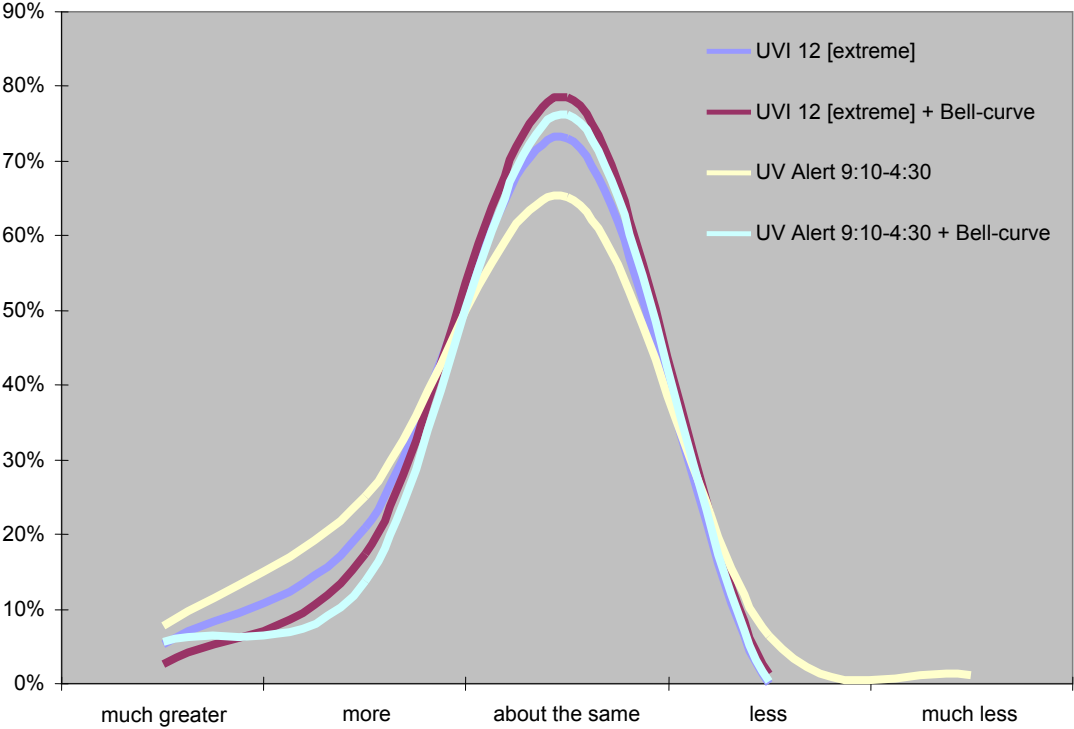


All four concepts were considered 'very' or 'somewhat' believable by a large majority of participants. However the proportions considering both bell-curve variants as such (99% each) was significantly greater than either *UV Alert* (95%) or *UVI* (87%). The small number of participants ($n=15$) who suggested any of the concepts was not believable were asked to specify why they thought this. Nine participants who viewed *UVI* suggested it contradicted their personal experiences of UV conditions (e.g. "it's always extreme no matter what!"), as did two who viewed *UV Alert* (e.g. "that would mean the whole day!") and one who viewed *UVI Bell-curve* (e.g. "there should be another peak at 3pm"). Three participants who viewed *UVI* suggested that more explanation was required, as did one who viewed *UV Alert* and one who viewed *UV Alert Bell-curve*. Overall, it appears that credibility was directly related to the amount of information provided by each concept, with the *UV Alert Bell-curve* consequently performing the best, as it provided the most information, and *UVI* performing the worst, as it provided the least.

Increased Understanding

Participants were next asked to rate how much more or less of an understanding of UV conditions they had after viewing each concept. They were asked to respond along a five-point scale from 'much less', to 'less', 'about the same', 'more' or 'much more'. Mean responses for each concept are displayed below in Figure 6.

Figure 6: How much more or less does this information increase your understanding of UV conditions?



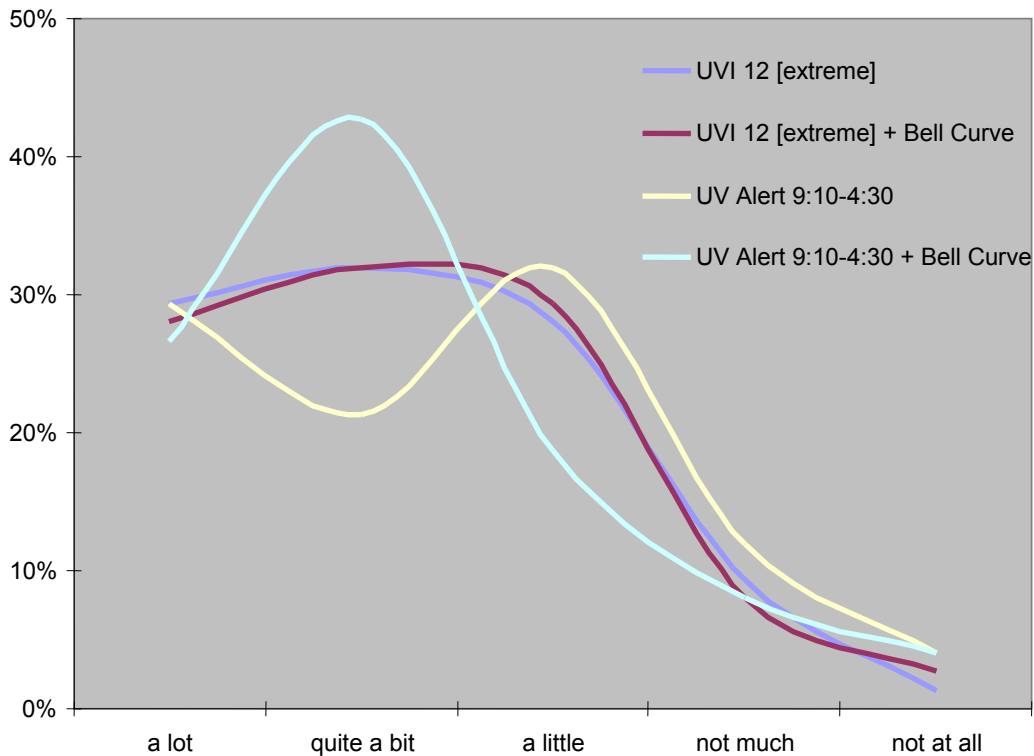
$F(3,295)=1.898 \quad p=.130$

There was no significant variation in the extent to which each concept was rated as modifying people’s understanding of UV conditions; a large majority who viewed each concept considering themselves to have ‘about the same’ understanding, and small proportions only considered themselves to have more understanding.

**Association
with Sun
Protection**

Participants were asked to rate to what extent each concept made them think about sun protection. They were asked to respond along a five-point scale from 'not at all', to 'not much', 'a little', 'quite a bit' or 'a lot'. Mean responses for each concept are displayed below in Figure 7.

Figure 7: To what extent does this information make you think about sun protection?



$F(3,295) = .502 \quad p = .681$

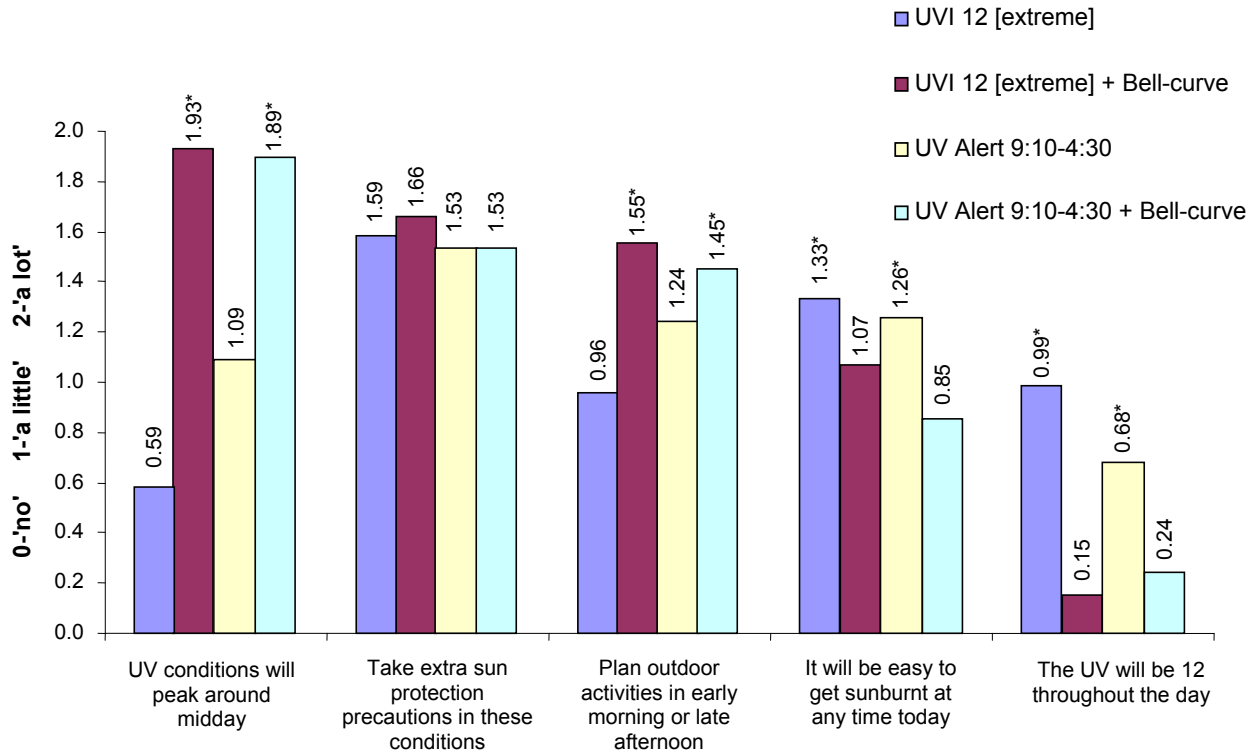
The *UV Alert Bell-curve* concept appeared to perform best, with 69% of participants who saw it suggesting it made them think of sun protection 'a lot' or 'quite a bit', compared to 61% who saw *UVI*, 60% who saw *UVI Bell-curve*, and 51% who saw *UV Alert*. As similar proportions of respondents for all concepts said it made them think of sun protection 'a lot', 'not much' or 'not at all', the overall differences observed for this measure were not statistically significant. However these results hint that *UV Alert Bell-curve* performed most favourably on this measure and *UV Alert* most the most lacklustre.

Prompted Inferences

Participants were read five statements and asked whether or not each was suggested by the concepts. Responses were recorded along a three-point scale from 'no', to 'yes – a little' and 'yes – a lot'. Mean responses per concept are compared in

Figure 8.

Figure 8: Implied messages of each concept



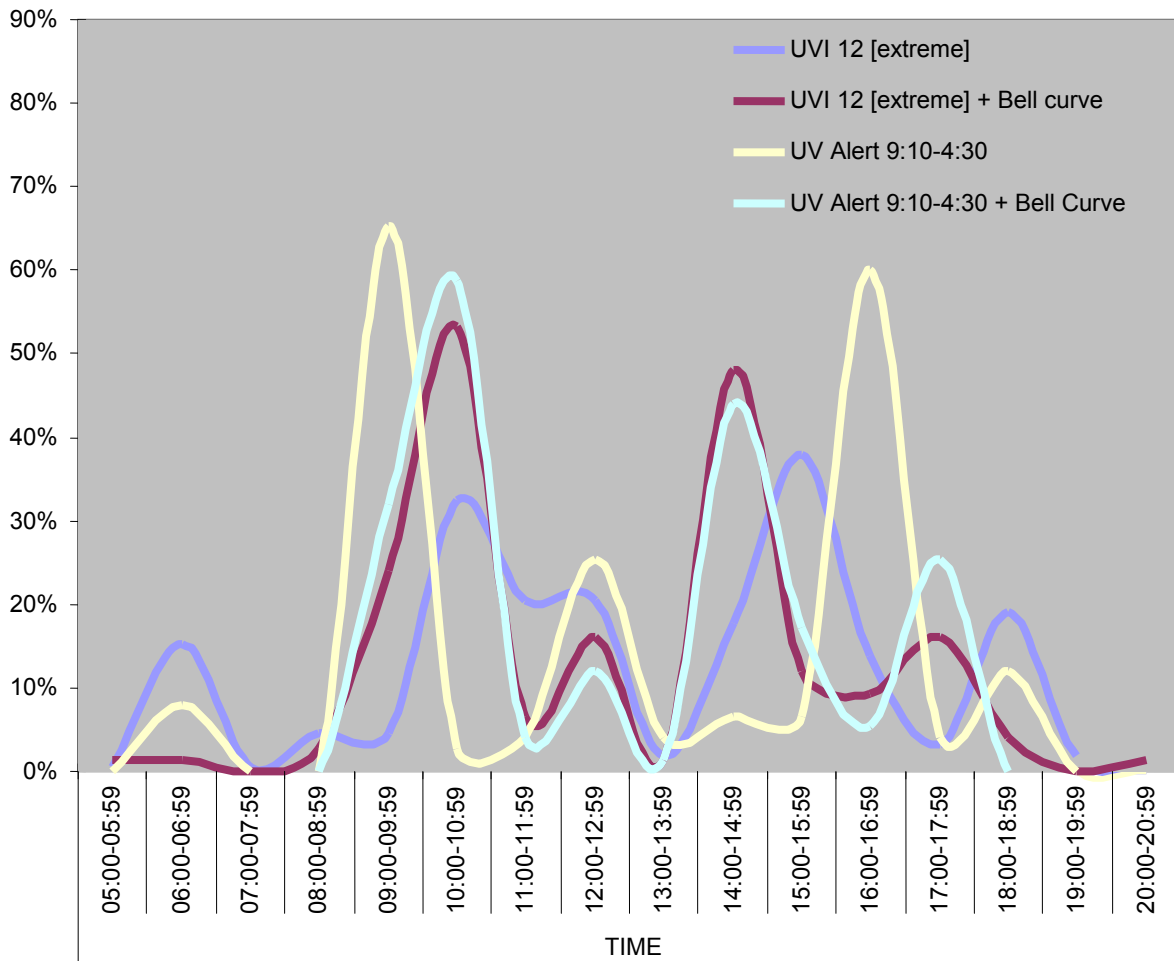
* denotes mean significantly greater at $p < .05$

All concepts were equally effective at emphasising the need for sun protection. However the bell-curves were significantly better at emphasising that UV conditions peak at solar noon and that outdoor activities should be planned for earlier mornings and later afternoons. Conversely *UVI* and *UV Alert* were significantly more likely to mislead participants into believing that UV conditions remain constant throughout the day and that the risk of sunburn is equal at anytime.

Times to stay protected

Participants were next asked in an open-ended manner the following question: "Looking at this information, at what times of the day do you think it will be important to protect yourself from the sun today?". Responses were recorded as times of the day and are displayed per concept in Figure 9 below.

Figure 9: Important times to use sun protection



It should be noted that many participants responded in terms of a time range (e.g. "10am–2pm"). As such the distributions displayed in Figure 11 should be considered in terms of time ranges, not specific times *per se*. For instance participants viewing *UV Alert* consistently suggested the times "9:10am–4:30pm" as per the alert message. However smaller proportions viewing *UV Alert* also nominated 12:00pm suggesting some awareness of the importance of solar noon to UV conditions, and others suggested 6:00am–6:00pm (essentially dawn to dusk) suggesting ignorance of the variability of UV conditions throughout the day.

Although viewers of *UV Alert Bell-curve* were also exposed to the same “9:10am–4:30pm” message, their responses were much more consistent with viewers of *UVI Bell-curve*, who concentrated upon the times between 10:00am and 2:00pm, corresponding to the ‘purple’ times of the day when the UV Index would be ‘extreme’, and midday, corresponding to the apogee of UV conditions as indicated by the graphs.

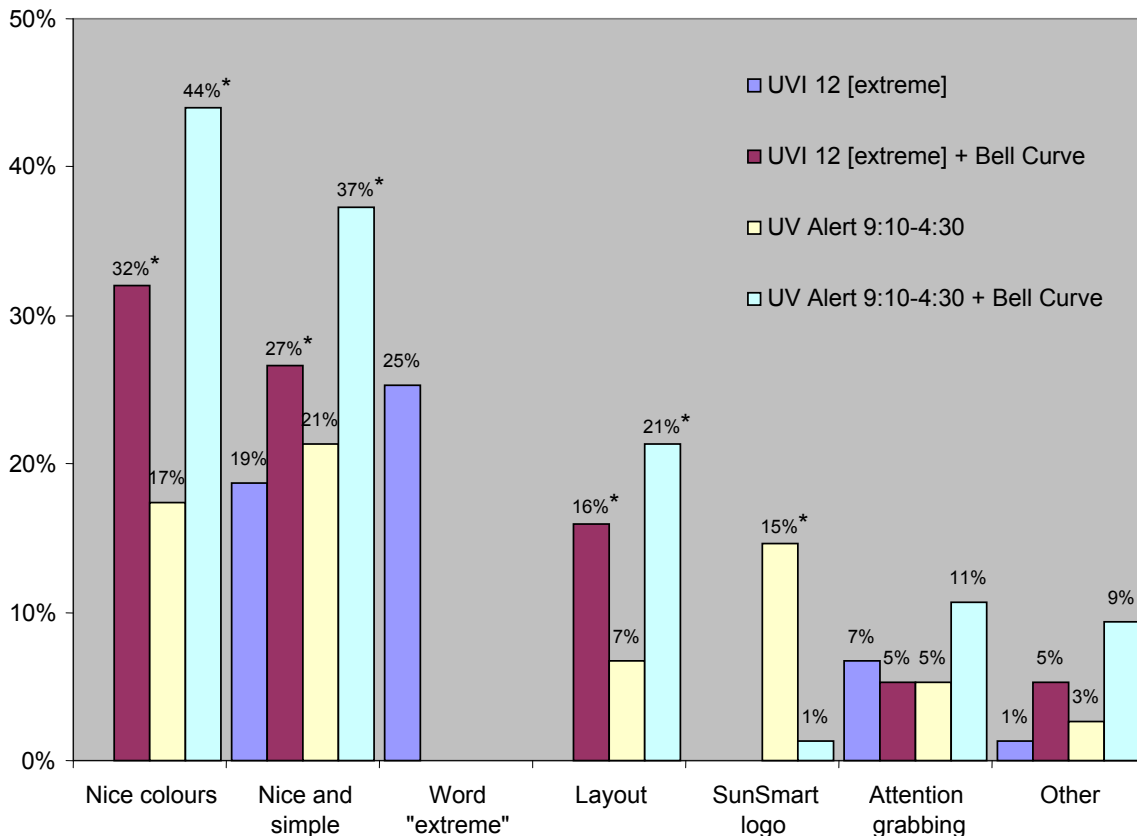
Participants who saw *UVI* were given no indication in terms of time for when it is important to take sun precautions. The most salient time for these participants was 3:00pm (corresponding to the commonly perceived ‘hottest’ part of the day). These results correspond to previous data that suggest around half of the population does not understand the importance of solar noon in relation to UV conditions and makes presumptions based upon temperature instead (Carter, 2005). The next largest proportions viewing *UVI* nominated 10:00am (onwards) and midday (solar noon), suggesting the other half of respondents had a fair idea. A final proportion of respondents who viewed *UVI* suggested 6:00am to 6:00pm, slightly higher than the proportion viewing *UV Alert*.

These results suggest that many misconceptions exist surrounding variation in UV conditions throughout the day, and that the traditional display format of the *UVI* does little to alleviate such. Participants viewing *UV Alert* clearly incorporated the “9:10am–4:30pm” message and it appears that this concept is better at demonstrating the variability of UV conditions throughout the day than *UVI*; but only marginally. Clearly the bell-curves are better at describing the variation of UV conditions throughout the day, by highlighting the importance of solar noon and downplaying the importance of temperature. It does not appear that viewers of *UV Alert Bell-curve* entirely ignored the “9:10am–4:30pm” message: a slightly higher proportion who viewed it nominated the 4–5pm end time in comparison to those who viewed *UVI Bell-curve*.

Things Liked

Participants were asked in an open-ended manner what things they particularly liked about each concept. Multiple responses were recorded and later coded into themes as outlined in Figure 10 below.

Figure 10: Things particularly liked about each concept



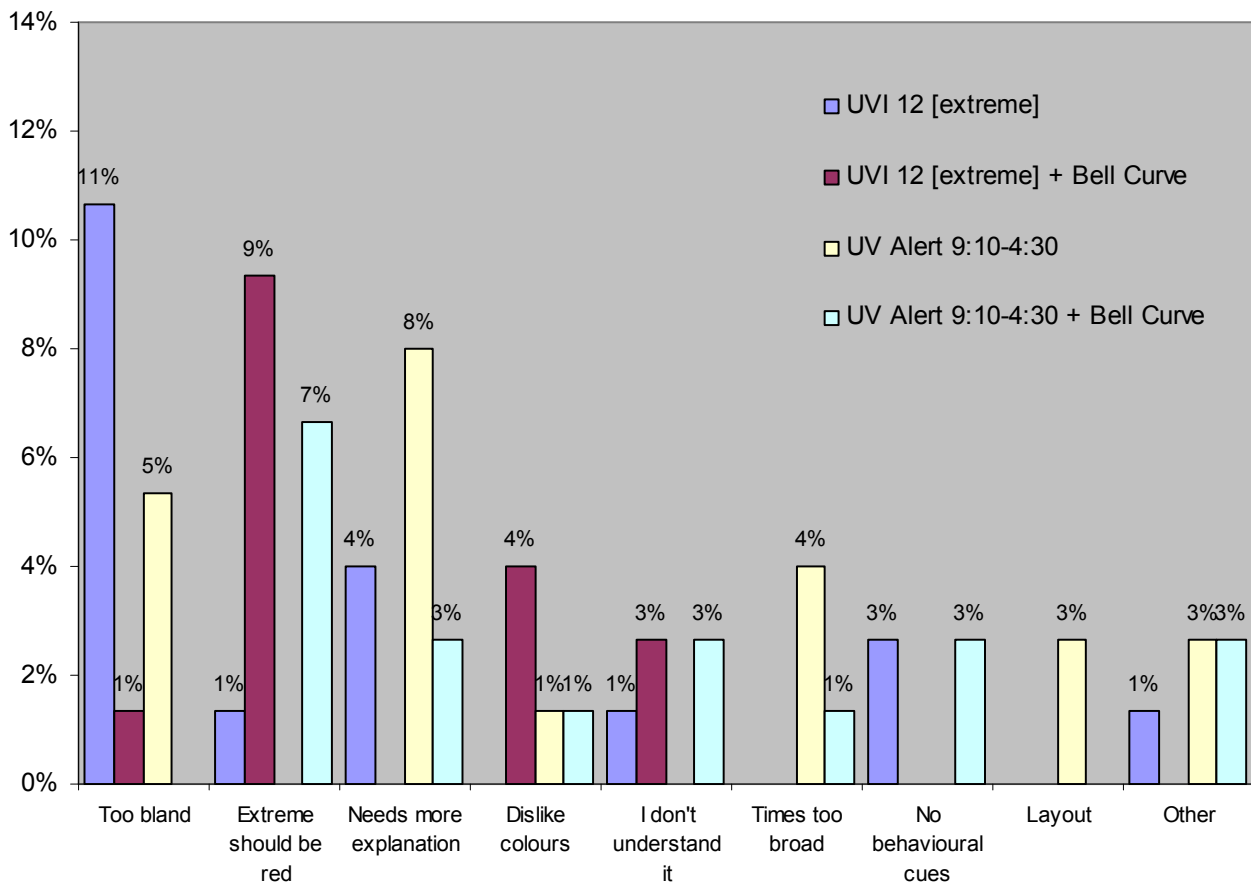
* denotes significant greater proportion at $p < .05$

The *UVI* concept was admired for its simplicity, and the use of the word [extreme] to clarify the apparently mysterious 'UV Index: 12' statement. The *UV Alert* concept was even more admired for its simplicity; but not to a significant extent. It was also admired for the aesthetics of its colour-scheme and general layout, and a significantly higher proportion of respondents made favourable mention of its use of the *SunSmart* logo, in comparison to either of the bell-curve variants which also included the logo. *UVI Bell-curve* was admired to a statistically significant extent over *UV Alert* for both its colour-scheme and layout and over *UVI* for its simplicity. Finally *UV Alert Bell-curve* was admired to a statistically significant extent over *UV Alert* for its layout, colour-scheme and simplicity.

Although one might expect the simplest of the concepts (*UVI*) to be most admired for its simplicity and the concept containing the most information (*UV Alert Bell-curve*) to be least so, the reverse was actually observed. This result can allay fears that a large proportion of the Australian population might be unable to understand the bell-curve concepts (Carter, 2004).

Things Disliked Participants were then asked in an open-ended manner what things they particularly disliked about each concept. Multiple responses were recorded and later coded into themes as outlined in Figure 11 below.

Figure 11: Things particularly disliked about each concept

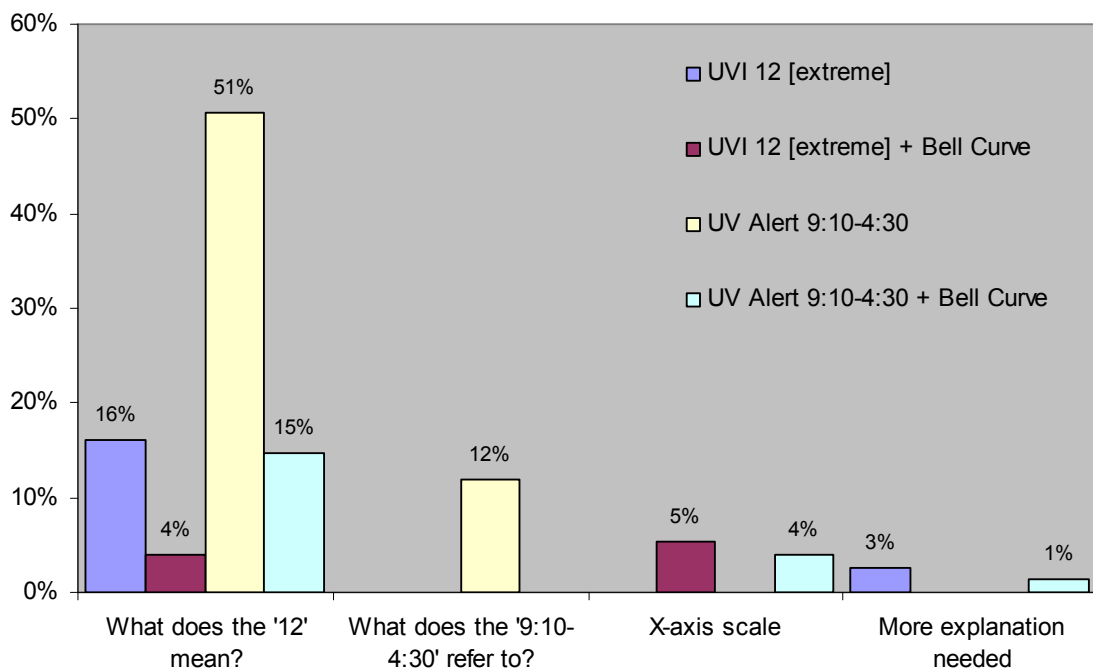


Overall there were only a minority of participants who stated there were things about each concept that they disliked. For *UV Alert* this involved 24% of participants, for *UV Alert Bell-curve* it involved 21%, for *UVI* 21%, and *UVI Bell-curve* 17%. The major criticisms levelled at *UVI* were that it was too bland, required more explanation and had no behavioural cues (e.g. "yes, but what does

it mean I should do?”). The largest criticism for both of the bell-curve concepts was that red, rather than purple, should indicate ‘extreme’. However only a small proportion of participants stated that they disliked the colours compared to the much larger proportions who stated that they liked them (see Figure 11). Similarly, small proportions of participants stated, or admitted, that they did not understand the bell-curve graphs; reinforcing the notion that the bell-curve concepts were easily understood. The *UV Alert* concept was disliked the most, but for a greater variety of reasons than the other concepts. Its greatest criticism was that the “UV Alert 9:10am-4:30pm” statement required more explanation, followed by it being disliked for its blandness, the perceived dubiousness of its message, and its layout.

Things Confusing Participants were finally asked in an open-ended manner what things they found confusing about each concept. Multiple responses were recorded and later coded into themes as outlined in Figure 12 below.

Figure 12: Things found confusing about each concept



Attention is immediately drawn to the majority of participants who viewed the *UV Alert* concept who stated that the ‘Max 12’ was confusing. It is interesting to note that an equal proportion of participants who viewed *UVI* thought the ‘12’ was just

as mysterious as those viewing *UV Alert Bell-curve*, even though the former included the category label [extreme]. Judging by the relatively few confused participants viewing the *UVI Bell-curve*, it appears that there was an interaction of the bell-curve and [extreme] label whereby the meaning of the '12' was made abundantly clear to these respondents. It is also significant that while a number of participants viewing *UV Alert* thought the statement 'UV Alert 9:10am-4:30pm' was confusing, none viewing *UV Alert Bell-curve* found it so; it would appear that the bell-curve served as all the explanation that the latter participants needed. The only other complaint about the bell-curves was that the x-axes were indistinctly marked, making them confusing to read.

4 Conclusions and Recommendations

UV Alert

The results of the present investigation suggest that *UV Alert* performed poorly. It was considered significantly more confusing than any other concept and significantly more suspicious than either of the bell-curve variants. Of all four concepts, it was also considered to a non-significant extent the most disliked and annoying, and least worrisome, interesting and least associated with sun protection. *UV Alert* was also significantly more likely than either of the bell-curve variants to mislead participants into believing that UV conditions, and the risk of sunburn, remain constant throughout the day.

The problems with *UV Alert* do not appear to have been caused by its layout, aesthetics or use of the *SunSmart* logo; these were well liked. However over half of participants who viewed *UV Alert* were confused about the 'Max 12' statement, and over one-quarter (28%) made clear misinterpretations of it. Evidence of the extent to which Australians understand the UV Index remains equivocal (Carter, 2005; *c.f.* Blunden *et al.*, 2004), but using as a guide the proportion of similarly confused participants viewing *UVI* (13%; *i.e.* less than half), we can be confident that the present confusion was exacerbated by the ambiguous wording used in *UV Alert*.

To a lesser extent, participants were also confused about the statement 'UV Alert 9:10am-4:30pm'. That is not to say that participants were unable to comprehend its meaning or intent; Figure 9 clearly suggests otherwise. Rather, they seemed confused and somewhat suspicious of the rationale underlying the statement. However, it appears that incorporating the 'UV Alert' statement with the bell-curve provided ample rationale for participants viewing *UV Alert Bell-curve*, who were not confused or suspicious at all. Indeed, providing the 'UV Alert' statement alongside the bell-curve appears to have enhanced *UV Alert Bell-curve* which modestly outperformed *UVI Bell-curve* on most measures.

UV Alert Bell-curve

In stark contrast to *UV Alert*, *UV Alert Bell-curve* was rated as significantly more interesting than any other concept, and significantly more believable and significantly less confusing and suspicious than *UV Alert*. Of all four concepts, it was also to a non-significant extent most associated with sun-protection, the least disliked

and was considered least boring, confusing, suspicious and annoying. Furthermore, *UV Alert Bell-curve* was significantly better than *UV Alert* at emphasising that UV conditions peak at solar noon and that outdoor activities are best planned for earlier mornings and later afternoons. Overall, *UV Alert Bell-curve* appears to have performed best out of all the concepts because it contained the most information, allowing for maximal comprehension.

Recommendations

The present results strongly suggest that *UV Alert Bell-curve* should be used whenever possible in preference to *UV Alert*. However, if it is not practicable to be rid of the *UV Alert* concept, it is recommended that the 'Max 12' be modified to reduce the considerable confusion caused. One possibility is to use the phrase 'Max UV Index: X [category label]' (see Figure 13). Alternatively, the 'UV Alert' could be prefixed by the appropriate UV Index category, which proved popular with participants (e.g. 'Extreme UV Alert: 9:10am-4:30pm', 'High UV Alert: 11:00am-1:00pm', 'Low UV Alert: 12:00pm-12:20pm', etc.) (see Figure 14).



Figure 13



Figure 14

One disadvantage of the *UV Alert* concept that will remain even with these modifications is that participants will still not be provided with a rationale behind the time range.

Although the *UV Alert Bell-curve* performed well, the present results suggest that there are still some aspects that could be improved. The most immediate is to modify the same 'Max 12' statement as above. Careful consideration also needs to be given to the rationale underlying the times appearing on the x-axis. Several pieces of evidence suggest that participants attended more to the '10am' and '2pm' labels than the 'UV Alert' text. If the NSCC is not concerned about this then

it is simply recommended to modify the 'Max 12' statement and ensure that alternative timescales are provided to states with daylight saving (see Figure 15) and those without daylight saving (see Figure 16).

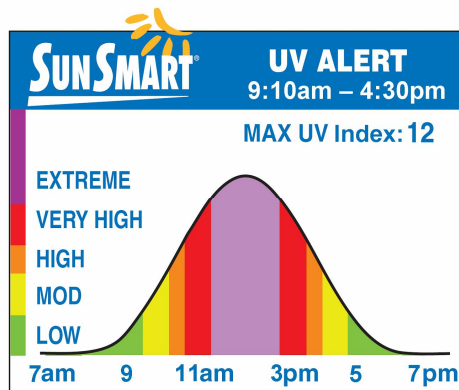


Figure 15

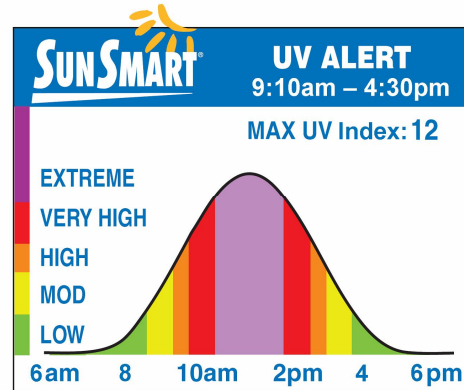


Figure 16

However if the NSCC is concerned that attention should primarily be drawn to any time when the UV Index is 3 or above then it is recommended that the x-axis be labelled with the beginning and end times clearly corresponding to low-moderate points along the spectrum. During warmer months the gap between the two labels could be filled with a single label below the apex of the bell-curve so as to also highlight solar noon (see Figure 17). Alternatively the x-axis could be labelled at regular time intervals, so as not to give prominence to any particular times of the day (see Figure 18).

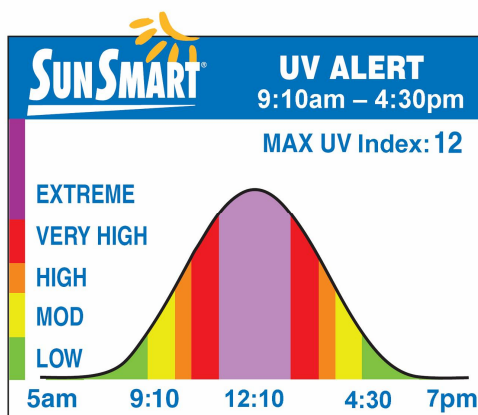


Figure 17

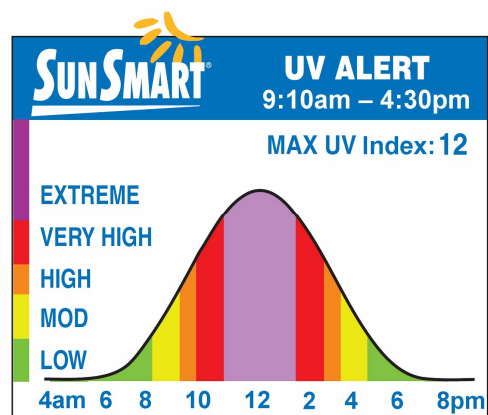


Figure 18

5 References

Blunden, A., Lower, T. & Slevin, T. (2004) Knowledge, Awareness, and Use of the UV Index Amongst the West Australian Public, *Journal of Health Communication*, 9(3), 207-222.

Carter, O. (2005) *An Assessment of Australians' knowledge of the UV Index*, Cancer Knowledge - Cancer Practice: Fifth State Cancer Conference, Perth, 18 October 2005 [URL: http://cbrcc.curtin.edu.au/owen_carter.htm accessed 9-11-2005]. [Also: Second revision submitted to *Journal of Health Communication* August 2005].

Carter, O. (2004) *Investigating better presentation formats for the UV Index*, Cancer Research Symposium, Perth, 24 September 2004. [URL: http://cbrcc.curtin.edu.au/owen_carter.htm accessed 9-11-2005]

CURTIN UNIVERSITY - UVI Concept Testing

CIRCLE CONCEPT TO BE SHOWN TO RESPONDENT

- UVI 12 [extreme] 1
- UV Alert 9:10am-4:30pm..... 2
- Bell-curve with UV Alert..... 3
- Bell-curve without UV Alert 4

SCREENING

QA. Are you a resident of Australia?

Yes 1
No..... 2 → CLOSE

QB. Have you been sunburnt at least once in the past year?
[DEFINED AS ANY REDDENING OF THE SKIN RESULTING FROM SUN EXPOSURE]

Yes 1
No..... 2 → CLOSE

Q1. To make sure we get a whole range of people, do you mind telling me your age? _____

IF REFUSES SHOW CARD Q1 AND ASK

Would you mind telling me which of the following age groups are you in?

- Under 18 years 0 → CLOSE
- 18-29 years 1
- 30-44 years 2
- 45 years or over 3 → CLOSE

Q2. Sex.

Male..... 1
Female 2

50/50 PER CONCEPT ←

SHOW DISPLAY

Q3. Please tell me all the thoughts and feelings that are going through your mind as you look at this information. **IF STARTS TO DESCRIBE WHAT INFORMATION IS SAYING, STATE:** Yes, but what are you thinking and feeling?

1st Mention: _____

What else?: _____

Anything else?: _____

Q4. I will read to you a number of statements which describe various feelings. As I read each one out to you, please tell me whether or not you felt that feeling whilst looking at the information.

Firstly, did you feel ... **READ OUT. VARY START POINT AND TICK ...** whilst you were looking at the display. **IF YES ASK: WAS THAT A LOT OR A LITTLE. CIRCLE AND CONTINUE WITH OTHERS**

		Yes <u>A Lot</u>	Yes <u>A Little</u>	<u>No</u>
[]	Interested.....	1.....	2.....	3
[]	Confused.....	1.....	2.....	3
[]	Told me something new.....	1.....	2.....	3
[]	Annoyed.....	1.....	2.....	3
[]	Suspicious.....	1.....	2.....	3
[]	Bored.....	1.....	2.....	3
[]	Worried.....	1.....	2.....	3

Q5. What is this information telling you? **PROBE FULLY**


1st Ment : _____


What else? : _____

What else? : _____

SHOW CARD Q6

Q6. How believable is this information? Would you say it is...

Very believable..... 1  Q6
Somewhat believable..... 2

Not very believable..... 3  Q6a
Not at all believable..... 4

6a) Why do you say that?

SHOW CARD Q7

Q7. After looking at this information, how much more or less of an understanding do you have of UV conditions?

- Much greater understanding 1
 - More understanding 2
 - About the same understanding 3
 - Less understanding 4
 - Much less understanding 5
-

Q8. Is there anything about the way the information is displayed that you particularly like? What is it? Anything else?

Nothing liked 99

Q9. Is there anything about the display you particularly dislike?

Nothing disliked..... 99

Q10. Is there anything about the display you find particularly confusing?

Nothing found confusing 99

SHOW CARD Q11

Q11. To what extent does the display make you think about sun protection?

- A lot 1
 - Quite a bit 2
 - A little 3
 - Not much 4
 - Not at all 5
-
-

Q12. The display says some things about UV conditions. For each of the following please tell me whether or not this is something the display implies. **TICK AND ROTATE START POINT. IF YES ASK: WAS THAT A LOT OR A LITTLE. CIRCLE AND CONTINUE WITH OTHERS**

	Yes a lot	Yes a little	No	Not sure
[] The UV will be 12 for all of today	1	2	3	9
[] UV conditions will be strongest around midday	1	2	3	9
[] You should use sun protection today	1	2	3	9
[] Plan outdoor activities for early morning or late afternoon	1	2	3	9
[] Take extra sun protection precautions in these conditions	1	2	3	9

Q13. Looking at this information, at what times of the day do you think it will be important to protect yourself from the sun today?

Q14. Where you born in Australia or overseas?

Australia 1
Overseas 2

SHOW CARD Q15

Q15. Which of the following best describes you?

Full-time employed..... 1
Part-time employed..... 2
Home Duties 3
Student..... 4
Unemployed..... 5
Retired..... 6

SHOW CARD Q16

Q16. In what year did you leave school?

Year 8 or below 1
Year 9 or equivalent..... 2
Year 10 or equivalent..... 3
Year 11 or equivalent..... 4
Year 12 or equivalent..... 5

SHOW CARD Q17

Q17. What is your highest educational attainment?

Certificate 1
Advanced Diploma and Diploma..... 2
Bachelor Degree 3
Graduate Diploma and Graduate Certificate..... 4
Postgraduate Degree 5
None of these 6

Q18. What is your postcode? _____

IF SAYS “Don’t know”, ASK: What is your street and suburb? _____

END OF INTERVIEW

First name: _____ Phone number: _____

I certify that this is a true, accurate and complete interview. I will not disclose to any other person the content of this questionnaire or any other information relating to this project.

INTERVIEWER'S SIGNATURE: _____ DATE: ___/___/05
