## The Impact of Role Models on Sun Protective Behaviours: Expert Paper

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The impact of media image on body satisfaction and self esteem has been the subject of a large body of research across areas such as eating disorders, sexualisation, smoking initiation and gender stereotyping (Fabrianesi et al., 2008; Jones & Rossiter, 2008; Sargent 2005; Ogden & Sherwood, 2005) as well as sun exposure.

We cannot locate any specific content analyses for television programmes or websites either in the UK or internationally relating to sun tanning, sun exposure risks or effective sun protection, however the portrayal of sun-related behaviours in all media forms is likely to have some influence on perceptions of desirable body image. The magnitude of this effect across different media forms is un-researched, as is the actual or potential impact on the effectiveness of sun protection interventions. Two major content analyses of print media from Australia and the USA respectively (Dixon et al., 2007, Miner & Baker, 1994) indicate that deep tanning is glamorised in magazines, poor sun-protective behaviours are commonly shown and a substantial quantity of implicit messages are misleading or contradictory.

Younger age groups, particularly females, appear to be more influenced by media images. By the age of 8, girls are aware of societal images of female beauty and the use of media images to compare self image with the media portrayal of ideal increase markedly between the ages of 8 - 12 and leads to dissatisfaction (Bessenof, 2006; Dohnt & Tiggemann, 2006).

The international literature indicates that preadolescent girls use media images as a basis for deciding on ideal physical attractiveness, even though the images portrayed are unrealistic or represent poor role models and unwise behaviours (Fabrianesi et al., 2008). One UK study suggests that the media's influence may be complex (Champion & Furnham, 1999). Australian evidence that magazines may have a stronger impact than television (Slater & Tiggemann, 2006) may not be generalisable to other markets and websites such as Bebo or Facebook may also be influential. We cannot locate any studies that have examined potential cross-media influence in the UK context.

The following table provides an indication of the relative size of teenage and women's magazines targeted at a young age group. What we cannot determine is overall readership; pass-on readership is likely to be high, meaning that a significant number of young women regularly read these titles.

Table 1:	Circulation data a	as at June 2009 (Source:	Audit Bureau of	f Circulations, 2010)

Teenage Magazines		Women's Magazines with young profiles		
Publication	Audited circulation	Publication	Audited circulation	
Sugar	140,599	OK!	599,847	
Top of the Pops	119,739	Closer	530,371	
Bliss	86,054	Heat	445,192	
Shout	76,568	New!	400,189	
Mizz	54,068	Hello!	397,634	

It is of concern that a television programme "Sunset Tan" set in a tanning salon exists in the USA and regularly features celebrities such as Britney Spears praising tanning (Poorsattar and Hornung, 2008). While this series is not available via scheduled TV channels, it is available online: <a href="http://video.tvguide.com/SEARCH/Sunset%20Tan">http://video.tvguide.com/SEARCH/Sunset%20Tan</a> Prior research indicates that celebrity role models such as Paris Hilton and Jessica Simpson who openly endorse the use of sunbeds do influence the tanning behaviours of teenage girls (Rawe & Scully, 2006). Katie Price, a known endorser of sunbed use, has her own ITV2 reality show "What Katie Did Next" (Thursdays, 9pm). Whether she discusses or shows the use of sunbeds during the show should be monitored.

There have been several recent media campaigns that use celebrity endorsers to caution against sunbed use (see, for example "Dazzle don't Frazzle" featuring Nicole Roberts <a href="http://www.heatworld.com/Celeb-News/2010/02/Dazzle-Dont-Frazzle-Join-our-campaign-here/">http://www.heatworld.com/Celeb-News/2010/02/Dazzle-Dont-Frazzle-Join-our-campaign-here/</a>). Recent media coverage suggests an increasing number of celebrities are "proud to be pale" (Hill, undated), however the impact of such activity on actual behaviour change has not been assessed. Also un-assessed is the impact of positive and negative behavioural messages from different celebrities in terms of their relative influences on sun protection behaviour. Table 2 provides an overview of consumer media reporting on celebrities and sunbed use and / or sun tanning overall.

Table 2: Celebrities Supporting or Opposing Sunbeds or Tanning & Celebrities Reported to

have had Skin Cancer (drawn from consumer media coverage)

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Specifically	Supporting	Tanned – but	Opposing	Celebrities				
supporting sunbeds	fake tans	no details of	unsafe	reported to				
		how	tanning e.g.	have had skin				
			sunbeds	cancer				
Britney Spears	Victoria	Cheryl Cole	Nicola Roberts	Ewan McGregor				
(ContactMusic,	Beckham	(Lichtenstein,	(Metro, 2010)	(Hansworth,				
2007)	(Lichtenstein,	2009)	Denise van	2008)				
Paris Hilton, Jessica	2009)	Amanda	Outen	Melanie Griffiths				
Simpson (Rawe &	Colleen	Holden (The	(Thomas,	(Roberts, 2009)				
Scully, 2009)	Rooney	Sun, 2009)	2008)	Elizabeth Taylor				
Jordan / Katie Price	(Littlejohn,	Alex Curran	Gemma Merna	(Chan, 2002)				
(marieclaire 2010)	2010)	(Harkin, 2009)	(Hope, 2009)					
Nicole Polizzi	Duncan James							
("Snooki")	(Mould, 2010)							
(Eisinger, 2010)								
Miley Cyrus (Gold,								
2009)								
Amy Winehouse								
(Mirror, 2009)								
Hulk Hogan (Shaath,								
2009)								

While there is no data on the impact of positive role models on sunbed use or sun protective behaviours, US literature suggests that if celebrities continue to openly endorse unwise sun exposure practices, perceived social norms are reinforced and safe sun exposure messages that conflict with this perception are likely to be disregarded (Branstrom et al., 2004; Lowe et al., 1999; Hillhouse et al., 1997).

There is some evidence from studies of US university students that media literacy education reduces the effect of media images on body dissatisfaction in the short term at least (Watson & Vaughn, 2006; Yamamiya et al., 2005). There is no evidence of long term effects or effectiveness of this approach. This type of intervention may not be effective with young children as crticial cognitive skills are not yet fully developed; children under the age of approximately 7 cannot use information outside the context in which it was acquired even when prompted; children aged between 7 and 11 are unable to use information without reminders in the context in which actual behaviour occurs (Eagle, 2007).

A further concern is the recent decision to permit product placements in television programmes produced within the UK (Neate, 2010). This involves the use of a recognizable branded product in movies or television programmes and in newer electronic media such as videogames. This placement may be paid for directly, be provided as part of an exchange of goods or services, or be a part of a joint promotional package (Karrh, 1998). Placement can take many forms in traditional media, from passive (the product is shown as part of the setting, but is not actually used), through to active (the product is used by an actor with or without verbal acknowledgement as part of the script). Placement

therefore provides an indirect form of celebrity endorsement for the product featured (Law & Braun, 2000).

While products such as alcohol, tobacco, gambling and foods deemed to be of low nutritional value will not be permitted and the BBC will remain banned from promoting any products, there is technically nothing to prevent sunbeds being featured in UK-produced programmes. This is a matter that should be addressed with some urgency. Conversely, of course, there is an opportunity to use product placements to encourage effective sun protective behaviours. There have been calls in markets such as Australia to encourage producers / editors to improve the portrayal of sun protection behaviours, given the positive impact of entertainment-based education strategies in areas such as cardio-vascular health and immunization (McDermott et al, 2005). This strategy should be given serious consideration within the UK.

## **Declaration of interests**

Julia Verne is the Director of the South West Public Health Observatory

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