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Is there an App for that?: Social media uses for road safety

Murray, C.¹ & Lewis, I.¹

¹ Centre for Accident Research and Road Safety – Queensland, Queensland University of Technology

Abstract

The use of social media has increased dramatically in recent years in the areas of public health and injury prevention, with many organisations creating online and social media content. Despite the adoption of such media by modern society, research relating to the design and evaluation of social media for the promotion of health issues is very much in its infancy.

A timely review of the available evidence in relation to the use of social media campaigns from both the road safety and broader public health context will be undertaken. In particular, this paper will address the questions of what social media should be developed, how it should be evaluated, as well as what should be the key measures of success and to what extent do these measures relate to practically significant outcomes, such as behaviour change.

Much like more traditional media campaigns, social media may be best regarded as another approach within the array of potential approaches that a health advertising researcher or practitioner may utilise. With younger demographics becoming less likely to engage with more traditional advertising mediums relative to their preference for social media, social media's most important role in the road safety advertising context may be to offer the means of delivering road safety messages to high risk, younger road users.

Keywords

Social Media, Road Safety, Behaviour Change, Media Campaigns, Evaluation

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In 1993, within Elliott's meta-analysis of road safety advertising campaigns, mass media campaigns identified and examined for their effectiveness included, unsurprisingly, television and radio-based campaigns. Elliott reported that television was associated with the largest effect size overall; however he noted that this finding was likely to be confounded with exposure, such that because television had relatively greater capability of reaching a larger audience than other advertising mediums, then it also had an increased chance of achieving its persuasive objectives. Almost two decades on from Elliott's research, evidence suggests that television is now not necessarily the most wide reaching medium particularly when attempting to reach specific demographics (e.g., younger demographics; L2 Think Tank, 2011). In place of these more traditional media forms is social media which has entered the mass media context with the appeal of wide reach particularly for younger demographics. Despite the rapid rate of technological advancements in today's society as well as the adoption of different forms of social media in the promotion of health issues including road safety, currently, limited evidence exists in relation to the role and effectiveness of social media within the health advertising context more broadly and the road safety advertising context more specifically.

This paper will provide an overview of the available literature relating to the use of social media as a persuasive strategy within the array of potential mediums/approaches that may be used to promote health messages and/or campaigns. From this review, some suggestions for the future direction of research in this area, and what social media practice could or should do, will be made.

Literature selected for this paper was sourced from a variety of search tools and electronic databases including Elsevier, ProQuest and EBSCO to identify full-text articles published from 2007 and onwards. These papers were restricted to articles published in English. Additional resources were found utilising Google search engine. Search terms for all sources included "social media", "road safety", "public health", "diabetes", "SMS", "text message", "mobile phone", "smart phone", "internet advertising", "social media and advertising", "social networks", "new media", "websites", "twitter", "facebook" and "YouTube".

The literature selected represents a sample of available articles, selected based on new information presented, advances in assessment methods and findings derived from evidence based research in relation to the role and effectiveness of social media in relation to health advertising broadly and road safety advertising more specifically.

The paper begins with a review of the types and extent of social media usage in Australia as well as a discussion of the varied definitions that have been associated with the term, 'social media'.

Defining 'social media'

While undertaking the research for this paper, it became apparent that there have been varied ways in which researchers and practitioners have defined 'social media'. For instance, Cohen (2011) cites a number of definitions for social media and while one definition outlined the concept as "... media for social interaction, using highly accessible and scalable communication techniques...social media is the use of web-based and mobile technologies to turn communication into interactive dialogue" another indicated it was closer to "today's

most transparent, engaging and interactive form of public relations". When attempting to research a particular phenomena, varied definitions of a concept make comparisons across studies difficult (akin to the adage of comparing apples and oranges) which, in turn, limits the ability to draw definitive and overall conclusions. Thus, an important first step for building a body of empirical evidence in relation to social media and its role and effectiveness, will require the adoption and explicit provision of a definition of social media by researchers and practitioners. In terms of what is consistent across definitions, there is often reference to the concepts of 'interaction', 'shar[ing]', and 'exchange'. Further, some other consistently identified characteristics of social media include references to terms such as text, online, audio, video, images, podcasts and similar multimedia communications (Doyle, 2011).

For the purposes of this paper, social media has been defined as a group of Internet-based applications that allow for the creation and exchange of User Generated Content (Kaplan & Haenlein, 2009, p. 61). This definition includes new media, defined as media based on the use of digital technologies, such as the internet, computer games, mobile phones and digital television (Abrams, Schiavo & Lefebvre, 2008, p. 3). More specifically, social media applications discussed in this review have been focused upon Facebook, YouTube, Twitter, and smart phone applications. The focus on these particular social media applications aligns with the notion that they provide the means to enable the dissemination of social media campaigns and/or initiatives, and reflect four of the most popular, and commonly used social media platforms based on usage statistics (as will be discussed within the subsequent section of this paper).

Specifically, the applications included can be defined as:

Facebook: a social networking website that allows users to add people as 'friends' and send them messages on-line. Users can also provide short updates on their personal profiles to notify 'friends' about themselves. Users can also join networks organised by organisations or 'friends' as well as 'like' organisation/campaign pages (Usher, 2011, p. 325).

Twitter: a social networking and micro-blogging service that enables users to send and read other users' messages. These 'tweets' are text-based posts limited to 140 characters and are displayed on authors' profile pages. All users can send and receive 'tweets' via the Twitter website or compatible external applications, such as those available for smart phones (Usher, 2011, p. 326).

YouTube: a video-sharing website where users can upload, share and view videos. YouTube makes it possible for anyone with an internet connection to upload a video that a worldwide audience can watch within a few minutes (Usher, 2011, p. 327).

Smart phone: a mobile phone which includes functions similar to those found on personal computers. Smart phones provide a solution for information management, mobile calls, email sending, and internet access (Business Directory, 2011).

Social media usage: Types and extent

In Australia, social media usage research (Nielsen's 2010 Social Media Report) shows that 9 million Australians are interacting via social networking sites with Facebook being the most popular site with 75% of the usage overall. YouTube and Wikipedia follow with 70% and

65% of the usage respectively, while sites Twitter and Flickr account for 34% and 33% of the usage respectively.

These data indicate that a large proportion of the Australian population is exposed to social media, providing another potential avenue and medium for communicating with users directly. This communication can be delivered directly to consumers without clutter or dilution, direct to email in-boxes, Facebook accounts, Twitter profiles or personally searched by consumers on YouTube, or downloaded onto their smart phone. These applications allow for consumers to ‘choose’ to be communicated with by specific organisations or brands, allowing for consumers to show true interest in a brand and associated messages.

As indicated, the use of social media in Australia is growing and is fast overtaking the use of traditional, mass-media mediums. Statistics maintained by Australian social media commentator David Cowling of SocialMediaNews.com.au, track unique Australian visitors (UAV) to many social media sites and report monthly on trends and usage. These statistics show a continued increase in the number of UAV to major social media sites in the first third of 2011 (January – April). For the applications defined by this paper, usage in Australia was as follows, with all statistics reflecting the continuing trend towards increasing usage:

Application	January 2011	April 2011	Difference
Facebook	9.8 million	12 million	+81%
YouTube	6.7 million	10 million	+67%
Twitter	1 million	2 million	+200%

While trends are relatively easy to understand with internet based applications (e.g., Facebook), social media forms specifically designed for mobile applications are slightly more difficult to track.

Mobile phone take up in Australia is strong with, on average, one handset per person. Of the total mobile phone ownership, 43% of people sampled in a 2010 survey reported owning a ‘smart phone’ while 26% reported having participated in mobile social networking. Of note, 66% of mobile social networkers are under 35 years of age (Nielsen 2010 Social Media Report).

Of note, 42% of respondents to the Australian Mobile Phone Lifestyle Index survey (based on N = 3758), conducted by the Australian Interactive Media Industry Association in 2010, had browsed the internet on their mobile phone, with 45% visiting websites on at least a monthly basis (Mackay, 2010, p. iii). In the same survey, 41% of respondents reported downloading a mobile phone application, while another 8% reported attempting to, but not completing, to download a mobile phone application (Mackay, 2010, p. 72). Again, relevant to this paper, 58% of respondents reported downloading applications for personal use, with health and wellbeing-related information accounting for 33% of applications downloaded (Mackay, 2010, p. 75).

Further, as noted previously, evidence of the popularity and use of social media by younger demographics surpassing their reliance on more traditional forms of media is also amassing. For instance, almost twice the number of Generation Y’ers use Facebook every day than those who utilise more traditional media, such as television or newspapers (L2 Think Tank, 2011). Recent statistics also indicate that over half of all users of Facebook in Australia are aged 18 to 34 years (SocialBakers, 2011). Given the popularity of social media with younger

demographics, its potential to effectively ‘reach’ these younger demographics has been acknowledged by health promoters (Paek et al., 2010). In the road safety context, given that younger drivers represent a road user group at high risk of being involved in road trauma (Department of Infrastructure Transport Regional Development and Local Government [DITRD], 2009), advertising researchers and practitioners’ moves towards the use of social media to ensure the dissemination of road safety messages to the younger driver demographic are necessary and justified.

Social media campaigns: Commercial advertising context

Social media, and more specifically social media campaigns, are gaining momentum as viable means of delivering messages in the advertising and marketing fields. From a commercial advertising perspective, social media campaigns are often designed to gain sales, attract supporters or simply gain more attention for a brand (Stafford, 2011). Large multi-national organisations with products to sell are creating new and unique opportunities to engage with customers via social media campaigns. Organisations, such as Nandos and Virgin Blue, are seen as highly successful in the area of social media through innovative ways of connecting with customers and being able to demonstrate effective communication through the two-way communication evident in Web 2.0 platforms (Stafford, 2011).

For instance, Wotif.com, an Australian web-based company who offer discounted hotel rooms booked directly through their website, has been regarded as a successful user of social media, particularly via Twitter. Wotif.com first delivered Twitter specific specials to commemorate their 11th birthday with \$11 hotel rooms, on sale for 11 minutes, only announced on Twitter. This promotion saw Wotif.com’s Twitter followers grow by approximately 2000 on that day. This promotion worked because Wotif.com continued to deliver Twitter only specials (Kreativesparkdesigns, 2011). Now, Wotif.com offers a daily ‘wotdeal’ only available to their followers on Twitter. To find out about the deal, consumers need to have actively chosen to follow Wotif.com and are rewarded with special offers only available to them. While followers can forward these deals onto people not following Wotif.com via the Twitter re-tweet function, again, only users of Twitter can be exposed to the deals.

Similarly, consumers who chose to ‘Like’ an organisation on Facebook can also be exposed to rewards and special offers only available to them. In 2007, Ikea, the Swedish furniture company, both created their Facebook page and launched a new store in their home country. Without much money to market the new store, Ikea used Facebook. It posted photographs of approximately 200 of the company’s most popular furniture items and then invited their followers to ‘tag’ their name to a photo. Subsequently, that piece of furniture was given to the first person to ‘tag’ the item. Within minutes, all of the furniture photos had been tagged and the pieces claimed. This campaign was successful as it incorporated one of the most popular features on Facebook, tagging and uploading photos. The target audience already knew what to do and how to do it, so the campaign was clean and simple (Stafford, 2011).

Both of the above examples demonstrate a company’s intention to ultimately increase awareness of the brand, and have consumers experience favourable thoughts and feelings about the brand and product/s. Feelings play an important role in advertising campaign development and advertising can result in both positive and negative feelings (Edell & Burke, 1987). As explained by Edell and Burke (1987, p. 421), feelings contribute uniquely to attitude toward an advertisement, beliefs about the brand’s attributes and attitude towards the

brand. Positive feelings about an advertisement can result in positive feelings about a brand, and a change of attitude towards that brand (Homer & Yoon, 1992). As such, more modern social media campaigns can and should still be considered in terms of their effects upon more traditional measures of advertising effectiveness (persuasiveness), such as attitude to the brand and liking of the message and product.

From a YouTube perspective, one of the most successful social media campaigns in terms of persuading consumers and influencing individuals' attitude towards a brand, is the BlendTec "Will it Blend" campaign. BlendTec was a relatively unknown manufacturer of high-end kitchen equipment with a low market share. Channelled through the online video-sharing site, BlendTec regularly posts new videos showing 'extreme blending' whereby their product blends a range of popular consumer products. Whilst starting out as a piece of wood being blended as a joke, the site has become one of the most popular video sites on YouTube. Whenever a new and popular product is released, BlendTec takes advantage of the hype associated with the product's launch by simply asking "Will it blend?". The most popular video to date, with over 11.3million views, was the iPad blending experiment in 2010 (Stafford, 2011).

From special offers for online members and discount vouchers that go viral, large commercial organisations are using social media campaigns and positioning themselves as leaders in the social context domain due to their willingness to utilise this new media. Currently, however, overall there appears to be limited empirical evidence of the effects and potential success of such social media approaches in terms of more traditional measures of (persuasive) success, such as increased brand awareness, changes in attitude towards a brand and, ultimately changes in purchase related intentions and behaviour. Not all social media campaigns will be successful, but as with traditional campaigns, if goals are devised from the outset (whether a campaign aims to raise awareness or change attitudes, for example), and campaigns are executed carefully (e.g., in terms of thorough pre-testing and piloting of their materials) and evaluated effectively, then it is more likely that social media and social media campaigns will be successful in terms of persuading audiences and motivating purchases.

Although there are challenges with obtaining reliable and valid measures of the effectiveness of campaigns/messages delivered via more traditional media, such as television (see Lewis et al., 2009), social media campaigns offer some 'new' challenges. For instance, social media offers potential outcome measures in terms of the number of 'hits' to a site/or viewers to a page and the nature of comments provided in response to a stimulus (Paek et al., 2010); however, to what extent do such measures provide insight into any subsequent effects on individuals' attitudes and behaviours? In such an applied context as road safety advertising and health advertising more broadly, it is important for practical outcomes (e.g., behaviour change) to be investigated whenever possible.

Social media and health advertising campaigns

The term 'mass media campaigns' describes public communication campaigns and refers to a form of advertising, specifically, paid media advertisements designed specifically for a target concept (Delaney, Lough, Whelan & Cameron, 2004, p. 1). Rice and Atkin (2009, p. 436) defined such campaigns as "purposeful attempts to inform, persuade, or motivate behaviour changes in a large audience within a given time period". Health advertising usually involves attempts to persuade an individual to change their attitudes and ultimately behaviour, and is

generally more difficult to achieve success in than product advertising (Delaney et al., 2004; Job, 1988).

Typical mass media campaigns for health issues have placed messages in media that reach large audiences, most frequently through television, radio, printed press and billboards (Wakefield, Loken & Hornik, 2010, p. 1261); however, this exposure is often passive resulting from an incidental effect of using routine media. Despite some campaigns in the health behaviour field utilising new technology, such as internet, mobile phones and PDA's, recipients have generally had to actively choose to seek and review information through clicking a web link or similar (Wakefield et al., 2010, p. 1261).

Recently, the use of social media in the health promotion and advertising context has included campaigns targeting a range of issues including diabetes, sexual transmitted diseases, Autism, Swine Flu and every day health alerts (Ferrer-Roca et al. 2004; Franklin et al. 2006; Gold et al. 2010; Engaging Social Media, 2009; CDC 2011). These campaigns were designed to target particular health issues and demographics and sought to achieve specific campaign objectives.

For example, in 2008, researchers at the Burnett Institute, Melbourne, Australia undertook a project designed to evaluate a mobile phone text messaging-based campaign aimed at raising awareness of sexual health among young people. A sample of 1771 young people aged between 16 and 29 were recruited via a relevant youth focused music event, and participants received 12 unique messages over a 6 month period. Each message was tailored to suit the age of the sample size, aligned with a relevant event on the calendar (e.g. Mothers Day¹, Valentine's Day²) and other message driven characteristics (Gold et al., 2010).

Post campaign focus groups showed an overall favourable response to the messages; however, males indicated they were less likely to feel the messages related directly to them. Participants reported feeling the messages were personal and informal in delivery, and that they tended to remember the messages that aligned with annual events, such as Valentine's Day. Similarly, participants responded positively to the use of indirect language, however, they responded negatively towards the use of statistics. While participants were positive about the timeliness of the messages, a minority of male participants felt the messages became too 'routine' (Gold et al., 2010, p. 7).

The currently available evidence in relation to health-related social media campaigns suggests that a number of content and delivery components are more successful than others. For example, brief, targeted content is more successful than general messaging (Franklin et al., 2006), messaging that encourages self-management of issues may be better received and the perceived personal correspondence of campaigns tends to be viewed favourably. Similarly, Gold et al. (2010) suggests that key elements, such as message style, language and broadcast schedule, tended to be viewed favourably by their focus group participants. Of note, is Gold et al.'s (2010) use of qualitative research methods (i.e., focus group discussions) to explore participants' responses to their social media campaign. To the extent that qualitative approaches enable the gaining of a deeper understanding relating to individuals' thoughts, feelings, and responses, arguably, such approaches are particularly important and

¹ "Spare a thought for condoms this Sunday, they can help you have babies too (Chlamydia causes infertility) Burnet Institute PS Don't forget to call your mum" (Gold et al., 2010)

² "Roses are red, daises are white, use a condom if you get lucky tonight. Happy Valentine's Day! Love the Burnet Institute" (Gold et al., 2010)

relevant as research evidence relating to the role and effectiveness of social media campaigns is beginning to amass.

This paper now explores the available evidence in relation to the use of social media campaigns within the road safety advertising context.

Social media and road safety mass media advertising and campaigns

Historically, road safety advertising has utilised standard mass media characteristics including television advertising, newspapers, radio advertising, billboards, magazines, cinema, direct mailings, internet websites and face-to-face (Wundersitz, Hutchinson & Woolley, 2010). Different types of media can have synergistic affects, for example, print media can encourage people to view television campaigns and television campaigns may promote viewers to visit a website (Wundersitz et al., 2010, p. 12). As noted previously, while traditional media is a one-way broadcast medium (newspapers, television), social media is two-way communication (Green Marketing TV, 2010).

It has been acknowledged elsewhere that, in terms of health issues, road safety and road safety advertising campaigns represent a unique context in terms of the targeted behaviour and audience, message and campaign characteristics, and the relationship with enforcement and punishment (Delaney et al., 2004). These issues and those relating to the legal status of the target behaviour within campaigns add further complexity to the development, delivery and evaluation of road safety mass media campaigns (Delaney et al., 2004). Often the perceived effectiveness may be associated with recall, saturation, market share and air-time, yet the potential outcome of behaviour change is difficult to measure. These issues exist in the area of social media also. Like with mass media, social media campaigns need to be developed with end goals in mind, for instance, does a campaign aim to raise awareness?, induce attitude change? and/or possibly evoke a change in behaviour? (see Elliott, 1993). Content and delivery is shaped by these outcomes.

While commercial advertising values social media relevant to website traffic, interactions/contacts, customer engagement, sales, retention and profits, attitudinal and behaviour change advertising (i.e., health advertising seeking practically significant outcomes) needs to include assessment of additional outcomes of campaign effectiveness, such as changes in the health behaviour targeted. For example, in the field of road safety, success is often attributed to a reduction in fatality, crash rates or in terms of increasing engagement in “good”, safe behaviour/s and decreasing engagement in “bad”, risky behaviour (Dann & Fry, 2009, p. 226). With this in mind, social marketers are under increasing pressure to evaluate campaigns as a measure of social change efficiency and effectiveness. There are challenges, however, with how such evaluations are conducted (e.g., see Lewis et al., 2009 for a review of some challenges associated with evaluating traditional road safety advertising campaigns).

In the area of road safety, social media campaigns have begun to be utilised. Australia has shown a tendency to be an early adopter of new mediums in advertising and marketing, and it is apparent that social media in the context of road safety continues this trend. For example, existing television commercials, produced by the Victorian Transport Accident Commission have been uploaded to the organisation’s YouTube channel (Campaign Brief, 2010) as have campaign commercials for the Western Australian Office of Road Safety (ABC Premium News, 2011).

Other road safety-related campaigns have been devised specifically for dissemination via social media mediums. For instance, the “Embrace Life” seatbelt campaign from the Sussex Safer Roads Partnership in the UK, designed a YouTube commercial targeting seatbelt use in their community. While the campaign was supported by branded artwork around the community driving traffic to the campaign website, the YouTube video specifically attracted world-wide acclaim for its content and delivery (Osocio, 2010).

Similarly, a video montage of television commercials produced by the Victorian Transport Accident Commission (TAC) was launched in late 2009 on YouTube to commemorate the 20th anniversary of the organisations first television commercial. Whilst this commercial also ran on free-to-air television, the campaign received extensive viral support through the TAC’s YouTube channel which post-campaign became the third most viewed sponsored channel on YouTube (Campaign Brief, 2010).

Further, since 2009, a number of social media campaigns have been developed including the Queensland Department of Transport and Main Roads’ online campaign, Share My Story³, Vic Roads’ CityGT iPhone application⁴ and their online campaign Don’t be a D***head⁵. The New South Wales Roads and Transport Authority launched an online anti-speeding Pledge campaign, while also using YouTube to distribute the television commercial developed for their Speeding, “No one thinks big of you” campaign (Jones, 2010; Watsford, 2008).

The CityGT campaign, designed to look like a regular driving game and not a road safety campaign, attracted thousands of people to its public launch, and was downloaded more than 30,000 times. The game was ranked in the top three ‘hottest Apps’ on iTunes, and was one of 2009’s most popular free Apps on the Australian iTunes store (Public Relations Institute of Australia, 2010).

New South Wales Roads and Transport Authority’s Speeding “No one thinks big of you” campaign showed similar success with their target market. Launched in 2007, tracking surveys indicated the campaign achieved 97% awareness among young male drivers and 95% amongst the general community. According to Watsford (2008, p. 392), the results demonstrated the campaign penetrated the youth barrier and was successful in reaching young males, and communicating a “credible and believable anti-speeding message to them”. The campaign, whilst not initially designed as a specific social media campaign, received positive attention on YouTube, with the series of commercials attracting over 500,000 views (Watsford, 2008, p. 394).

As this review has highlighted, Australian agencies have embraced social media approaches in the promotion of road safety and injury prevention. As efforts are undertaken to understand more about the role and effectiveness of social media for health promotion, there are likely to be a number of important issues to consider and challenges to address. The subsequent section of this paper discusses just some of the key issues for future research and practice to consider.

Some suggestions for future research and practice

In order to advance both research and practice in the context of road safety advertising and social media campaigns, we identify some key suggestions.

³ <http://hereforlife.qld.gov.au/sharemystory/index.php>

⁴ <http://www.citygt.vicroads.vic.gov.au/>

⁵ <http://www.abc.net.au/news/stories/2010/03/29/2858955.htm>

First, as alluded to earlier in this paper, to begin building a resource of empirical-based evidence regarding the role and effectiveness of social media approaches, it will be important for advertising practitioners and researchers to ensure the provision of a clear and explicit definition of social media as relating to their particular purpose and focus. Similarly, as with advertising campaigns delivered via more traditional means, the objectives of a social media campaign need to be clearly and explicitly articulated (see Elliott, 1993). Thus, when any conclusions are provided in relation to the effects of the campaign (and its relative success), these outcomes may be validly compared and contrasted with other campaigns to provide a comprehensive understanding of how particular features of social campaigns have functioned. Extending upon the issue of determining the effects of a campaign, while there may be access to on-line measures of number of 'hits' to a site/or viewers to a page, in such an applied area as advertising for health issues including road safety, outcome measures of practical significance (i.e., behaviour) are particularly important.

Second, notable researchers in the field have long advocated that research and practice move beyond the issue of whether or not road safety advertising (delivered via traditional means) is effective, to what types of messages are more effective (see Donovan, Jalleh, & Henley, 1999). In relation to the latter question, research into the design and development of the most effective messages (and for whom) continues currently (see Lewis et al., 2009 for a review). This issue will also apply to social media based campaigns in terms of identifying such aspects as the content of messages/campaigns. Further, with the array of social media approaches available, an additional issue that will need to be addressed in campaign development will be determining which approach will be the most effective in reaching, and ultimately persuading, the intended target audience. As this review highlighted, the four types of social media most commonly used (i.e., Facebook, YouTube, Twitter, and mobile phone applications) although all classified as 'social media', do possess inherent differences in their functionality. For example, messages delivered via Twitter would need to take into account that communications delivered via this medium are limited to 140 characters or less. Therefore, a likely first step for campaign development would relate to the identification of how the advertising researcher/practitioner seeks to deliver the campaign/message and the intended or desired effects/outcomes (i.e., objectives) of their campaign.

Third, along with issues relating to campaign design, an additional fundamental issue relates to the determination of the effects of social-media based campaigns and, thus, evaluation and methods to conduct valid and reliable evaluations of such campaigns are needed. It is possible that controlled studies involving 'forced' exposure to a social media message/campaign and direct measurement of associated (persuasive) effects may be needed. While such controlled studies are unlikely to represent a realistic viewing and response context (see Lewis et al., 2009), they may be necessary, at least while empirical evidence is beginning to amass, to reduce the potential confounds and assist researchers and practitioners to understand more about the actual effects of the message content. In addition, as highlighted earlier, qualitative research methods (e.g., focus group discussions) will likely play an important role in understanding more about individuals' responses to social media campaigns given the in-depth exploration they afford.

Finally, it is evident that social media is firmly entrenched within today's society as a means of communication as well as information provision and sharing. As such, it is crucial that research and practice into the role and effectiveness of social media as a means to promote road safety and health issues more broadly continues.

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