

Toucher les adolescentes au moyen du réseautage social : une nouvelle avenue pour les messages de prévention du tabagisme

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L'industrie du tabac utilise à présent les sites de réseautage social pour cibler les adolescentes. Pour combattre cette publicité, il faut créer de nouvelles initiatives de lutte contre le tabagisme (LT) en ligne. La présente étude descriptive interprétative visait à explorer la vision qu'ont les adolescentes de l'utilisation des sites de réseautage social pour diffuser des messages de LT ciblant les jeunes femmes. Des groupes de discussion ont été formés avec 17 filles âgées de 16 à 19 ans. Sept messages de LT ont été utilisés à des fins d'évaluation et ont servi de contexte pour la discussion sur la diffusion de messages de LT dans les sites de réseautage social. L'analyse des données a permis de dégager certains thèmes, y compris les préoccupations relatives à l'efficacité des messages actuels de LT et les représentations stéréotypées du genre, les facteurs perçus comme influençant l'efficacité des messages de LT sur les sites de réseautage social, et les suggestions pour améliorer l'efficacité des messages de LT placés dans les sites de réseautage social. L'appui aux messages de LT dans les sites de réseautage social laisse entendre que ce moyen de communication est une ressource inexploitée pour la prévention du tabagisme.

Mots clés : tabagisme, genre, lutte contre le tabagisme, adolescentes, sites de réseautage social

Reaching Adolescent Girls Through Social Networking: A New Avenue for Smoking Prevention Messages

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Because adolescent girls are being targeted on social networking sites by the tobacco industry, new online tobacco control (TC) initiatives are needed. The purpose of this interpretive descriptive study was to explore adolescent girls' perspectives on the use of social networking sites to deliver TC messages targeting young women. Focus groups were conducted with 17 girls aged 16 to 19. Seven TC messages were provided for evaluation and as context for discussion about the delivery of TC messages on social networking sites. Data were analyzed for themes, which included concerns about the effectiveness of current TC messages and the stereotypical representations of gender, factors perceived to influence the effectiveness of TC messages on social networking sites, and suggestions for enhancing the effectiveness of TC messages placed on social networking sites. Endorsement of TC messaging on social networking sites suggests that this medium is an untapped resource for smoking prevention.

Keywords: tobacco use, technology, health promotion, women's health, youth health, gender

Introduction

Despite trends showing that rates of cigarette smoking among Canadian youth are decreasing (Health Canada, 2012), smoking among adolescents remains a critical public health concern. Advances in technology and the rapidly increasing use of social media have created new challenges and opportunities for tobacco control (TC). TC policies have forced the tobacco industry to be more creative in its marketing approach. As a result, tobacco companies are using the Internet and its social networking sites as unregulated media for advertising to adolescents, especially girls (Freeman & Chapman, 2007; Jenssen, Klein, Salazar, Daluga, & DiClemente, 2009). These advertising tactics take advantage of trends indicating that adolescent girls are common users of social networking sites (e.g., Lenhart, Madden, Macgill, & Smith, 2007) and are more frequent communicators on social networking sites, such as Facebook, than

boys (Hargittai, 2007; Lenhart et al., 2007). It is critical, then, that social networking sites be explored for their potential to deliver TC messages directed towards adolescent girls in an effort to counter the effects of pro-tobacco advertising and prevent smoking uptake by girls.

Research involving the use of social networking sites, such as Facebook, for TC initiatives has only just begun. A few studies have reported that social networking sites are a favourable medium for reaching youth with health information (Moreno et al., 2009; Team Shan, 2011). Based on a survey of 167 young women aged 17 to 29, Team Shan found that social networking sites were a preferred medium for receiving information about breast cancer risks, including smoking. However, researchers have yet to investigate what types of images, content, and delivery strategies are preferred among adolescent girls for receiving tobacco-related health information in this medium.

The purpose of this study was to explore adolescent girls' perspectives on the use of social networking sites to deliver TC messages directed towards young women. Special attention was paid to girls' evaluations of and suggestions for modifying current TC messages that specifically target girls for use on social networking sites. An understanding of how young women perceive TC messages and their thoughts about delivering these on social networking sites will provide an important foundation for efforts to improve smoking-prevention strategies targeting adolescent girls.

Methods

Study Design

Interpretive descriptive methodology (Thorne, 2008) was used for this focus group study. The purpose of interpretive description is to identify patterns and themes relating to the phenomenon of interest so that new understandings of it from the viewpoints of particular individuals are brought forward (Thorne, Reimer Kirkham, & MacDonald-Emes, 1997). Interpretive description is used to develop knowledge that will inform practice (Thorne et al., 1997) and thus is aligned with the aim of this study, which was to inform the development of social networking-based TC strategies directed towards young women. The focus group method was used because it is a flexible approach to learning about the ideas and opinions of groups and is considered an excellent way to gather information from adolescents (Creswell, 2007). Focus groups have also proved valuable in assessing the needs of target groups in order to develop meaningful and effective health promotion programs (Heary & Hennessy, 2002).

Ethical approval for the study was obtained from the Behavioural Research Ethics Board at the University of British Columbia Okanagan.

Recruitment

To recruit adolescent girls for the study, we contacted staff at community and education centres serving youth and requested their permission to hold a focus group at their site and their assistance with reaching young women through a recruitment poster. The recruitment poster was also posted as an advertisement on Facebook. To be eligible, girls had to be between the ages of 15 and 18. Because 13 and 14 are the required ages to open an account on Facebook and MySpace, respectively, girls can be expected to have some experience with social networking by age 15. Additional eligibility criteria were previous or current use of Facebook or MySpace and ability to converse in English. Both smokers and non-smokers were eligible. All participants provided informed consent. Because all participants were of the legal age (16 years) to provide informed consent in the jurisdiction where the study was conducted, parental consent was not required. An honorarium of \$40 was provided at the end of the session to compensate participants for their time and travel costs.

Sample

The sample comprised 17 girls aged 16 to 19 (4 high-school students, 12 university students, 1 member of the workforce). The majority of the participants ($n = 15$) described themselves as Caucasian; one described herself as Filipino and one as Korean. While 11 participants self-identified as non-smokers and 6 as smokers, only 4 indicated being addicted to tobacco and to have smoked in the past month.

Most of the participants went online regularly and felt comfortable navigating the Internet. Almost all sought health information on the Internet and six reported that they sought information specifically on the topic of smoking. All participants had a Facebook profile and four had a MySpace profile. Most participants signed onto their Facebook site regularly (2–10 times/day). Participants with a MySpace profile reported that they did not visit this site as often as they visited Facebook. All of the participants had a large number of Facebook “Friends”; none had fewer than 100 and a few specified having 700 or more.

Data Collection

The primary form of data collection was three semi-structured focus groups consisting of eight, five, and four girls. In keeping with guidelines for focus group methodology (Krueger & Casey, 2009) and the age of the target group, a topic guide that incorporated open-ended questions, activities, and stimulus materials (TC messages) was developed to encourage active involvement and discussion on key issues without restricting

openness of response. Similar approaches to the design of focus group discussions have been used successfully with adolescents and young women (Bottorff et al., 2010; Heary & Hennessy, 2002).

Two of the focus groups were conducted in a meeting room at the University of British Columbia Okanagan and one in a meeting room at the YMCA. In keeping with gender-sensitive research, the study used a female moderator and two female research assistants to assist with data collection. After signed consent was obtained from each participant, the focus group sessions commenced and were audiorecorded for transcription. Field notes were used to enhance the recorded information with observations about the interview process and the content. The sessions lasted approximately 2 hours.

Selection and description of TC messages for focus group sessions. We included a selection of existing TC messages as stimulus materials in the focus group discussions because they provided a useful starting point for developing TC messages for use on social networking sites. In addition, we reasoned that the messages were an effective tool for engaging young women in a discussion about TC messages and ways these could be integrated into social networking sites. We selected seven TC messages targeting young women. Because the Internet sources various types of TC message intended for many different media, the messages were selected from several different Web sites. This allowed for evaluation of various messages presented by different health organizations and agencies. The selection of messages was based on our desire to present a variety of images and different depictions of smoking. Because it is well documented that messages used for health promotion are often embedded with specific representations of gender (Greaves, 2007; Haines et al., 2010), we also included messages that expressed a variety of representations of gender. The names of the selected TC messages are as follows: The Truth, Poster Child, America's Next Top Model, Chic?, Above the Influence, Cigarettes Smoke People, and Live to See It. Table 1 provides an overview of the messages, which were presented to the participants in poster format.

In relation to representations of smoking, Poster Child was the only message that included detailed information to educate young women on the health risks of smoking. Most of the other messages included only a brief caption and a picture to raise awareness. America's Next Top Model featured no wording or caption. The TC messages typically depicted body image as a reason for young women to avoid tobacco, limiting the negative outcomes of smoking to physical appearance (e.g., Chic?). The messages were also determined to have an individualistic focus because most featured a single female image. Fear-appeal is frequently used in

messages targeting youth, as it was in the selected TC messages (e.g., depiction of a woman with a tracheotomy).

In the selected TC messages, gender was often reflected in representations of femininity and female sexuality through the image of an attractive, slender body. The underlying assumption was that the gendered role of females entails maintaining sexual attractiveness by keeping slim. Many of the young women in the TC messages were depicted in stereotypically sexual ways, such as caressing a cigarette (e.g., *Cigarettes Smoke People*) or with their mouths slightly open (e.g., *The Truth*). Also, most of the messages depicted a lone female in a passive position disconnected from the world and somewhat docile and dependent, her feminine identity hidden and insignificant. Two of the fear-based messages featured headless female bodies, reinforcing the notion of physical attractiveness as an important feminine attribute.

Focus group sessions. The focus groups began with a survey to collect data on demographics, smoking status, and Internet use. Following an “ice-breaker” activity, participants were asked to provide reactions to and evaluations of the seven selected TC messages by answering three questions on a board located beside each message displayed as a poster: (1) What do you like about this message and why? (2) What do you not like about this message and why? (3) What would you change about this message and why? The participants were then asked to identify their two favourite messages and the two they liked the least, marking them with “thumbs up” and “thumbs down” stickers. The purpose of this exercise was to encourage further individual reflection on the different ways in which TC messages are directed towards young women. The participants were then invited to discuss their evaluations of the messages as a group. Open-ended questions were posed to facilitate discussion about features of the TC messages that would influence their effectiveness if delivered on social networking sites and about changes that might improve TC messages targeting girls on social networking sites — for example, “If we posted this message on Facebook and MySpace, do you think it would be effective at reaching girls your age? Why or why not?” Because Facebook and MySpace are known to be the most popular social networking sites, they were the focus of discussion. Finally, we consolidated participants’ suggestions for developing and delivering TC messages on social networking sites by giving them a printout of a Facebook page and asking them to suggest ways to make the messages more receptive to young women in this medium.

Data Analysis

Transcripts of the focus groups were analyzed through constant comparison (Corbin & Strauss, 1990), an analytical approach recommended by

Message	Message Overview	Source
The Truth	The Truth.com is run by the American Legacy Foundation, which was founded under the terms of the Masters Settlement Agreement to prevent teen smoking uptake. This message displays a teenage girl (from her mid-section to her cheeks) holding a cigarette. A white dotted line encircles her larynx and the cigarette, and the message challenges the reader to “remove one.”	http://theinspirationroom.com/daily/2008/truth-remove-one/
Poster Child	The British Columbia Ministry of Health and NOW Communications of Vancouver collaborated to depict the damage that a young girl could sustain. This message shows a girl holding a cigarette, with areas of her body highlighting visuals of tobacco-related damage. A description is provided for each visual.	http://tobaccocontrol.bmj.com/content/8/2/128/F2.large.jpg
America’s Next Top Model	America’s Next Top Model Anti-smoking Campaign focused on the side effects of smoking for young women. There were several messages portraying a different side effect. This particular message depicts a beautiful model with long hair holding a cigarette, but in the mirror she sees a sad woman who is bald due to chemotherapy.	http://www.myinterestingfiles.com/images/2008/03/anti_smoking_campaign_from_america_top_model_7.jpg
Chic?	This message was developed by the World Health Organization for 2010 World No Tobacco Day. It depicts a beautiful young woman who has a tracheotomy because of her smoking habit.	http://www.who.int/tobacco/wntd/2010/en_wntd_2010_chic_no_throat_cancer.pdf
Above the Influence	This message was produced by the Vigilante advertising agency for Above the Influence (for Partnership for Drug Free America) as part of a substance-abuse campaign. Above the Influence’s main approach to preventing substance abuse is to encourage teens to resist peer pressure and societal influences. This message depicts a teenage girl and text expressing her decision not to be drawn into drugs or alcohol.	http://adsoftheworld.com/media/print/above_the_influence_partnership_for_a_drugfree_america_i_do_me

Smoking Prevention: Reaching Adolescent Girls Through Social Networking

Message Title	Year Developed	Year Accessed	Country of Origin	Format	Tone	Aim
Remove One	2008	2010	United States	Campaign poster	Negative	Education/ awareness
Tobacco Industry's Poster Child	1998	2010	Canada	Campaign poster	Shocking	Education/ awareness
Bald From Chemo	2008	2010	United States	Campaign poster/ picture	Negative	Education/ awareness
Chic? No, Throat Cancer	2010	2010	Switzerland	Campaign poster	Shocking	Education/ awareness
I Do Me	2010	2010	United States	Web site/ poster	Positive	Empowerment

(continued on next page)

Message	Message Overview	Source
Cigarettes Smoke People	The Cancer Patients Aid Association ran a print campaign by the Canadian company Bleubancrouge. This message is set in a bistro where there are only two female disembodied arms burning down like a cigarette. It is meant to illustrate how addiction controls and devours its hosts.	http://spaceinvaders.com.br/2009/02/09/ccpa-cigarettes-smoke-people/
Live to See It	This message was developed by Neogama/BBH for ADESF to show that smoking will prevent people from living to see interesting future developments, such as rising temperatures, as demonstrated in this message. This message displays naked Barbie-like females walking city streets.	http://adland.tv/ooh/adesf-institutional-stop-smoking-now-future-live-see-it-print-brazil

Thorne (2000) for studies using interpretive description to develop understandings of the participants' experiences of the phenomenon. Analysis began with the coding of data segments by comparing the data and making notations in the margins. Broad categories developed from this analysis were then further reviewed and critically analyzed, resulting in more refined categories and subcategories. This process was facilitated by asking iterative, analytic questions (e.g., what is happening here?) and engaging in reflective, critical examination of the data to identify underlying meanings and explanations (Thorne et al., 1997). Transcripts and field notes were also reviewed in an iterative manner, to ensure that all emergent themes and subthemes were captured. Representative quotes were selected from the transcripts, poster comments, and Facebook pages to illustrate key themes and subthemes.

Results

The young women who participated in the study were receptive to the use of social networking sites for the delivery of TC messages directed towards them and believed that this medium holds distinct advantages in reaching young women. However, their evaluations of the selected TC messages targeting young women suggested that there are important considerations in developing effective TC messages for this medium. Their perspectives were captured in three broad categories: (1) participant eval-

Message Title	Year Developed	Year Accessed	Country of Origin	Format	Tone	Aim
Cigarettes Smoke People	2009	2010	Canada	Campaign poster	Shocking	Education/ awareness
Live to See It. Quit Smoking Now	2008	2010	Brazil	Campaign poster	Positive	Provocation

uations of TC messages, (2) factors perceived to likely influence TC message effectiveness on social networking sites, and (3) suggested changes to TC messages for use on social networking sites.

Participant Evaluations of TC Messages

Participants thoughtfully considered the seven selected TC messages targeting young women and were forthright in offering their perspectives on the effectiveness of the approaches used. Their evaluations were grouped in relation to overall evaluations, images/messages associated with smoking, and female/gendered issues and representations.

Overall evaluations. In general, the participants were critical of the approaches used to reach young women. They thought that many of the TC messages lacked clarity, were unrealistic, or contained too much written information. The lack of clarity was related to confusing or insufficient information. For example, the statement “remove one” in The Truth, referring to the choice between a cigarette and an intact throat, was viewed as confusing because it was not presented as a question. Several messages were considered too unrealistic to make a relevant connection between the girls and the message foci. For example, there was consensus that Live to See It was “too fake” because it contained Barbie-like females, a cartoon image, and a hypothetical situation. The participants also said that some of the messages contained too much information. For example, they thought that the picture in the Poster Child

message made a “strong point” about the dangers of smoking but found the amount of written information “overwhelming to the viewer.”

Images/messages associated with smoking. Not surprisingly, many of the comments concerned the images/messages associated with smoking. These related to the lack of meaningful contexts represented in the messages, the use of fear-appeal messaging strategies, and fostering a personal connection.

The concern about the lack of meaningful contexts in the messages reflected a wish to see contexts that resembled one’s own everyday experiences. For example, when discussing the Poster Child message, the participants spoke of their preference for images of girls doing things that they could identify with: “Put her in situations that we’d be in, as opposed to just standing there.” Some also criticized the individualistic focus of the messages and said they preferred messages that demonstrated the effect of smoking and second-hand smoke on significant people in their lives:

I just realized that all of these posters are about you, like, an individual smoking, but not about how it affects other people, like, second-hand smoke. I think it’s important to bring that out and let smokers know that you are killing your friend, your family member, just people around you, so it’s not just about you.

The use of fear-appeal messaging strategies was a subtheme threaded throughout the young women’s conversations about the smoking image/message, although there were differences of opinion on this topic, particularly between the smokers and non-smokers. Those who smoked were adamant about their dislike for “sugar-coated” messages, their comments reflecting an appreciation for messages that arouse fear. One participant who smoked said that “scarier images” were more effective:

I think that the scarier images are the more effective ones because they are, ultimately, more truthful. It’s not sugar-coated, it’s just, like, this is what’s going to happen. So having the truthful images like the poster [Poster Child] over there [is] more effective because it [shows] what’s actually going to happen.

The participants who smoked also said that fear-based messages prompted them to “contemplate” changing their behaviour. Those who did not smoke, however, perceived fear-appeal messages to be ineffective because they elicited a negative affective reaction. They did not like being “scared” or “grossed out.”

The focus group discussions also included noteworthy dialogue about messages that were perceived to foster a personal connection with the viewer, such as prompting the viewer to consider making a decision

about smoking or challenging socially accepted ideas about smoking. For example, all of the participants liked the fact that The Truth invited the viewer to think about the decision in relation to whether or not to smoke and the consequences of that decision.

Female/gendered issues and representations. The participants' comments on gendered issues and representations in the TC messages were focused on how young women were portrayed in the messages. The discussions centred on female sexuality, self-assurance, emotional expression, and the balance between beauty and health within the messages.

The messages prompted discussion about the use of female nudity and sexuality in TC messages and concerns about exploiting women and portraying them as sex objects. Some of the participants appeared to be frustrated and offended by some of the TC messages:

It's just like every TV commercial, or something that has to do about women. It usually involves sex or looks, and that shouldn't matter at all. Like, we women should just be loved for who we are. It doesn't matter if they are fat, skinny, muscular. [It] doesn't matter — they are just the same. I don't know. I just I hate it when they make women look like sluts.

The participants wanted to see expressions of self-assurance, such as confidence or sophistication, in the representations of women. They thought that this would make the message more impactful for girls their age, for whom these attributes are important. For example, one participant spoke about the sophisticated disposition of the young woman in America's Next Top Model: "I would look at this message, because, besides the cigarette, this girl is sophisticated and I would possibly strive to be more like her."

There was also discussion about the emotional expressions reflected in the messages and how these demonstrated the negative effects of smoking. Participants believed that the expression of negative emotions such as sadness, loneliness, and regret would have enhanced the effectiveness of the messages because these are emotions that most people want to avoid. Concerns were expressed about the perceived inappropriate emotional expression of the woman in the Chic? message. The participants thought that her expression should have reflected how upsetting it would be to have a tracheotomy. They saw her as "flaunting her throat cancer and didn't seem upset by it." It was also noted that the effectiveness of messages depicting headless/faceless female bodies or bodiless limbs might be limited by the absence of emotional expression. For example, in her poster comment on The Truth, one participant said, "I wish her whole face was shown to be able to see what her emotions are."

Discussion was also generated by perceptions of how the TC messages focused on beauty rather than health. This subtheme was carried through

the discussions on several of the messages, with many of the young women stating that there was too much emphasis on physical attractiveness and not enough on health and well-being: “Make it more about your life, not just vanity.”

Factors Perceived as Likely to Influence TC Message Effectiveness on Social Networking Sites

The young women were invited to discuss factors that could be expected to influence the effectiveness of TC messages on social networking sites. The discussion centred on four topics: instant impact, message novelty, portrayal of women as self-assured, and gender stereotyping.

Instant impact was described as essential if TC messages delivered on social network sites were to be effective in attracting the attention of young women. For an anti-smoking message to have instant impact, according to the participants, it must be easily comprehensible and readily understood. They explained that, since they spent little time looking at advertisements on social networking sites like Facebook, instant impact was very important:

When you're on Facebook, everything's really quick [and] gets at you right away. You want to get to that information as quick as possible, because you're not going to put a lot of time into looking at these.

Some of the TC messages were described as having this kind of instant impact. Regarding the Chic? message, for example, participants thought that viewers would “get the message right away” because it was simple (consisting primarily of a picture and the caption “Chic? No, throat cancer”) and stood out due to its bright-yellow lettering.

Novelty also helped to create the kind of strong image considered suitable for TC messages on social networking sites. Participants found the novel image in Cigarettes Smoke People engaging and said it would motivate them to click on the message: “Since you don't know what it is . . . or . . . see stuff like that . . . you click on it.”

There was a noteworthy discussion about how the self-assured image of the teenage girl in Above the Influence would make the participants want to click on it. Since the girl in the message demonstrated confidence in and satisfaction with her decision not to be enticed into alcohol or drug use, they were drawn to the message. The participants explained that these self-assured attributes were what they aspired to.

The use of stereotypical gendered images of women was thought to hinder the receptivity of young women to the TC messages on social networking sites. All of the participants said that portraying girls as “sex objects” did not “appeal” to them and detracted from a message's effectiveness. A TC message featuring a stereotypical image of a woman was

even perceived to be something that would be “clicked on mostly by guys.”

Suggested Changes to TC Messages for Use on Social Networking Sites

The participants made suggestions for enhancing the effectiveness of TC messages on social networking sites. Their thoughts about delivering TC messages on these sites, as well as their ideas about how to design TC messages that appeal to girls in this medium, were captured in three themes: interaction, animation, and positive message framing.

Interaction. There was considerable discussion in the focus groups about the need for TC messages on social networking sites to have interactive elements. The participants discussed several different ways that interactivity could be incorporated into the messages, such as through social sharing/broadcasting, media games, and information links.

“Social sharing” is a term used to describe how social networkers broadcast their thoughts and activities through certain features built into social networking sites. For example, in their comments about Facebook, the young women identified several Facebook options into which a TC message could be integrated, such as News Feeds, Group Pages, Fan Pages, Walls, and Like/Dislike options. The participants thought that receptivity to TC messages would be enhanced more through the use of these features within the social networking medium than by displaying them as stand-alone messages in the sidebar of a Facebook page, which is where most advertisements and messages are displayed. They said they would be more inclined to look at TC messages if they were integrated into these social sharing features, because these are safe and reliable areas:

I just don't know where [messages in the sidebar are] taking me, so I don't go there, but if it was actually part of Facebook somehow, or just posted somewhere and a bunch of people were Liking it [and] it was being passed through the Walls, then I'd be more interested in it.

The young women also suggested that providing the option to “play” with the information in the messages would draw them in. For example, their comments about the Facebook page said that viewers could be asked to “draw with their mouse” or scroll onto areas that would expand with information once they clicked on it. Using Poster Child as an example, one participant suggested that written information about the effects of smoking could be made visible by “scrolling the mouse along the body.”

The participants pointed out that social networking sites could facilitate access to the detailed information needed to improve the effectiveness of TC messages without overwhelming the viewer. They believed that having one simple message was not enough to inform young

women about smoking and that messages need to lead users to further information so they can “learn from it and apply it to their lives.” Detailed information could be provided in interactive, user-centred ways:

Maybe something to grab your interest and then have a whole host of pages where you have information [and] you have some kind of interaction where you could post things or ask questions or something like that. Because if you just have one thing, then it doesn't give you anything so that you can do something with the information that you gather. And if you try to cram too much onto one picture, you kind of draw away from it.

Animation. The participants also recommended incorporating animation into TC messages on social networking sites, to attract the attention of young women and ensure instant impact. It was suggested in the Facebook page comments that TC messages “pop up” and incorporate “flashing” or other types of movement in key elements of the images and text:

I think including animation would make it stand out, because a lot of the side ads are still images and we ignore it — like, no one actually looks and reads it, but if the smoking ad is flashing or moving in some way, then people would be like, “Oh, what's that?”

Positive message framing. Also noteworthy was a preference expressed by both smokers and non-smokers for TC messages that have a positive orientation when delivered in a social networking context. Some of the young women who smoked, for example, expressed a preference for messages that portray the positives of quitting: “Push that you can get a fresh start.” Some of the non-smokers also said they would be inclined to click on TC messages that demonstrate the positives of not smoking: “I think it would be a really effective way to advertise if the focus is [to show] that you can really have fun, have an active social life, and connect with your peers over things that are not smoking.”

Discussion

This is one of the first studies to explore the perspectives of young women on the use of social networking sites for the delivery of TC messages. The participants were receptive to the use of this medium for TC messages directed towards them and believed that this medium has distinct advantages in reaching young women. This finding is supported by the results of a recent survey of 167 young women aged 17 to 29 in which participants suggested that social networking sites would be an effective means of messaging girls about smoking in relation to breast cancer (Team Shan, 2011); the authors state that this represents a signifi-

cant change from their 2008 survey, in which young women reported a preference for print materials.

The participants made some important suggestions for enhancing the effectiveness of TC messages on social networking sites. Their suggestions related to the way that TC messages are integrated into social networking sites through the use of interactive media, including social sharing/broadcasting features. Moreover, the participants indicated that the social networking medium presents unique opportunities to effectively meet their information needs. These suggestions are consistent with the Web 2.0 context, where online information is characterized by interactivity, user-generated content, and multi-directional communication flows (Schein, Wilson, & Keelan, 2010). It has been suggested that new media channels, such as social networking sites, allow users to access the information that is most appropriate for them — relevant and personally engaging (Fotheringham, Owies, Leslie, & Owen, 2000) — thus enhancing tailored health interventions. Traditional media, such as television, radio, and print, simply do not have this potential for individual tailoring and interactivity of health interventions (Bennett & Glasgow, 2009).

Participants' preferences for negatively or positively framed TC messages varied based on their smoking status when evaluating messages intended for traditional media. However, both smokers and non-smokers preferred messages that encouraged or reinforced positive health behaviours associated with being smoke-free and were intended for use on social networking sites. Since women join social networking sites for the purpose of enjoying themselves and having positive experiences (Lin & Lu, 2011), this may be an important consideration in designing TC messages for social networking sites. The focus group discussions highlighted the need to consider the smoking status of the target audience, as well as how different media might influence the effectiveness of particular TC strategies.

The young women's discussions pointed to the importance of adopting age-specific messaging strategies that acknowledge the different transitions that adolescents in particular age groups may go through. It has been suggested that TC advocates must become aware of the different developmental stages of adolescence when creating tobacco prevention messages, because this will have a significant impact on their effectiveness (Vardavas, Connolly, Karamanolis, & Kafatos, 2009). New research specifically indicates that directly involving young women in developing health promotion strategies and including their voices is a way to ensure targeted, age-specific messaging (Bottorff et al., 2010; Team Shan, 2011). The viewpoints of the participants in the present study hold potential for guiding the development and evaluation of tailored TC messages that resonate with young women on social networking sites.

One of the most striking findings is that many TC messages directed towards girls are underpinned by assumptions about gender. There appears to be a long history of discrepancy between what TC advocates think is effective and what young women and experts in women's health consider effective. The TC movement has a history of uncritically advancing TC messages that do not promote equity among women but, rather, exploit women by playing into dominant views of gendered roles and femininity (Greaves, 2007). Researchers who have analyzed breast cancer messages targeting young women have been critical of the sexualized images and messages used by experts to raise awareness about the risk of breast cancer; they note the potential value of alternative messages about breast cancer, produced by young women for young women (Haines et al., 2010). Based on these findings, Haines et al. (2010) conclude that promoting health and well-being would likely be a more effective health promotion messaging strategy for young women than focusing on physical appearance. In a similar vein, the participants in the present study expressed concern about the stereotypical presentations of women (i.e., sex objects) in TC messages and suggested that stereotypes be avoided in order to improve the effectiveness of messages targeting young women. These findings highlight the importance of ensuring that TC messages are gender-sensitive.

The use of interactive, Web-based technologies for smoking prevention is not well established. The findings of this study provide direction for the development and evaluation of such efforts targeting young women as well as other youth groups. The unique ethical and methodological issues and challenges (e.g., obtaining informed consent, data collection) in online health research are being identified and new approaches are being developed (Convery & Cox, 2012). Furthermore, evaluation studies of online health interventions, while still in their infancy (Shahab & McEwen, 2009), have made progress and indicate promising results for cancer-prevention initiatives targeting young women (e.g., Craciun, Schuz, Lippke, & Schwarzer, 2012). Social networking sites are an untapped resource with distinct advantages for effective smoking prevention among adolescent girls.

These findings need to be considered in light of several limitations. Since this study specifically examined Facebook and MySpace, these exploratory findings may not be applicable to other social networking contexts. Although smokers and non-smokers were not identified in the focus groups, the inclusion of both groups may have constrained some participants in what they shared. Finally, it is important to be mindful of the rapid changes in technology when applying the findings to message development and implementation as well as to future research.

Conclusion

Although TC policies have severely restricted pro-tobacco marketing, the Internet provides new and anonymous media for the promotion of tobacco products. Understanding young women's perspectives on this medium as a means to counter pro-tobacco advertising to girls is therefore important. Based on the findings of this study, TC advocates should be encouraged to consider the use of social networking sites for TC messages and should continue to solicit the views of young women to inform TC message development. The use of interactive technologies and user-centred designs hold potential for reaching a wide range of young women to effectively promote non-smoking lifestyles.

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Acknowledgements

This research was supported by funding from the Psychosocial Oncology Research Training (PORT) Program of the Canadian Institutes of Health Research.

Conflict of interest statement: none.

Financial disclosure statement: not applicable.

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