REACHING GIRLS THROUGH SOCIAL NETWORKING: IS THERE A NEW

AVENUE FOR SMOKING PREVENTION MESSAGES?

by

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B.S.N. Laurentian University, Ontario, Canada, 2008

A THESIS SUBMITTED IN PARTIAL FULLFILLMENT OF THE REQUIREMENTS FOR

THE DEGREE OF

Master of Science in Nursing

in

The College of Graduate Studies

THE UNIVERSITY OF BRITISH COLUMBIA

(Okanagan)

January 2012

ABSTRACT

      Evidence reveals that adolescent girls are being targeted on the internet by pro-tobacco advocates in order to influence smoking uptake, especially on social networking websites. Despite efforts to prevent smoking, rates of smoking initiation among young women continue to raise concerns. The aim of this interpretive descriptive study was to explore adolescent girls' perspectives about utilizing social networking websites as a medium to deliver tobacco control (TC) messages directed towards young women. Data were collected using three semi-structured focus groups with 17 smoking and non-smoking adolescent girls who were recruited through a recruitment poster and an ad on Facebook. Participants ranged in age from 16 to 19 years old, with a mean age of 17.7 years old (SD=0.69). The participants were provided seven current TC messages directed towards girls for evaluation, and to provide a context for discussion regarding the placement of TC messages on social networking websites. The data were analyzed using constant comparative methods. The findings suggest that young women are receptive to TC messages on social networking sites if messages are interactive, provide access to further information, and are positively framed in relation to becoming or staying smokefree. However, the participants expressed concern about the perceived stereotypical representations of gender and femininity displayed in TC messages and warned that these aspects render TC messages as less effective. Although there were mixed responses to the use of fear appeal messages, participants agreed that TC messages should include aspects that adolescent girls can relate to, such as ensuring the foci of messages are age-specific, include reference to peers and/or family, match the emotional tone in messages to the health and social risks associated with smoking, and refer to activities that are popular among adolescent girls. The findings of this study provide a beginning foundation for the development and evaluation of TC messages directed towards

young women on social networking sites and has important implications for policy, practice and

future research.

PREFACE

       This research was approved by the UBC Okanagan Behavioural Research Ethics Board

on November 16, 2010. Ethics certificate #H10-02443.

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ACKNOWLEDGEMENTS

I first want to thank the participants of this study; their enthusiastic participation not only made this study possible, but also made it an enriching experience. I also want to say thank you to the organizations that assisted in recruiting participants; the University of British Columbia, H2O Center (YMCA), and Okanagan Boys and Girls Clubs. I would also like to acknowledge the following CIHR Strategic Training Program for their financial and training support: the Psychosocial Oncology Research Training (PORT).

Thank you to my supervisor, Dr. Joan Bottorff, for your continual support and guidance throughout this process; the wisdom and expertise you have imparted to me is something that I will always carry with me throughout my academic career. Thank you to my supervisory committee members, Dr. Mary Jung and Dr. Claire Budgen, for your support and encouragement, which has always left me feeling motivated. I would also like to thank the UBCO Nursing Department for standing behind me and believing in my work. Also, I am so grateful to my friends for supporting me and cheering me on. Richard, thank you for listening to my queries, challenging me with questions, and making this education experience fun. I would finally like to thank my family, Harry, Rita, Matthew, and Katie, for your unconditional love and support throughout my academic endeavors.

1 INTRODUCTION

1.1 Problem statement

In Canada, adolescent girls' smoking uptake remains high. Between the years 2009 and 2010, smoking rates among girls aged 15 to 19 remained unchanged while smoking rates for adolescent boys showed significant declines (Health Canada, 2011). Tobacco is the leading cause of preventable death and chronic illness among women, yet it remains under-recognized as a critical women's health issue (Sarna & Bialous, 2004). There is an alarming progression in smoking uptake among girls around the world and the gap between boys and girls' smoking rates is narrowing (Centers for Disease Control and Prevention [CDC], 2010; Global Youth Tobacco Survey Collaborating Group [GYTSCG], 2003; Greaves, Jategaonkar, & Sanchez, 2007; Health Canada, 2011; World Health Organization [WHO], 2007a). The 21st century poses many of the same challenges in the past to TC advocates, but in different contexts, including the internet (Norman, McIntosh, Selby, & Eysenbach, 2008). Smoking bans have forced the tobacco industry to be more creative in their marketing approach and, as a result, tobacco companies are using the internet and its social networking sites as an unfettered and unregulated medium for advertising to girls (Freeman & Chapman, 2007; Hong & Cody, 2002; Kim, Paek, & Lynn, 2010; Pierce et al., 2010; Ribisl, 2003; Ribisl, Lee, Henriksen, & Haladijian, 2003). It is documented that many adolescents are consistently exposed to tobacco content on the internet, with a particular emphasis towards girls (GYTSCG). More specifically, research has revealed that the tobacco industry has turned to social networking sites to increase smoking uptake among girls through pro-tobacco advertising targeting adolescent girls (Freeman & Chapman, 2010; Jenssen, Klein, Salazar, Daluga, & DiClemente, 2009). These advertising tactics take advantage of trends that indicate 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 that we explore social networking sites for their potential to deliver TC messages directed towards adolescent girls in an effort to find effective and meaningful ways to counter the effects of pro-tobacco advertising and prevent smoking uptake among young women.

It has been acknowledged that important health-related behaviours and patterns begin early in life and may be affected by the media (DiNapoli, 2009). Researchers have found tobacco imagery delivered through media channels is common and is a contributing factor to increases in adolescent smoking uptake (Brown & Witherspoon, 2002; Health Canada, 2009; Pierce et al., 1998; Sussman, 2005). Nevertheless, we have yet to develop counter-advertising initiatives (Jenssen et al., 2009). Despite evidence that social networking sites are the media of choice among adolescent girls for communication, the available literature reveals a gap in our knowledge about using social networking sites as a viable medium for TC initiatives towards girls. There are a few studies, however, that conclude the internet may be an effective media channel for TC initiatives directed towards youth, offering support for exploring the delivery of TC initiatives via social networking sites (Norman, Maley, Skinner, & Li, 2008; Parlove, Cowdery, & Hoerauf, 2004; Prokhorov et al., 2008; Shegog et al., 2005).

Commonly used approaches to health messaging, such as print pamphlets, are now thought to be less effective because health information is increasingly obtained through the internet (Pechmann & Reibling, 2000). For example, 80% of American internet users sought health information online in 2006, and 11% of online high-school students and 10% of college students specifically sought tobacco cessation information (Fox, 2006). Public health professionals cannot afford to ignore this emerging media channel to communicate health promotion messages. Pro-tobacco advocates have utilized the internet as a major channel for promotion of smoking; therefore, it is important to develop innovative web-based counter

strategies (Vickers, Thomas, Patten, & Mrazek, 2002). Norman, McIntosh, Selby, and Eysenbach (2008) argue that, in order to positively influence adolescent smoking behaviours, we must integrate TC initiatives into mediums popular among them. Given that social networking sites are popular among adolescent girls combined with evidence that smoking experimentation and uptake usually begins before the age of 18 (Chen & Millar, 1998), integrating TC initiatives directed towards adolescent girls into social networking sites is a priority.

Evidence suggests that smoking among adolescent girls is influenced by gender-specific, psychosocial needs and pressures, such as norms related to body image, peer relationships, romance, fashion, and autonomy (Johnson et al., 2003; WHO, 2007a and 2007b). Researchers have argued that, because differences exist in girls and boys smoking uptake (Haines, Poland, & Johnson, 2009; Haines et al., 2010) and their responses to tobacco reduction interventions (Courtenay, 2000), gender must be a priority in TC and research initiatives. However, there is a gap in Canadian literature regarding the influence of gender on tobacco-reduction strategies for adolescent girls, particularly on the internet. Consequently, a better understanding of adolescent girls' perspectives on the delivery of TC messages directed towards young women in social media is needed to inform adolescent girls' tobacco use prevention.

1.2 Purpose of the study

The **aim** of this study was to explore adolescent girls' perspectives on **utilizing 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. The ultimate goal was to provide recommendations to guide the development of TC messages for dissemination on social media sites (e.g., Facebook) to prevent smoking uptake among adolescent girls.

1.3 Research questions

The following three research questions were proposed to guide this study:

(a) What are adolescent girls' evaluations of current TC messages that are directed towards young women?

(b) What do adolescent girls identify as factors that will likely influence the effectiveness of TC messages on social networking sites?

(c) What changes are recommended by adolescent girls to enhance the effectiveness of TC messages directed towards them on social networking sites?

1.4 Study overview

This thesis will begin with an overview of literature examining gender and its intersections with adolescent girls' smoking trends, tobacco advertisement on the internet, web use among youth, and web-based tobacco prevention initiatives. This review will be followed by the research methods, findings, and discussion.

2   LITERATURE REVIEW

2.1   Overview

The following chapter includes the reviewed literature underscoring the need for online

TC initiatives directed towards girls, particularly on social networking sites. Throughout this

review an attempt was made to identify relevant gaps in the current state of knowledge pertaining

to the influence of the internet on adolescent girls' smoking behaviour. This chapter is organized

into the following seven sections: 1) current trends in smoking among adolescent girls, 2)

intersections of gender and health risk behaviours, 3) web use among youth, 4) gender, smoking

and the internet, 5) the internet and youth smoking prevention, 6) youth and TC message types

and approaches, and 7) analysis of selected TC messages.

2.2   Current smoking trends among adolescent girls

Despite promising evidence that cigarette smoking among adults is declining (Busen,

Modeland & Kouzekanani, 2001; Canadian Cancer Society, 2009; Health Canada, 2009; Johnson

et al., 2004), smoking rates among adolescents are not paralleling these positive statistics. Since

1981, the number of Canadian smokers has dropped for almost every age group except

adolescents and children (Health Canada, 2009). Health Canada's 2008-2009 Youth Smoking

Survey reported that 3% of youth in grades 6-9 were smokers, a figure unchanged from 2006-

2007 but an increase from 2% in 2004-2005 (Health Canada, 2010). Also 14% of adolescents

aged 15-19 years old were reported to be smokers in Wave 1 of the 2010 Canadian Tobacco Use

Monitoring Survey (CTUMS), which was not statistically different from 2009 (Health Canada,

2011). The CDC (2006) also revealed no significant declines in tobacco use by middle school and

high school students. It is estimated that between 82,000 and 99,000 youth initiate daily smoking

around the world (Canadian Lung Association, 2006). These alarming statistics are coupled with

evidence that the average age of Canadian youth trying cigarettes for the first time is 12.1 years (Health Canada, 2010).

It is widely acknowledged that the younger the age of smoking onset, the greater the risk of regular adult smoking (Campaign for Tobacco-Free Kids, 2009b; Canadian Lung Association, 2006; Chassin, Presson, Sherman, & Edwards, 1990; Chen & Millar, 1998; Unger & Chen, 1999). This has serious implications for future health, especially because approximately 90% of adult smokers begin smoking as adolescents (Busen et al., 2001). Therefore, not only could we see a rise in adult smokers in the next decade, but we could also face pressure on the health care system due to increases in tobacco-related health complications, such as cancer and cardiovascular disease. The cost is high if we do not intervene in the youth smoking epidemic (Stevens, Barron, Ledbetter, Foarde, & Menard, 2001; Unger & Chen, 1999).

Tobacco is used by over 1.3 billion people and is killing more than 14,500 people every day (Glynn, Seffrin, Brawley, Grey, & Ross, 2010). The CDC (2006) emphasizes the need for implementing evidence-based strategies in preventing youth tobacco initiation and use. Stevens et al. (2001) echo the CDC and contends that the sheer rise in tobacco-use prevalence among youth under the age of 18 points to the urgent need to find new ways to prevent youth tobacco use. Although there are many initiatives implemented to counter pro-tobacco marketing through campaigns, regulations, and policies, there is a pressing need to extend these efforts by implementing initiatives through environments that are important to youth (Faucher & Carter, 2001), such as online social networking websites commonly used by adolescents. Ling and Glantz (2002) posit that the tobacco industry has taken full advantage of youth environments, both physical and social, for successful tobacco promotion. For example, the social networking sites Myspace and Facebook have been identified as mediums of choice by the tobacco industry

for recruitment of youth smokers (Shepherd, 2009). If this is the case, then TC efforts need to be aimed at countering the tobacco industry's recruitment of youth through this medium.

The trend toward earlier smoking initiation among girls is also of increasing concern (Sarna & Bialous, 2004). Since the 1980's the rate of smoking initiation among girls ages 12 to 17 years of age remains higher than that of girls between the ages of 18 and 25 (Sarna & Bialous). It is troubling that despite smoking prevention programs and messages, young women are still taking up smoking across the globe (Greaves et al., 2007; Sarna & Bialous, 2004). Britton (1998) contends that even with years of health education aimed at young woman, follow-up studies reveal varied effectiveness of TC initiatives and that girls' smoking rates continue to advance. This progression is largely attributed to the tobacco industry's heavy marketing towards women and girls (Britton, 1998; CDC, 2010; Sarna & Bialous; WHO, 2010). The GYTSCG (2003) and the WHO (2010) contend that there is an alarming increase in smoking uptake among girls and the gap between boys and girls smoking rates is narrowing. In Canada for example, the 2010 Canadian Tobacco Use Monitoring Survey (CTUMS) reports that the current smoking rate among adolescent boys is 13% while smoking rate for adolescent girls is 14% (Health Canada, 2011). It is important that we pay particular attention smoking prevention, especially among adolescent girls.

The health effects of smoking among women cannot be ignored. There is growing evidence that women are more vulnerable to tobacco-related illnesses than men (Carpenter, Wayne, & Connolly, 2005; Kay et al., 2010; Sarna & Bialous, 2004). For example, women who smoke are 20 to 70 percent more likely to develop lung cancer than men who smoke the same number of cigarettes (Manton, 2000; Shriver et al., 2000). The WHO (2001) reported that women's mortality rates are 80-90% higher for those who smoke compared to those who don't smoke. Even further, research shows that girls who initiate smoking in early adolescence sustain

growth retardation (Stice & Martinez, 2005).

Tobacco reduction strategies and policies have been successful in reducing the prevalence of smoking within Canada, but certain groups of vulnerable populations, such as adolescent girls, still display unacceptably high rates of smoking (Greaves et al., 2006). Research is needed to guide the development of more effective strategies to prevent adolescent girls' smoking.

2.3   Intersections of gender and health risk behaviours

2.3.1 Influence of gender on health risk behaviours

The term gender refers to the socially constructed roles, attitudes, personality traits, behaviours, values, and relative power and influence ascribed to men or women; whereas sex refers to biological characteristics (Health Canada, 2003). Ideas about gender influences and their intersections with sex and diversity generate assumptions and expectations, which in turn, influence men and women's health behaviours (Greaves & Hemsing, 2009). Given that health behaviours are influenced by normative values, health beliefs, and the surrounding environment (WHO, 2003a), it is not surprising that gender-specific strategies are needed to positively influence health behaviours. The role of gender influences on health risk behaviours among youth is described in the literature (Bonny, Britto, Lostermann, Hornung, & Slap, 2000; Busen, Modeland, & Kouzekanani, 2001; Mistry, McCarthy, Yancey, Lu, & Patel, 2009; Rew, Horner, & Fouladi, 2010; Sarigiani, Ryan, & Petersen, 1999; Stoltenberg, Batien, & Birgenheir, 2008; Topolski et al., 2001; Wu, Rose, & Bancroft, 2006; Zweig, Phillips, Lindberg, 2002).

2.3.2   Influence of gender on smoking

There is a small but growing body of literature that examines the influence of gender on adolescent girls' smoking to inform TC (Greaves & Hemsing, 2009; Haines et al., 2009; Johnson et al., 2004). For example, evidence suggests that girls initiate smoking for different reasons than

boys (Faucher, 2003; Galanti, Rosendahl, Post, & Gilljam, 2001; Wagner & Atkins, 2000), and also that girls are more vulnerable to tobacco use due to social-structural and psychosocial pressures, such as trauma, gendered roles, unequal power relations and differences in access to social services (Greaves & Hemsing, 2009). Moreover, Greaves and Jategaonkar (2006) posit that many factors such as class, culture and ethnicity contribute to trends in women's smoking and further argue that tobacco use is a response to social and economic inequalities. Britton (1998) contends that smoking among women began with the Baroness de Dudevant (Chopin's mistress, Paris, circa 1840), purportedly the first woman to ever wear men's pants and smoke in public in an effort to promote power and independence among women. Women's gendered roles have been changing, along with shifts in independence and autonomy (WHO, 2003a), and smoking uptake among women has been hypothesized to be related to these social changes.

Since the 1920's the tobacco industry has been targeting young girls to begin smoking by associating smoking with a desired physical and social image, and removing concerns for health risks by marketing "light" and "ultra-light" cigarettes to this target group (Campaign for Tobacco-Free Kids, 2009a). This approach by the tobacco industry has served to change cultural beliefs about women and smoking, where it was once viewed as very undesirable for women to smoke (Greaves et al., 2007). Images of women have evolved throughout the 20th century, from associating women and smoking with independence and glamour, to associating it with sexual allure (WHO, 2005).

DiNapoli (2009) posits that ego development is an important developmental task throughout adolescence. This developmental stage is marked by gains in independence and making life choices, such as trying cigarettes (Norman, Maley, et al., 2008). The tobacco industry takes advantage of this transition period in a girl's life by advertising cigarettes as a solution to keeping slim and looking mature and independent (Britton, 1998; Carpenter et al., 2005; Health

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Canada, 2008). The tobacco industry has successfully marketed to girls by directly targeting them through advertisements that associate tobacco use with glamour, body image, romance and independence (GYTSCG, 2003; WHO, 2005; WHO, 2001). Several studies have found receptivity to pro-tobacco advertisements as powerful predictors of adolescent smoking (Biener & Siegel, 2000; Evans, Farkas, Gilpin, Berry, & Pierce, 1995; Gilpin, White, Messer, & Pierce, 2007; Pierce et al., 1998; Unger & Chen, 1999; Canadian Lung Association, 2006). It has also been suggested that the tobacco industry's gendered approach to marketing has played a major role in influencing smoking uptake among girls (Carpenter et al., 2005). In contrast, TC advocates have not consistently used gender-focused approaches to counter pro-tobacco messages to girls.

Social networks have been reported to be influential in adolescent girls' smoking uptake. It is acknowledged that girls have more intimate friendships, report higher intimacy levels, and are more likely to turn to their peers for support, which may result in more opportunities to influence smoking uptake (Mercken et al., 2010). Adolescent girls experience dramatic changes physically and psychologically and these pressures may motivate initiation of smoking so that they can fit the image they believe necessary to be part of particular social networks (Health Canada, 2008). Faucher (2003) conducted a secondary analysis of the National Longitudinal Study of Adolescent Health and concluded that one of the strongest risk factors that contributed to smoking initiation among adolescent girls was peer smoking. Wagner and Atkins (2000) also found that smoking behaviours and attitudes among peers is strongly associated with smoking among adolescent girls. Researchers that examined the differences between adolescent boys and girls' networks regarding smoking-based selection and influence processes reported that only girls were influenced to smoke by their peers (Mercken et al.). The importance of social networks and relationships to adolescent girls points to the role that their social environment plays in

adolescent girls' health behaviours, particularly smoking behaviours, and the importance of considering gender influences.

Although gender plays a significant role in smoking behaviours among young women, little effort has been made to incorporate gender-specific approaches to tobacco prevention and control efforts directed towards young women. Wagner and Atkins (2000) conducted a review on literature about smoking prevention among adolescent girls and concluded that that the most commonly employed approaches to smoking prevention among adolescents were not gender-specific. It is evident that those who are developing TC initiatives need to pay more attention to the gender-specific needs of adolescent girls.

2.4   Web use among youth

2.4.1   Youth and the internet

It is necessary to examine youth web use patterns in order to underscore the potential opportunity that social networking sites have for reaching adolescent girls with regards to smoking prevention. Adolescents comprise the largest portion of individuals who use internet technologies (Hong & Cody, 2002; Kim et al., 2010; Lenhart, Madden, & Hitlin, 2005; Ribisl et al., 2003). In 2010, 93% of teens aged 12-17 reported using the internet (Lenhart, Purcell, Smith, & Zickuhr, 2010). Adolescent girls comprise a large portion of these young, avid internet users. Gross (2004) surveyed over 250 students in grades seven to 10 to examine adolescent internet use. According to Gross, results revealed that the gap between boys' and girls' internet usage is narrowing, with an increasing number of young women spending more time online compared to the past.

Adolescents are also large users of online health information and represent an important population for understanding the impact of the internet on their health behaviours (Gray, Klein, Noyce, Sesselberg, & Cantrill, 2005). In 2005, it was reported that more than 90% of both

Canadian and U.S. adolescents have regular access to the internet, and that many use the internet to access health information (Gray et al.). Lenhart et al. (2010) estimated that about a third of online teens (ages 12 to 17) search the internet for health information and that girls are more likely than boys to look for sensitive health information (23% versus 11%), such as information on drug or alcohol use.

Over the past few years, the most popular trend in online communication is the use of social networking websites (Pfeil, Arjan, & Zaphiris, 2009). The purpose of social networking sites is to allow users to participate in social activities and establish social capital by building and maintaining contacts (Pfiel et al.; Steinfield, Ellison, & Lampe, 2008). This trend is particularly popular among teenagers. Teens (aged 12 to 17) are almost twice as likely to use social networking sites compared to adults (73% versus 47%) (Lenhart et al., 2010). According to Lenhart et al. (2010), older online teens (14-17 years old) are more likely to report using social networking sites than younger teens (82% versus just over 50%). In addition, 41 percent of teenagers say they send messages to their friends everyday via Facebook, Myspace, or other similar sites (Lenhart et al., 2007). Both Facebook and Myspace provide an ideal platform for users to connect with others, interact with information, and post personal thoughts and opinions (Mazur & Richards, 2011). Youth that use social networking websites are considered "intense" communicators, where maintaining their social networks are important to them (Lenhart et al., 2007; Mazur & Richards, 2011). Boyd (2007) examined how boys and girls engage with the social networking site, Myspace, and found that teenagers used this site to connect with already existing peers and youth. Furthermore, youth endeavored to develop an identity on their profile by adhering to specific social codes (Boyd), reflecting the importance developing and maintaining their social networks.

2.4.2 Adolescent girls and social networking

Girls are more frequent communicators and are more likely to use social networking sites, such as Facebook, than boys (Gross, 2004; Hargattai, 2007; Lenhart et al., 2007; Rainie, 2000). For example, in Canada, it is documented that more women (54%) use Facebook than men (46%) (Socialbakers, 2011). Hargittai (2007) suggests that gender is a significant factor to social networking site use. Even though men may still spend more time on the internet, Hargittai concludes that women are more likely to use social networking sites than men. Also, adolescent girls are motivated to use social networking sites for different reasons than boys. For example, a study conducted by Mazur and Richards (2011) revealed that adolescent girls were more likely to send and receive messages from fellow peers and that more than half of these interactions were between girls, whereas two thirds of boys' interactions were with the opposite gender. Online gender homophily and enjoyment of same-gender interactions among girls is also supported with offline friendships (Mazur & Richards). A recent study by Lin and Lu (2011) explored why people use social networking sites, and reported that the number one reason for joining social networking sites by both genders is enjoyment. However, perceived benefit and network externalities on continued intention to use varied by gender. The number of peers had a significant impact on girls' intentions to continue to use social networking sites, perceived usefulness, and enjoyment, whereas boys indicated that the number of peers affected their perception of utility of social networking sites (Lin & Lu). Livingstone (2003) has argued that "research on children and the internet must go beyond access to examine the nature of internet use—its nature and quality, social conditions, cultural practices and personal meanings" (p. 159). Based on available evidence, it is reasonable to conclude that if girls' experiences in using social networking sites are different than boys, that this needs to be taken into account when using this media to deliver health promotion messages.

2.5 Gender, smoking and the internet

2.5.1 Pro-tobacco advertising on the internet

The internet provides an unfettered channel for selling tobacco products and promoting tobacco use to youth. According to Ribisl et al. (2003), it is the culture and lifestyle of smoking associated with each gender that appeal most to youth. Researchers who have examined tobacco content on the internet concluded that websites with the greatest youth appeal were devoted to juxtaposing smoking with culture and lifestyle (e.g., Ribisl et al.; Hong & Cody, 2002). Hong and Cody (2002) conducted a content analysis study of 318 pro-tobacco websites that were accessed through Google, Infoseek and Yahoo! to examine the characteristics of the human models within the photographs displayed on these sites. Female models were most often portrayed in sex/fetish sites and were slim and attractive. According to Hong and Cody, the portrayal of men as rugged individuals and women as beautiful and slim correlated with their respective gender-associated culture and lifestyle.

Using a similar approach, Ribisl et al. (2003) also conducted a content analysis of over 1600 photographs displayed on 30 websites found through Yahoo! to assess the demographics of the individuals depicted and the amount of smoking and nudity displayed. All websites were easily accessible to youth and no age verification was required to enter the sites. They reported that five of the 30 sites mentioned "smoking fetishes" (associating sexuality and sexual fantasies with smoking) and generally featured pictures of clothed and unclothed women smoking. Over a third of the sites featured stories about smoking where the words like "girlfriend", "girl", "daughter", "mother", and "virgin" frequently appeared in the titles of the stories. The study also reported that 95% of the photographs depicted smoking, of which 92% featured one or more women, and 7% contained nudity and smoking.

Freeman and Chapman (2007) conducted a study in which they searched for videos with smoking content on the YouTube website and identified those that were most commonly viewed. The most watched pro-smoking videos were the smoking fetish and female smoking videos. This is congruent with evidence that portraying smoking by girls as sexy and alluring is a common tobacco-marketing strategy (Amos & Haglund, 2000). However, the researchers acknowledged that it is difficult to determine whether or not the tobacco industry is behind many pro-tobacco advertisements on the web given its historical use of stealth marketing techniques (Freeman & Chapman, 2007). In a similar study, Kim et al. (2010) conducted a content analysis of the smoking fetish videos on YouTube. Among the 139,000 videos that were located using the search term *smoking,* 2,220 (1.6% of all smoking videos) were smoking fetish videos. When the search term *anti-smoking* was entered only 1,480 anti-smoking videos were identified. What is most alarming about these findings is that youth between the ages of 12 and 17 are the largest demographic group to visit YouTube (Bausch & Han, 2006).

2.5.2   Pro-tobacco advertising on social networking sites

The tobacco industry and cigarette retailers have been implicated in targeting social networking sites such as Facebook and Myspace to recruit smokers (Freeman & Chapman, 2010; Jenssen et al., 2009; Shepherd, 2009). Jenssen et al. (2009) conducted a content analysis of web pages viewed by adolescents ages 14-17 in order to describe exposure to tobacco-related content. Findings indicate that although only a small portion of the internet sites visited by adolescents contained pro-tobacco messages, most pro-tobacco references were found on social networking sites, with almost half of them on Myspace (Jenssen et al.). The researchers argue for the need to pay attention to social networking sites because of the growing popularity of Myspace and Facebook profiles. Consistent with social norm theory (Berkowitz, 2004; Brown & Moodie, 2009), social networking sites that promote smoking may create a sense of normality regarding

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this harmful practice. Research shows that adolescents who are socially dependent on tobacco perceive smoking as a way to maintain their social connections and not necessarily because they crave nicotine (Johnson et al., 2003). Also, there is evidence that girls (31%) are more likely than boys (17%) to report social norms (my friends do it) as a reason to initiate smoking (Faucher & Carter, 2001).

Freeman and Chapman (2010) identified 'British American Tobacco' (BAT) employees on Facebook and then conducted a search on Facebook for BAT promotional adds and two of BAT's global brands, 'Dunhill' and 'Lucky Strike'. Each of the three search terms was associated with over 500 items across a variety of Facebook subsections. The BAT employees energetically promoted these items through joining and administrating groups, joining pages as fans, and posting photographs of BAT products. Despite the World Health Organization Framework Convention on Tobacco Control (WHO FCTC) ban on all forms of tobacco advertising, promotion and sponsorship, it has yet to be tested on online social networks, such as Facebook and Myspace. The threat of pro-tobacco content on these sites to the health of young adolescents is evident, especially for girls, because they are frequent users of social networking sites. Because researchers have shown that cigarette advertising on the internet is correlated with increased smoking appeal among youth as well as increased uptake and continued smoking by adolescents (Jenssen et al., 2009; Ribisl), the urgent need for strategies to counteract pro-tobacco content targeting girls on the web is apparent.

2.6   The internet and youth smoking prevention

2.6.1   Using the internet for smoking prevention

Utilizing the internet for health promotion and risk reduction is a recent development with distinct advantages (Walters, Wright, Shegog, 2006). The internet provides an environment that is appealing, anonymous, and accessible 24 hours a day (Lin & Hullman, 2005; Parlove et

al., 2004). The rise in internet-based health information provides access to health information to large audiences (Cheh, Ribisl & Wildemuth, 2003). Norman, Maley, et al. (2008) agree that web-based interventions are an excellent cost-effective opportunity to have wide reach and influence population health. While research on the efficacy of internet-based health information initiatives has only begun, several recent studies suggest that web-based smoking initiatives have favorable effects on adolescent smoking behaviours (Norman, Maley, et al., 2008; Parlove et al., 2004; Prokhorov et al., 2008; Shegog et al., 2005; Woodruff, Edwards, Conway, & Elliot, 2001).

Parlove et al. (2004) conducted a qualitative study in order to gain an understanding of youth's preference for and acceptability of the internet as a channel for smoking prevention intervention. The researchers recruited students in grades six to eight (63% of whom were females) to participate in focus groups that were centered on questions about the appeal of using the internet for smoking prevention interventions. The students endorsed the use of the internet as a channel for smoking prevention, and their key suggestions were to incorporate an interactive component and/or give interventions a modern visual flare to make them more appealing. Although the study findings point to the need to involve the target audience in the creative process of intervention innovations, the researchers did not consider gender influences, or the use of social networking sites.

Three studies were identified that examined the short-term effects of online smoking interventions (Norman, Maley, et al., 2008; Shegog et al., 2005; Woodruff et al., 2001). One additional study was located that examined long-term effects of an on-line smoking prevention and cessation program (Prokhorov et al., 2008). These studies all point to the potential usefulness of online interventions targeting youth.

Norman, Maley, et al. (2008) examined a web-based anti-tobacco initiative offered to 1,402 students (46% were females) in grades 9 through 11. The study utilized a two-group

randomized control trial where a five-stage interactive web site (Smoking Zine) was used as the intervention. The Smoking Zine website was integrated into a program that used paper-based journals, a small group form of motivational interviewing, and tailored e-mails. In addition, the researchers acknowledged the novelty of this intervention and conducted a detailed gender-based analysis given that gender effects can influence internet use and responses to a clinical intervention. The on-line intervention had a positive effect on motivation for smokers most resistant to quitting at baseline, and prevention of the likelihood of heavy smoking by non-smokers at six months, which was consistent between both males and females. Given the detailed attention to gender influences in this research study, the results are promising for reaching adolescent girls with online TC interventions.

In another study, Shegog et al. (2005) evaluated the use of a web-based tobacco prevention program (Headbutt) to change intentions of middle school children to smoke tobacco. In this a single-group pretest-posttest study, 2,227 students in grades six to nine were assessed on cognitive determinants of smoking in the Headbutt program and provided tailored feedback based on their responses. Exposure to the Headbutt program significantly decreased smoking intentions and pro-smoking attitudes, and increased self-efficacy expectations and knowledge of negative consequences associated with smoking. Although these results point to the potential value of online interventions, gender influences were not explored.

In the third study examining short-term effects, Woodruff et al. (2001) piloted an internet-based virtual reality intervention to support rural teen smoking cessation. Eighteen teen smokers (aged 13 to 17) were invited to interact in real-time in the virtual world with a trained cessation counselor for seven, one-hour chat sessions over the period of two months. Analysis of data collected at baseline, posttest, and one-month follow-up indicated significant changes in quitting, amount smoked, and intentions to quit. Also, positive trends were seen in past-week abstinence

rates, quit attempts, and attitudes toward quitting. However, gender influences were not accounted for in either the intervention or the evaluation.

Finally, Prokhorov et al. (2008) conducted an experimental study that analyzed the longer-term outcomes of an interactive, internet-based smoking prevention and cessation intervention (ASPIRE) for 1160 high school students. At the 18-month follow-up, results showed that the intervention was effective at preventing smoking initiation, with only 1.9% of baseline non-smokers initiating smoking compared to the control group (5.8%). The ASPIRE intervention also had significant positive effects on changing decisional balance (pros and cons of smoking) and temptation to smoke, particularly among those at higher risk for smoking uptake (i.e., exposure to peer or parent smoking). In contrast, participants in the control group demonstrated higher smoking initiation rates among participants with baseline peer pressure to smoke and among participants with household exposure to smoke. Although the ASPIRE program was designed specifically for adolescents and reported promising results regarding the use of the internet as a media channel to reach adolescents with targeted smoking interventions, gender influences were not accounted for in the design of the intervention or evaluation.

2.6.2   Using social networking sites for smoking prevention

Facebook and Myspace have been identified as important channels for TC initiatives because they present the opportunity to quickly and easily engage with the public (Norman, McIntosh, et al., 2008). Since Ptolemy (2011) posits that young women are not motivated to find health information on their own, presenting TC messages on social networking sites holds promise through enhanced exposure and removal of the need for self-seeking behaviour to access anti-smoking information. Social networking sites also provide a medium for gaining the attention of young women and raising their awareness around tobacco use.

Research involving the use of social networking sites for TC initiatives has only just begun. Although limited, a few research studies have reported that social networking sites are a favourable medium for reaching youth (Moreno et al., 2009; Team Shan, March 2011). Ptolemy (2011) and Team Shan specifically found that social networking sites were preferred mediums among young women for receiving information in relation to smoking and breast cancer. However, no studies have yet to investigate and expand on the potential for utilizing social-networking websites, such as Facebook and Myspace, as a medium for delivering TC messages.

Researchers have found the internet to be a promising channel to promote smoking prevention initiatives to youth. Given the high rates of internet use among youth, it is important to expose youth to health promotion messages in ways that take advantage of their internet use patterns as well as their preferences for online health information. Shahab and McEwen (2009) posit that, despite the increase in the number of online interventions, there is little known about what factors influence their success or why some work while some do not. Target audience perspectives about interventions are needed to direct the development, implementation, and evaluation of TC messages on social networking sites.

2.7 Youth and TC message types and approaches

While there are many different types of TC messages aimed at targeting youth, there is a lack of literature examining the effectiveness of these messages, why or why not they are effective, and what channels are most appropriate for the messages. Moreover, there is a lack of literature that has examined gender influences in relation to message preferences among the target audiences. Researchers that have attempted to contribute to understandings of TC messages' efficacy among youth have revealed varied effectiveness of the messages. Wakefield et al. (2003) conducted a literature review of anti-smoking advertising directed towards youth and found that, although some research suggested a positive influence on teenagers in relation to

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messages that graphically depict health effects of smoking, emphasize social norms against

smoking, and portray the tobacco industry as manipulative, these findings are not consistent. For

example, McKenna and Williams (1993) focus group tested anti-smoking campaign material

depicting the tobacco industry's manipulation. By presenting this material to youth, the

researchers aimed to provoke adolescent's desire for control through not smoking or quitting

smoking. However, it was found that 38% of the 10-17 year old participants thought that the

messages promoted smoking. McKenna and Williams argued that it is critical to conduct

audience research throughout the creative process of developing TC initiatives to ensure that the

material is "in tune" with the consumers. Similarly, other researchers have stressed the

importance of identifying existing beliefs and attitudes among the target audience when

developing effective campaign message themes (Hornik & Woolf, 1999). Farrelly et al. (2003)

stress that TC campaign approaches targeting youth must be concomitantly considered with what

types of message themes the target audience prefers in relation to these campaign approaches. In

order to gain an understanding of youth perspectives on delivering health messages through a

new and innovative medium, it is also necessary to examine what kind of messages hold potential

for effectively raising the awareness of the intended target audience in this medium.

2.8   Analysis of selected TC messages

Existing TC messages provide a usual starting point for developing TC messages for use

on social networking sites. We reasoned that existing TC messages could be used to engage

young women in a discussion about effective TC messages to learn more about their preferences,

and to provide a basis for identifying ways TC messages could be integrated into social

networking sites. This study included seven, purposefully selected TC messages directed towards

young women for analysis and evaluation. The names of the 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. Because the internet sources various types of TC messages intended for many different media, the messages for this study were selected from several different internet websites. This allowed for evaluation of various messages presented by different health organizations and campaign agencies. The TC messages were also selected to provide a variety of images and information. Only messages that specifically targeted young women were included.

In the following discussion, an analysis of the messages is described and in doing so the rationale for their inclusion in this study is provided. The TC messages were analyzed in relation to descriptive aspects of the messages, the way smoking was depicted in the messages, as well as how gender was presented in the messages. Table 1 provides an overview of the selected messages.

Table 1. Message descriptions

Message	Message Overview	Source	Message Title	Year Developed	Year Accessed	Country of Origin	Format	Tone	Aim
The Truth	TheTruth.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 up a cigarette. White dotted lines circle her larynx and the cigarette and the message challenges the reader to "remove one."	http://theinspirationroom.com/daily/2008/truth-remove-one/	Remove One.	2008	2010	United States	Campaign Poster	Negative	Education/ Awareness
Poster Child	The British Columbia Ministry of Health and NOW Communications of Vancouver worked together to create an image that displayed the damage that could actually happen to a girl at a young age. This message displays a young girl holding up 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	Tobacco Industry's Poster Child	1998	2010	Canada	Campaign Poster	Shocking	Education/ Awareness
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 and a cigarette in her hand, but in the mirror she is looking at a sad woman bald from chemotherapy.	http://www.myinterestingfiles.com/images/2008/03/anti_smoking_campaign_from_america_top_model_7.jpg	Bald from Chemo	2008	2010	United States	Campaign Poster/ Picture	Negative	Education/ Awareness
Chic?	This message was developed by the World Health Organization designed for the 2010 World No Tobacco Day. This message depicts a beautiful young woman with a tracheotomy because of her smoking habit.	http://www.who.int/tobacco/wntd/2010/en_wntd_2010_chic_no_throat_cancer.pdf	Chic? No, throat cancer.	2010	2010	Switzer-land	Campaign Poster	Shocking	Education/ Awareness

Message	Message Overview	Source	Message Title	Year Developed	Year Accessed	Country of Origin	Format	Tone	Aim
Cigarettes Smoke People	The Cancer Patients Aid Association put on a print campaign from Canadian shop Bleubancrouge. This message is situated in a bistro where there are only two feminine disembodied arms that are burning down like a cigarette. The main aim of this message was to depict the addiction and how it controls and devours its hosts.	http://spaceinvaders.com.br/2009/02/09/ccpa-cigarettes-smoke-people/	Cigarettes Smoke People	2009	2010	Canada	Campaign Poster	Shocking	Education/ Awareness
Live to See it	This message was developed by Neogama/BBH,'s & client ADESF to present smoking as something that will prevent people from living to see interesting future developments, such as a rising temperature as demonstrated in this message. This message displays naked Barbie-like females walking the city streets.	http://adland.tv/ooh/adesf-institutional-stop-smoking-now-future-live-see-it-print-brazil	Live To See It. Quit Smoking Now.	2008	2010	Brazil	Campaign Poster	Positive	Provocation

2.8.1 Message descriptions

All of the messages, except for one, were developed between 2008 and 2010. Also, most of the messages were developed for the purposes of print campaigns. The tone of five of the messages was judged as shocking or negative. The two positively framed messages depicted the positive outcomes of not smoking or quitting smoking, whereas the other messages depicted the negative risks of smoking. Five of the messages focused on raising awareness and providing education on the dangers of smoking. One message (Above the Influence), entitled 'I do me', aimed at empowering young women to resist peer pressure around drug, alcohol and tobacco use. The other message (Live to See it) aimed to provoke the reader to think about what they might be missing if their lives are cut short due to smoking. This message displayed nude female Barbies walking through the streets with the caption, "In 2042 the temperature in big cities will increase by 8 degrees on average," which is followed by the slogan, "Live to see it. Quit smoking now." Five of the messages were North American, one was Swiss, and one was Brazilian. Because this present study was conducted in Canada, messages developed outside of Canada were included, such as "Live to See it," to extend the range of messaging strategies that might be considered in future TC messages to young women. We acknowledged that messages developed in other countries might be interpreted differently because of cultural viewpoints. However, since our purpose in selecting the messages was to prompt discussion, this was not a major concern.

2.8.2 Smoking depiction

The smoking image that was displayed within the messages was a consideration in image selection. Kang (1997) argues that modern advertising depends on images, which create multi-leveled meanings that need to be deconstructed in order to be understood. Bovee and Arens (1986), as cited in Kang, conjecture that "most readers of advertisements (1) look at the illustration, (2) read the headline, and (3) read the body copy, in that order" (p. 47). This suggests

that emphasis must be put on how visual images are constructed when analyzing messages. "Poster Child" was the only message that included detailed information to educate young women on the health risks of smoking, while most of the other messages only included a brief caption and picture to raise awareness. "America's Next Top Model" did not include any wording or caption within the message, rather the picture was expected to capture a young woman's attention and raise awareness about the effects of smoking.

The TC messages typically depicted body image as a reason for young women to avoid tobacco and, therefore, limited the negative outcomes of smoking to physical appearance. This draws attention only to the gendered issue of body image, but not necessarily to other aspects of life that may be important to a young woman. Although negative health outcomes were also intertwined with these messages, with the exception of "Poster Child," they were secondary to a primary focus on beauty. The messages contained little or no health information and usually depicted an attractive, slim woman. For example, the beautiful woman in "Chic?" was a major feature of the message that stood out. The woman has a tracheotomy and the message caption says "Chic? No, throat cancer." The image of the woman as well as using the term "chic" attributes precedence to beauty and how smoking can negatively impact this feminine trait.

The selected TC messages were also determined to be fairly individualistic in nature because they frequently depicted a single female image. This is an interesting observation in light of evidence that smoking uptake by young women impacts and is impacted by relationships with others, as well as other contextual factors. However, it must be noted that "Above the Influence" was the only message that steered away from body image and touched on the issue of peer pressure. This message was not exclusively situated in the context of tobacco use, but drug and alcohol use.

Fear appeal messages have been used frequently in messaging youth and this approach was also evident in the selected TC messages. The fear appeal approach was portrayed through images of young women who were bald from chemotherapy, had a tracheotomy, or were depicted with organ damage that occurred as a result of smoking. However, according to Ruitter, Abraham, and Kok (2001), even though many health promotion messages favor utilizing fear arousal, it is not necessarily the most effective method to stimulate precautionary motivation and action with regards to risky health behaviours. Therefore, it is essential that these message aspects be understood from a consumer point of view; especially a gendered point of view because we do not know what adolescent girls think is effective at positively influencing their smoking behaviours.

2.8.3 Gender sensitivity

In keeping with the gender-sensitive approach taken in this research, we wanted to select messages that were specifically targeting young women. Therefore, the message selection process included a principal concern for underlying gendered issues reflected in the TC messages, as well as how gender and femininity were represented.

In the seven messages we selected, gender was often intertwined with female sexuality and the presentation of an attractive, slim body. As a result, there was often an underlying assumption that the gendered role of females entails sexual subordination and maintaining sexual attractiveness through keeping slim. According to Lindner (2004), exposure to stereotyping of gendered roles in advertisements is related to negative attitudes towards women, stereotypical ideas about how women should behave in society, increased acceptance of sexual aggression towards women, and negative body image perceptions in women. In a few of the messages, the young women were displayed as completely nude or as semi-nude. "Live to See it" was especially provocative with images of naked Barbies roaming the streets and censorship icons

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used to cover the breasts and genitalia. Use of this nudity can be eye catching and attract attention

to the message; however, Goffman (1987) as cited in Haines et al., (2010), argues that this

imagery objectifies women and influences social perceptions of women's roles. However, as

previously noted, because "Live to See it" originated in Brazil, different cultural contexts may

render different analyses and interpretations of the message.

In two of the messages, the young women were displayed with their mouths slightly open,

which is often associated with sexual allure and flirtation. The women in these messages

appeared to portray submission to the negative outcomes of smoking rather than expressing

negative emotions that would most likely be experienced. In the "Above the Influence" message,

the young woman is displaying a placatory smile, which projects a subordinate image rather than

a confident and aggressive image according to Kang (1997). Although the underlying goal of this

message was determined to be that of empowering young women, the facial expression does not

necessarily portray empowerment or confidence. Four of the messages displayed the women

holding a cigarette in a stereotypically feminine way, with the wrist turned out and the fingers

delicately clutching the cigarette. Goffman (1979) analyzed "gender advertisements" and

discovered numerous examples of subtle gender stereotyping, one of which was the feminine

touch, where women were often shown to be cradling or caressing objects with their fingers.

Most of the messages depicted a lone female in a passive position that is disconnected

from the outside world. This depiction suggests a docile and dependent image of women, where

their identity is hidden and insignificant. Even further, the use of headless or faceless female

bodies or bodiless limbs was apparent in three of the messages. This places emphasis on the body

and negates any importance that might be placed on a woman's self-identity, which enhances the

perception that physical attractiveness is the most important attribute for women. Because these

anti-smoking messages are only targeting this one dimension of young women's lives, their gendered needs in relation to tobacco use may be oversimplified.

2.9 Summary

The literature pertinent to the use of the internet as a medium for TC messaging for girls has been reviewed. Although the role of the internet has been examined, less attention has been directed to the role of the internet as a medium for delivering TC messages to adolescent girls. Gendered pro-tobacco marketing strategies targeting girls have been used by tobacco companies. However, evidence of gender-sensitive web-based strategies to prevent adolescent girls' tobacco use is not evident in the literature and bears further investigation. The literature has provided a strong foundational argument for exploring adolescent girls' perspectives on utilizing social networking websites (Facebook and Myspace) as a medium for delivering TC messages directed towards young women based on: the increase of smoking uptake by young women, the level of internet use among youth, the increasing use of social networking sites by adolescent girls, the reported importance of the social environment to adolescent girls, and the need for strategies to be implemented within environments that are important to youth.

The analysis of the seven selected TC messages in combination with support from the literature suggests there is a need to explore adolescent girls' perceptions of currently existing TC messages directed towards them to guide the development of TC messages for online use. Considering the impact that gender has on smoking, it is noteworthy that there is little in the literature that addresses how gender influences young women's perceptions of TC messages that currently exist. We do not know what is meaningful and important to them within these messages or what changes they would make. Further, we do not know how they would perceive these messages if they were delivered through a different medium, such as social networking websites. TC messages need to be carefully considered before being placed on social networking sites.

Efforts to understand the use of the internet as medium for delivering smoking prevention strategies directed towards youth have only begun.

Exploration into how the internet can be used for successful TC strategies for adolescent girls is important and has the potential to make a significant contribution to the smoking prevention literature. Further, it is important that gender-sensitive research is conducted. An understanding of how TC messages are perceived by young girls and what their thoughts are about delivering them through social networking websites will provide an important foundation for considerations on improving tobacco prevention strategies for adolescent girls.

3 RESEARCH METHODOLOGY

3.1 Overview

A gap exists in health care professionals' and policy makers' knowledge pertaining to how the internet can be effectively used to positively influence adolescent girls' smoking behaviours. In an effort to reduce this knowledge gap, adolescent girls' perspectives on utilizing social networking sites as a medium for delivering TC messages directed towards young women were explored in this study through interpretive descriptive methods. The purpose of this chapter is to describe the rationale for choosing interpretive descriptive methodology and to describe the study design and methods.

3.2 Study design

Interpretive description is an inductive analytic approach that aims to develop knowledge that will inform practice (Thorne, Reimer Kirkham, & MacDonald-Emes, 1997). This research approach is aligned with naturalistic inquiry and acknowledges the constructed nature of human experience and therefore, allows room for shared realities (Thorne, Reimer Kirkham, & O'Flynn-Magee, 2004). The purpose of interpretive description is to identify common patterns and themes about a phenomenon of interest so that new understandings about the phenomenon from the contexts of particular individuals are brought forward (Thorne et al., 1997). The intent of this study was to guide the development of social networking-based TC strategies directed towards young women to address increases in the uptake of smoking among girls and young women (WHO, 2003b; WHO, 2009). Ethical approval for research involving human participants was obtained from the Office of Research Services at the University of British Columbia.

3.3 Sample

3.3.1 Sampling

This study utilized a purposive sample approach, which has been suggested to be an

appropriate sampling strategy for interpretive descriptive studies (Thorne et al., 2004). Purposive sampling means that the "inquirer selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon of the study" (Creswell 2007, p. 125). In order to capture what young women thought about delivering TC messages through social networking sites, an effort was made to recruit informants that were close in age, had various tobacco-related experiences, and were familiar with using social networking sites.

In qualitative research, participants provide their understanding of the phenomenon of interest and reveal what is important to them (Morse & Field, 1995). It is agreed between qualitative researchers that the intent of qualitative research is to discover meaning, not to generalize the information (Creswell, 2007; Morse & Field). Therefore, a general rule for qualitative research is not to only study a few individuals but also to gather extensive information from each individual (Creswell, 2007). Further, Thorne et al. (2004) conjecture that interpretive descriptive studies draw upon relatively small samples, using data collection techniques, such as interviews, to articulate a meaningful account of the experiential knowledge of participants that these methods render accessible. Therefore, emphasis is placed on the appropriateness of the sample rather than on the size of the sample.

3.3.2   Criterion for sample selection

Eligibility criteria required that participants were adolescent girls between the ages of 15 and 18. The age group selected for this study was decided upon for several reasons. First, the lower age group (15) was selected because, with 13 and 14 being the legal age to begin using Facebook and Myspace respectively, girls can be expected to have some experience with social networking by age 15. Secondly, Nusca (2010) reported that adolescents between the ages of 15 and 18 spend more time on the computer compared to those ages 12-14. And finally, Krueger and

Casey (2009) maintain the importance of being attentive to the age range of youth when conducting focus groups because they developmentally change over a two-year period, and their interests, experiences and socialization alter as a result. Therefore, despite the slight difference in the participants' age range than originally expected, the study sample consisted of participants with a suitable age gap. Other eligibility criteria included being either previous users or current users of Facebook and/or Myspace. Both smokers and non-smokers were eligible to participate. Participants also had to be able to converse in English because the nature of focus groups requires that the participants can understand each other. Participants under the age of 16 were required to provide a signed assent form (Appendix A) and their parent's written consent to participate (Appendix B). Participants aged 16 or over provided written consent to participate (Appendix C).

3.3.3   Recruitment procedures

Participants were recruited for the study through the distribution of a recruitment poster (Appendix D). These recruitment posters were distributed through three different community contexts in the Central Okanagan of Kelowna, BC: YMCA recreational facility (H2O Center), Okanagan Boys and Girls Clubs (OBGC), and the University of British Columbia's (UBC) Okanagan campus. The YMCA and the OBGC both provided a formal letter stating their support through distributing the recruitment posters throughout their facilities. Also, participants were recruited through posting the recruitment poster on Facebook. This allowed us to deliberately include a wide range of informants. All potential participants that were interested in the study were provided with a brief description of the study and study procedures and a consent form via email at least 24 hours prior to the conduction of the focus groups.

3.3.4   Description of the sample

This study included 17 adolescent girls between the ages of 16 and 19 (M=17.7; SD=0.69) that met the eligibility criteria. It must be noted that this study set out to recruit adolescent girls

between the ages of 15 and 18; however, the sample still met the requirements for the study. The oldest participants (19 years old) were 18 years old at the time of recruitment and therefore, met the eligibility criteria described above. Participants turned away from the study were those that were interested in participating after data collection was completed.

The study consisted of 17 adolescent girls; however, it must be noted that one participant raised the issue of sexual orientation and thought that the participant survey should have included other options for them to describe themselves other than male or female. This raised awareness to normative sex assignment, which does not make room for alternative understandings of sex or gender identity. For the purposes of this study and in an effort to be open to individual orientations to sex, the participants will be referred to as "young women."

Most of the study participants were recruited through the posters that were distributed throughout UBC's Okanagan campus. One study participant said that she found out about the study through the poster posted on Facebook. Four participants were recruited through the OBGC. The study participants all spoke English as their primary language and their education level consisted of the following: four high school students, nine first year university students, and four second year university students. The majority of the participants (n=15) described themselves as Caucasian; one participant described herself as Filipino and one as Korean.

Table 2 provides a summary of the study participants' lifetime smoking behaviour. Although eight participants described themselves as engaged or having been engaged in some sort of smoking behaviour, 11 participants defined themselves as non-smokers. Four participants described themselves as addicted to tobacco and to have smoked in the past month. Some of the participants initiated smoking between the young ages of nine and 13, while others did not initiate smoking until they were well into their adolescence at the ages of 16 and 17. Nine participants indicated that they had never had a puff of a cigarette, four participants had varying

amounts of lifetime tobacco use (between one puff and 99 cigarettes), and four participants

indicated that they have had over 100 cigarettes in their lifetime. All participants, except two,

who smoked or had tried smoking in the past, indicated that they also smoked marijuana (pot).

Table 2. Lifetime smoking behaviour among study participants   (n=17)

Variable	*M*	*(SD)*	*n*	*(%)*
Ever tried a cigarette				
Yes			8	(47.1)
No			9	(52.9)
Age took first puff				
9 years old			1	(5.9)
11 years old			1	(5.9)
12 years old			1	(5.9)
13 years old			2	(11.8)
16 years old			2	(11.8)
17 years old			1	(5.9)
Ever smoked a whole cigarette				
Yes			6	(35.3)
No			11	(64.7)
Age smoked first whole cigarette				
Never smoked a whole cigarette			11	(64.7)
10 years old			1	(5.9)
13 years old			2	(11.8)
16 years old			1	(5.9)
17 years old			1	(5.9)
Age not provided			1	(5.9)
Cigarettes smoked in lifetime				
Never had a puff of a cigarette			9	(52.9)
Only had a puff or a few puffs of a cigarette			1	(5.9)
1-5 cigarettes			2	(11.8)
6-15 cigarettes			0	(0)
16-25			0	(0)
26-99			1	(5.9)
More than 100			4	(23.5)
Ever felt addicted to tobacco				
Yes			4	(23.5)
No			13	(76.5)
Definition of self				
Non-smoker			11	(64.7)
Occasional smoker			1	(5.9)
Heavy smoker			1	(5.9)
Regular smoker			2	(11.8)
Social smoker			2	(11.8)
Pot smoker			5	(29.4)
Cigarette smoking in the past month				
Has not smoked in the past month			13	(76.5)
Has smoked at least once in the past month			4	(23.5)

Table 3 provides a summary of the study participants' internet usage and patterns. The study participants listed a wide range of places that they had access to the internet. The participants that listed "elsewhere" for computer/laptop access indicated that the library and friends' homes were places that they would go. Most of the participants accessed the internet regularly and felt comfortable navigating the internet. Almost all of the participants sought health information on the web, six of which said that they sought information specifically on the topic of smoking. Only one participant said that she had not sought any type of health information on the internet. All of the participants had a Facebook profile and four had a Myspace profile. Although some of the participants listed other social networking site profiles, this study maintained a focus on Facebook and Myspace because they are documented as the most widely used social networking sites among adolescents in North America. Most of the participants regularly signed on to their Facebook profiles with the majority indicating that they signed onto Facebook between two and 10 times per day, and one indicating that she signed on up to 100 times per day. Several participants indicated that they signed onto Facebook occasionally, which consisted of visiting their profile once per day. Participants that had a Myspace profile reported that they did not visit this site as often as Facebook, with the most often being once per day and the least often being once a week to "almost never." Many of the participants had a vast number of friends on their Facebook profile; none of them had less than 100 and a few specified having 700 or more Facebook friends.

Table 3. Internet usage and patterns among study participants   (n=17)

Variable	*M*	*(SD)*	*n*	*(%)*
Internet Access				
Has personal computer/laptop			9	(52.9)
Family has a computer/laptop			8	(47)
Has access to computers/laptops in school			7	(41.2)
Has access to computers/laptops elsewhere			5	(29.4)
Internet Usage Frequency				
Rarely			1	(5.9)
Occasionally			1	(5.9)
Regularly			15	(88.2)
Internet Aptitude				
Can easily navigate through the internet			11	(64.7)
Can blog			5	(29.4)
Can post pictures			12	(70.6)
Can post videos			8	(47)
Can create a web page			2	(11.8)
Health Seeking on the Internet				
General Health Information			16	(94.1)
Smoking Information			6	(35.3)
None			1	(5.9)
Social Networking Profiles				
Facebook			17	(100)
Myspace			4	(23.5)
Friendster			1	(5.9)
Bebo			1	(5.9)
Netlog			1	(5.9)
Social Networking Frequency				
Occasionally			2	(11.8)
Regularly			15	(88.2)
Number of Social Network Friends				
Facebook				
100-300			7	(41.2)
More than 300			10	(58.8)
Myspace				
Less than 50			3	(17.6)
More than 50			1	(5.9)

3.4   Data collection

The primary form of data collection was achieved through three semi-structured focus groups consisting of eight, four, and five adolescent girls in each group respectively. Since focus groups are more exploratory in nature, this method of data collection was appropriate for the purposes of this research. Also, focus groups are considered an excellent way to gather information from teens and young children (Creswell, 2007). Three focus groups were

appropriate because the rule of thumb for the number of focus groups is three to four according to Krueger and Casey (2009). These focus groups were conducted in two different settings; two were conducted in a meeting room at the UBC Okanagan campus and one was conducted in a meeting room at the YMCA. After signed consent was acquired from each individual participant, the focus group interviews commenced and were recorded via audiotape for transcription.

Field notes were also utilized to enhance the recorded information with impressions and observations about the interview process and content. Field notes are important when conducting interviews because they assist in remembering important points that might have been forgotten (Morse & Field, 1995). The field notes also served to assist with the transcription process. Morse and Field posit that field notes provide an overall understanding of the whole context, such as non-verbal gestures, tone, and general observations and reflections.

3.5   Focus group methods

The 'in-person' focus group interviews began with the completion of the participant surveys to collect each participant's demographic characteristics, lifetime smoking behaviour, and internet patterns and usage (Appendix E). A focus group interview guide was then used to assist the open-ended, semi-structured focus group interviews (Appendix F). The focus groups began with a warm-up activity. This activity included sorting copies of printed advertisements selling specific items and the participants were asked to determine from a gendered standpoint, whether these advertisements were being directed towards girls, boys, or unisex. This activity aimed to generate thinking about gender and how it plays a role in marketing.

The participants were then asked to evaluate the seven, selected TC messages previously described in the literature review. They were asked to answer the following three questions on a poster board located beside the message: (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

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message and why? Once the participants completed this activity, they were invited to identify their two most favourite and less favourite messages, marking them with "thumb's up" and "thumb's down" stickers. The purpose of this activity was to raise awareness and individual reflection about different ways that TC messages are directed towards young women.

The young women were then asked to discuss their evaluations of the messages as a group. The questions in the interview guide were used to guide the discussion. Following the discussion of the seven TC messages, participants were asked to consider how these messages would be received on social networking sites, and invited to provide reactions to and recommendations for using social networking sites as an avenue to reach girls with TC messages. The participants were then asked to consolidate their thoughts around delivering TC messages through social networking sites by taking a printed version of a Facebook page and providing suggestions for how TC messages should be changed in order to enhance young women's receptivity to them in this medium. They were invited to select a small version of one of the seven TC messages to help guide them in developing their suggestions. This activity prompted the young women to consider what additional changes might be needed to TC messages to enhance receptivity on social networking sites, such as Facebook and Myspace.

Finally, the focus group participants were asked to fill out a focus group interview evaluation form. All study participants then received an honorarium ($40) to acknowledge the time spent on the study. Each focus group session lasted the full 120 minutes.

Overall, it was observed that the participants were enthusiastic about participating in the study. Some of the participants shared their perceptions more than others in each focus group, which can be expected in the focus group interview context (Krueger & Casey, 2009). Particular individuals were often specifically asked for their perceptions in order to ensure that all participants were able to voice their thoughts and opinions.

In keeping with gender-sensitive research, this study utilized a female moderator and two female research assistants to assist with data collection. This enabled one research assistant to sit and observe the group, while the other was able to create field notes about the group dynamics (Cresswell, 2007). Also, this allowed for research team member debriefing, which aided in ensuring study rigour.

The social networking sites that were chosen to discuss as potential avenues for delivery of TC messages were Facebook and Myspace. These were specifically chosen because they have been documented as the most widely used social networking sites. Also, as previously mentioned, these sites are major sources of communication for adolescent girls in particular.

3.6   Data analysis procedures

Data analysis procedures consisted of constant comparative analysis. According to Thorne (2000), interpretive description relies on constant comparison processes in order to develop understandings of the participants' contextualized experiences of the phenomenon under study. Thus, constant comparison was used not only to compare data between the different TC messages, but also to reveal similarities and differences in the participants' perceptions. The transcripts were transcribed verbatim with the assistance of the field notes. In addition, participant comments recorded on the posters were typed up. These data were then analyzed through the use of constant comparative analysis.

Constant comparison involves taking one piece of data and comparing it to all other pieces of data so that similarities and differences are revealed and relations between the data emerge (Thorne, 2000). For example, by comparing the accounts of two individuals within the focus groups that were similar, analytical questions can be posed by the researcher, such as: how are these related? and what is happening here? Thorne et al. (1997) assert that asking these analytical questions stimulate a more coherent analytic framework for interpretive description than simply

coding, filing, and combing vast quantities of data bits. Also, making comparisons offers some protection against bias because the researcher is challenging ideas with fresh data (Corbin & Strauss, 1990). Further, comparisons assist with achieving precision and consistency because it requires grouping like with like (Corbin & Strauss).

Interpretive description aims to reveal patterns and themes that characterize the phenomenon being studied and also account for individual variations within them (Thorne et al., 2004). The researcher must step back and reflect on what the participants are saying, as well as why and how they are saying what they are saying in order to identify these themes (Morse & Field, 1995). Themes are usually embedded within the data but are not explicitly made clear by the participants. Therefore, it was upon staying close to the data and using critical and analytical reflection that themes for this study were identified.

For this study, data analysis began after data collection. Although data analysis is often recommended to occur concomitantly with data collection, there are exceptions for particular study methods. According to Mayan (2009), subsequent data analysis to data collection is appropriate when semi-structured interviews that include many participants are conducted using the same questions in the same order. Since congruent focus group methods were used and this study aimed to identify differences and similarities in data across the three focus groups, analyzing the data after data collection was fitting for this study.

Coding was the initial step in the analysis. Creswell (2007) describes coding as bringing together meaningful segments of data and assigning names to these segments. Coding for this study was aimed at identifying categories and linkages in the data. Once the transcriptions were complete and poster comments were typed up, this initial step in the analysis began with reviewing the data, making notations on the margins of the data and comparing the data. During this phase, the focus was on critically examining the data line-by-line, and making

notations in the margins. After consultation with the research team, it was decided to analyze the data in relation to the two main topics of the focus groups: (1) data related to perceptions about the seven TC messages and (2) data related to social networking and TC messaging. Data were reviewed again and data segments related to each of the seven TC messages were identified from the comments participants provided on the posters and from transcribed focus group data. This data was compiled into eight different files, one for each message and one for the general comments. For each of the TC messages, data were grouped under the following categories: general responses to the message (including the poster board comments), suggested changes to the message, and ideas about using the message on social networking sites. Some data related to general comments about TC messages and general comments about using social networking sites and these data were grouped accordingly in respective categories. All data were identified by focus group to facilitate comparisons among the groups and participants.

The second step involved a close reading of the data in each of the categories, and making comparisons within and between categories. At this stage, a number of sub-categories were identified and used to organize the coded data. These included a) participant evaluations of the female(s) in the message, b) message aspect preferences noted among smokers, c) message aspect preferences noted among non-smokers, d) message aspect preferences shared between smokers and non-smokers, e) suitability for social networking sites, f) barriers and facilitators that influenced message effectiveness on social networking sites, and g) suggested changes for use on social networking sites. Tables were then constructed to highlight major themes and sub-themes in the findings.

3.7   Rigour

Thorne (2008) posits that the credibility of qualitative research extends beyond consideration of adherence to methodological rules and aims to answer the question of what

meaning can be made of the research findings. It is in explicitly depicting and contextualizing the analytical logic employed throughout a study that the credibility of qualitative research is established (Thorne, 2008; Thorne et al., 2004). The methodology used in this research study was explicitly discussed and made transparent so that others could follow and evaluate the analytical logic employed. Also, reflections, reactions, and decisions about the data were recorded so that the development of abstractions is retraceable and thus, defensible (Thorne et al., 1997). Sandelowski (1993) confirms that the credibility of qualitative research data is more about the transparency and audibility of research practices than being right about a particular phenomenon.

Thorne et al. (1997) also emphasizes the importance of acknowledging researcher biases that might be brought into a study. Although attempting to eliminate bias is naïve, explicitly accounting for the influence of bias is helpful to ensuring rigour (Thorne et al., 1997). A bias acknowledged in this study was the affirmation of the study participants' feedback, such as nodding in approval or using the term "right." It was noted that providing the participants with affirmation might bias certain responses and potentially discourage participants that may want to raise alternative views. Therefore, it was necessary to be mindful of cues that may influence participants' responses and ensure that the focus group context did not attribute more value to one perspective over another.

The use of interpretive description produces findings that extend beyond what any individual might see in his or her own situation; therefore, having the participants "validate" findings can be quite misleading (Thorne et al., 2004). Alternatively, Thorne et al., (2004) suggest seeking validity of the findings with those who have expert knowledge of the phenomenon. Therefore, the analytic process and findings were frequently reviewed and discussed with expert researchers in the field of adolescent smoking prevention research. Also, presentation of the research to others generated additional questions and opinions, thus creating

new understandings and conclusions, which were employed to further assist with data analysis.

3.9 Summary

The complexities of smoking prevention among young women as a whole, and especially in combination with the internet, are under-explored topics. In an effort to uncover the perceptions of young adolescent girls regarding the delivery of TC messages through social networking sites, a qualitative research approach of interpretive descriptive methodology was chosen. Constant comparison guided a rich analysis of the participants' discussions, and also facilitated the identification of similarities and differences between focus groups as well as individuals. In this chapter the methods used in this research were described.

4 FINDINGS

4.1 Overview

The main aim of this research was to explore adolescent girls' perspectives on utilizing social networking sites as a medium to deliver TC messages directed towards young women. The purpose of this chapter is to present the findings of this interpretive descriptive study. These findings are organized according to the three research sub-questions. The first section of findings will focus on the young women's evaluations of the seven TC messages. The second section of findings will present what the young women perceived to be factors that will likely influence the effectiveness of the TC messages on social networking sites. In the last section of findings, changes that were suggested to enhance young women's receptivity to TC messages within the social networking site medium will be presented. Participants' perspectives were drawn from three different data sources: participant poster comments, participant discussions, and participant Facebook page comments.

4.2 Participant evaluations of TC messages

Participants were invited to evaluate seven TC messages targeting young women. Their evaluations were in relation to: overall evaluations, images/messages associated with smoking, female/gendered issues and representations, and design features (see Table 4). Findings related to each of these themes will be described in more detail in the following sections.

Table 4. Participants' evaluations of the messages

Message	The Truth	Poster Child	America's Next Top Model	Chic?	Above the Influence	Cigarettes Smoke People	Live to See it
Overall Evaluations	*Anti-smoking message not clear *The choice is confusing **Votes:** • FG#1: 3/8 thumbs up, 1/8 thumbs down • FG#2: 2/4 thumbs up • FG#3: 1/5 thumbs down	*Picture makes a "strong point" *Too much information **Votes:** • FG#1: 7/8 thumbs up • FG#2: 1/4 thumbs up • FG#3: 4/5 thumbs down	*Effective picture portrayal of long-term consequences *Unclear due to lack of words or caption **Votes:** • FG#1: 2/8 thumbs up, 2/8 thumbs down • FG#2: 1/4 thumbs down • FG#3: 3/5 thumbs up	*Confusing because the "smoking is ugly" message does not fit with the image **Votes:** • FG#1: 3/8 thumbs up • FG#2: 1/4 thumbs up • FG#3: 3/5 thumbs up	*Unclear about what the message is about *Too much reading required **Votes:** • FG#1: 3/8 thumbs down • FG#2: 3/4 thumbs up • FG#3: 3/5 thumbs up	*Unrealistic **Votes:** • FG#1: 2/8 thumbs up, 2/8 thumbs down • FG#2: 2/4 thumbs up, 1/4 thumbs down • FG#3: 1/5 thumbs up	*Exploits women *Unrealistic *Smoking message is unclear **Votes:** • FG#1: 7/8 thumbs down • FG#2: 4/4 thumbs down • FG#3: 5/5 thumbs down
Images/ Messages Associated with Smoking	*Not "sugar coated" *Scary but not grotesque *Encourages making a decision about smoking	*Not "sugar coated" *Descriptive *Gross/Shocking *"Just standing there"(non-contextualized)	*Contradicts the glamorization of smoking *Scary but not grotesque *Not contemporary	*Not "sugar coated" *Scary/Repulsive but not overbearing repulsive *Contradicts glamorization of smoking	*Targets peer pressure *Language is too "immature"	*Context not identifiable *Disturbing and unrealistic image of smoking consequences *Slogan was hard to see	*Too fake *"Original" image encourages readers to "take a second look"
Female/ Gendered Issues and Represent-ations	*"Stylish" woman *Headless bodies vs. bodies with a head/face	*Child *"Dowdy" vs. "neutral/average"	*"Sophisticated girl" *"Lonely" and "regretful" facial expression *"Trampy"	*"Attractive" but not "Barbie doll gorgeous" woman *Inconsistent emotional expression	*"Natural/ Average" girl, not "glammed up" *Teenager *"Content" facial expression	*"Attractive" arms and jewelry suggest "classy ladies" *Unrealistic *Bodiless arms vs. bodies	*"Sex objects" *Naked *Headless body
Design features	*Needs brighter colors	*Nothing attractive to draw a reader in	*Too many graphical distractions	*Too many graphical distractions	*Bright pastel colors were appealing	*Needs brighter colors	*Needs more "appealing" colors.

4.2.1   Overall evaluations

Overall, participants thought that many of the TC messages lacked clarity, were too unrealistic to be effective, or contained too much information. A lack of clarity in the anti-smoking message was related to the presentation of confusing or insufficient information. For example, "The Truth" was viewed as not conveying a clear message because the statement, "remove one," referring to the choice between a cigarette and an intact throat, was viewed as confusing.

Several messages were considered unrealistic, which the participants thought made them less effective. When discussing "Live to See it," there was consensus that it was "too fake" because the message contained Barbies, a cartoon image, and a hypothetical situation. This was reflected in the following comment generated by the discussions:

> They [images] could be a lot more realistic, and I didn't even see much about smoking on there except for the little print; other than that, all I saw was naked chicks so I don't think it was very effective.

It was also noted by the participants that some of the messages contained too much information. For example, the young women thought that the picture in the "Poster Child" message made a "strong point" about the dangers of smoking, but the message included too much information. For example, one participant's comment on the poster said, "The image is good but the size and amount of text is a little overwhelming to the viewer."

The focus group participants voted on their two most favorite and least favorite messages through the use of "thumb's up" and "thumb's down" stickers (See Table 4). It is interesting to note that, despite being the message that was thought to include "too much" information, "Poster Child" was the most favored TC message, receiving eight out of 17 thumbs up votes. However, it did receive four thumbs down votes. "Chic?" was the second most frequently endorsed message

and received seven out of 17 thumbs up and no thumbs down votes. The least endorsed message was "Live to See it," which received 16 out of 17 thumbs down and no thumbs up votes. The rest of the messages received a few more thumbs up than thumbs down votes in fairly consistent patterns.

In summary, when examining the messages in their entirety, the participants pointed out some overarching aspects of the messages that influenced their effectiveness. The lack of clarity, unrealistic nature, and large amounts of written detail in the messages were important aspects that the participants thought reduced effectiveness of the messages.

4.2.2   Images/messages associated with smoking

Not surprisingly, many of the participants' comments focused on the images/messages associated with smoking. These comments related to the lack of meaningful contexts represented in the TC messages, fear arousal, fostering a personal connection, and depictions of young women in a particular age range. The following discussion will present the participants' perceptions related to these sub-themes.

4.2.2.1   Meaningful contexts vs. lonely girls

A prominent sub-theme noted among the young women was a desire to see the women within the messages in contexts that resembled their everyday experiences. For example, while discussing the "Poster Child" message, participants talked about their preference for images of girls doing things that they could identify with. One participant exemplified this during the discussion: "Put her in situations that we'd be in as opposed to just standing there." Participants expressed a preference for TC messages that demonstrate how smoking may impact their life goals and day-to-day lives. The "Cigarettes Smoke People" message prompted the following conversation between two participants:

Participant 1: If it [the message] were applied to a situation where you would want to have your body and you know you really want to be there, it would be different.

Participant 2: I definitely agree with that because I think that [it would be better] if advertisements were directed at [showing how] smoking was preventing you from doing certain things that you really want to do, like if you die early then you can't have kids, you can't get married, you can't have a fulfilling job, you can't do all these sorts of things you want to do.

Participant 1: Whereas when you think 'okay like will I be able to sit and have coffee?' or 'will I be able to be a model?' That's not really something that everyone is aspiring to be, but if smoking is hindering [you] from your everyday life of going out and doing things that you want for you life, then maybe that would be effective.

The focus group participants also talked about how the use of contemporary and modern settings would be more impactful, especially in relation to the "Cigarettes Smoke People" and "America's Next Top Model" messages. A few young women mentioned that the bistro setting in "Cigarettes Smoke People" was ineffective because restaurants are now smokefree. Another participant, while discussing the "America's Next Top Model" message, stated, "We don't have these lovely places where we sit and do our makeup, we are in the bathroom with the plugs and blow-dryer (laughing)."

Some of the participants commented on the individualistic focus of the messages and thought that this limited the effectiveness the messages. Instead, they advocated for TC messages that pointed out the effect of smoking and second hand smoke on important other people in their lives. For example, one participant pointed out the following:

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 that it's a big issue as

well and it has equally the same effect, even worse sometimes. 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.

This point was reinforced by one participant who smoked who thought that depicting how

smoking might affect other people would make her think more deeply about the consequences of

her behaviour:

If you did second hand smoke advertising, like a small child, or it could be my brother or

sister, I don't know, it just kind of, it gets you more, you are like, 'oh, I don't really want

that happening to my relatives,' or something.

4.2.2.2   Fear arousal

Fear arousal was another sub-theme that was 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 in the groups. The participants who

smoked were adamant about their dislike for "sugar-coated" messages and their comments

reflected an appreciation for messages that included fear arousal for this reason. One smoking

participant talked in-depth about how the "scarier images" were more effective:

Ultimately, I think that the scarier images are the more effective ones because they are

ultimately, like I said, 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,

it's more effective because it [shows] what is actually going to happen…. Show cancer

cells, show what a tumor looks like, show lung cancer or something like that. Just say,

'this is what it looks like inside of you.' I don't know, I think that's more realistic [and

would] be more effective. [It's] not sugar coated.

The participants who smoked also said that fear-based messages prompted them to "contemplate" changing their behaviour because they were "so descriptive" and "get the point across" about the harmful effects of smoking. This rationale was used by one participant when discussing the "Poster Child" message, "It's the most descriptive, most detailed and just, it has words, it's my favorite, it's pretty scary stuff." Although several participants who smoked commented that they did not like the "grossly graphic" or scary images, they did not think changing these aspects of the messages was necessary and even recommended not to make changes.

Focus group participants who did not smoke perceived fear-based messages to be ineffective because they elicited a negative affective reaction. They discussed how they did not like being "scared" or "grossed out." For example, one non-smoking participant said that the "shock and gag factor" of the "Poster Child" message would make her "want to look away and not read the message." It was even suggested in the poster comments that the "visual grossness" be reduced to enhance the effectiveness of these messages. A non-smoking participant discussed how she liked "The Truth" message because it did not depict the harmful effects of smoking in a grotesque way:

> I really like that it doesn't have to show the tube in the throat or like the ugly teeth or anything like that. It just shows the cigarette. It shows places that are affected and like, I know what it's talking about when there is a circle. I know the effects that smoking does have on your throat, lungs, or anything right. So I like that it's able to do that and put the point across very strongly without being grotesque or anything like that.

It must be acknowledged that some non-smoking participants appreciated the potential usefulness of the fear arousal approach, reasoning that these messages effectively depicted how "ugly" smoking could make a person look. For example, the "Chic?" message was thought to be

"repulsive" but not "overbearingly repulsive" such that they would avoid paying attention to the message. Similarly, "America's Next Top Model" was described as "honest but not grotesque" in the poster comments. However, some participants thought that the physical disfigurements displayed in many of the messages are not necessarily effective for young women: "I don't think that really appeals to girls as much."

The young women who didn't smoke further suggested that embedding the scary images within a context that might be important to them would be more effective and impactful in the prevention of smoking uptake among adolescent girls as well as prevent the inclination to distance themselves from the messages. One participant suggested putting images of young women within a social context or a sports context and then depicting a scary image, such as a black lung, to show how smoking can impact their health as well as their ability to participate in these day-to-day activities. However, it was suggested that there were too many messages that focused on the negatives of smoking and that demonstrating the positives of not smoking may not be a more effective smoking prevention strategy:

> I think it would be a really effective way to advertise if there was a lot of people shown having fun and being attractive and going to social things and not smoking [where] 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.

4.2.2.3 Fostering a personal connection

The focus group discussions also included noteworthy dialogue around messages that were perceived to foster a personal connection with the reader, such as prompting the reader to think about making a decision around smoking or challenging socially accepted ideas around smoking. Depicting the challenge between the choice of not smoking and staying healthy and smoking and living with the harmful consequences of smoking was viewed as a desirable feature

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in TC messaging. For example, all of the participants liked how "The Truth" message invited the reader to think about the decision to smoke or not, and the consequences of that decision. Although "The Truth" was the only message that contained this feature, the young women discussed how they liked that it challenged them to think about their decisions around smoking, and is depicted in the following poster comment: "It makes you think further about the consequences."

The focus group participants also discussed messages that they perceived to challenge teens to think more deeply about the "socially accepted" ideas around smoking, such as that smoking makes you look "cool." For example, when discussing the "Chic?" message, one participant said:

I thought it was good because sometimes smoking is thought of as being chic. Like you do it to look cool, whereas that, it's like a total contrast. Like no, it's not chic, you can get throat cancer. It [leads] to something kind of repulsive. So that's what I liked about it.

The young women also liked how these messages challenged the ways the tobacco industry supports and maintains these constructions around smoking. One participant's poster comment on "America's Next Top Model" said, "It does a great job of showing how the industry tries to glamorize smoking, yet the truth is in the mirror with such sick effects, [such as] cancer."

4.2.2.4   Child vs. teenager/young woman

The age of the women depicted in the TC messages was also discussed. Participants reflected on how well each image mirrored young women their own age. They did not like the slogan "Poster Child" because they thought this implied the message was directed towards children younger than themselves, while the girl in the "Above the Influence" message was thought to look more like someone their age.

In summary, the young women's discussions about the images in the TC messages were informative. The young women indicated a preference for TC messages that portrayed contexts that represented their everyday lives. Although there was a desire to learn about the harmful effects of smoking in TC messages, the use of "grotesque" images was not consistently supported. Fear arousal was perceived to be effective at attracting attention but there was less agreement on whether the approach facilitated receptivity to the message, particularly between the smokers and non-smokers. The participants supported messages that engaged the reader and fostered a personal connection with the images and messages. Messages that employed this approach were those that stimulated decision making between not smoking and the harmful effects of smoking and those that challenged dominant discourses around smoking for teens. Finally, the age of the young women depicted in the TC messages was an important aspect that was also perceived to influence message effectiveness.

4.2.3 Gendered issues and representations

It is well documented that messages used for health promotion are often embedded with specific representations of gender. The young women's comments reflecting gendered issues and representations in the TC messages focused on how young women were portrayed in the messages. The discussions focused on female sexuality, self-assurance, emotional expression and the balance between beauty and health within the messages.

4.2.3.1 Female sexuality

The TC 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 young women appeared frustrated and offended by some of the TC messages. For example, one participant stated:

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 because there's really no point.

There was also considerable focus group discussion around the level of physical attractiveness of the young women displayed in the TC messages, which determined whether the participants could identify with the women, and in turn, influenced the perceived effectiveness of the TC messages. The use of "model-like" women was often criticized, which was demonstrated by one participant while discussing the "Live to See it" message: "Women [don't] look like that, it's so not true, the average girl doesn't look like that, like those girls don't really have hips!" It was also suggested by the participants that the effectiveness of the anti-smoking message was reduced when female nudity became the focus. For example, the semi-nude woman in the "America's Next Top Model" message was thought to look "trampy" and one participant said, "It looks almost like a sex advertisement [rather] than an anti-smoking advertisement."

Some of the TC messages were perceived favourably because the women were not portrayed in a sexual manner. For example, the participants especially liked how the girl in the "Above the Influence" message was not portrayed as a "sex object" and one participant said, "She's not all dressed up and like, her boobs are not showing." Similarly, the girl in "The Truth" was viewed as "stylish" rather than sexually alluring and one participant stated, "She's not trampy like those ones (other messages)." The image of the young woman in "Chic?" was also well received by the participants: "I really liked the fact that it's a very attractive girl [but] not necessarily overly attractive, as in like Barbie doll."

Some participants expressed conflicting preferences for female attractiveness in TC messages. For example, some participants thought that the girl in the "Poster Child" message was "dowdy," which made the message less effective. On the contrary, other participants thought that the girl looked "average" and therefore, they could easily relate the message to themselves. Despite differences in their perceptions, they unanimously agreed that orienting women's attractiveness around their sexuality was not effective at reaching young women in TC messages.

4.2.3.2 Self-assurance

Expressions of self-assurance, such as confidence or sophistication, were characteristics that the participants wanted to see in representations of women in the TC messages. They thought that this would make the message more impactful to girls their age because these attributes are important to them. For example, the discussion about "America's Next Top Model" led one participant to talk about the perceived sophisticated disposition of the young woman: "I would look at this message because, besides the cigarette, this girl is sophisticated and I would possibly strive to be more like her." This conversation was brought forward again while discussing "Above the Influence." One participant commented on how "content" the girl appeared, which was an appealing characteristic that drew her in to the message. However, several participants commented on the poster board that the girl in the message should look more "content," "confident," and "happier" about her decision not to be influenced by peer pressure.

Preferences for images of women in TC messages were evident in discussions about using celebrities and models in TC messages. One participant toyed with the idea of having a celebrity to draw girls' attention to the message but later concluded that a celebrity is not what they "strive to be" and might actually render the message less effective for young women. When this idea was brought up in another focus group, participants responded similarly and said, "We are not famous."

4.2.3.3   Emotional expression

The focus groups also initiated discussion about the emotional expressions reflected in the women within the TC messages and how this assisted in understanding the negative effects of smoking. In addition, participants perceived that representing negative emotions such as "sadness," loneliness," and "regret" in TC messages could enhance their effectiveness because these are emotions that most people want to avoid. For example, participants thought that the young woman in "America's Next Top Model" displayed an appropriate facial expression of sadness and regret in relation to becoming bald from chemotherapy. One participant said, "It's like you're going against yourself, contradicting yourself, 'I wish I didn't do this', I think it's effective, the expression on her face." Concerns were also expressed about the perceived inappropriate emotional expression displayed by the woman in the "Chic?" message. They thought that her expression should reflect how upsetting this experience would be but instead, she was perceived as "flaunting her throat cancer and doesn't seem upset by it." Another participant agreed and stated, "She's all smiling and stuff and she's got this thing in her throat, like why are you smiling?"

It was also noted that the lack of emotional expression in messages that depicted images of headless/faceless female bodies or bodiless limbs might limit their effectiveness.   For example, one participant's poster comment said, "I wish her whole face was shown to be able to see what her emotions are" when discussing the young woman in "The Truth" message. Therefore, the display of negative emotions was viewed as an important part of TC messages because this assisted with comprehending the negative effects of smoking.

4.2.3.4   Beauty vs. health

Discussion was also generated around how the TC messages were often perceived as focusing on beauty rather than health. This sub-theme was carried through the discussions of

several of the messages, where many of the young women thought that there was too much of an emphasis on physical attractiveness and not enough focus on health issues related to smoking. For example, several participants thought that not showing the girl's face in "The Truth" message was a good way to keep the focus on the "very real issue" of how smoking can negatively impact your health: "I think having the head cut off makes it better because you are not focusing on how pretty the person is, or how bad the person looks because they smoke, you are focusing on the actual issue itself." Although the participants' poster board comments on "Chic?" reflected their appreciation of how the image made them think of the "negative and non-attractive side of smoking" and made them want to "avoid smoking," they also thought that the young woman's beauty became too much of the focus in the message. One participant's poster comment stated, "Make it more about your life, not just vanity." Similarly, "Live to See it" was also scrutinized for its display of female nudity, as depicted in the following poster comment: "Try to make the message showcase the negative aspects of the issue (smoking), not just scantily clad women."

In summary, focus group participants discussed several gendered issues and representations within the TC messages. The young women expressed mixed views regarding their preference for the level of physical attractiveness of the women in the TC messages. However, the discussions suggest that the young women in the focus groups thought that using female sexuality was not an appropriate way to reach girls in TC messages. Some of the TC messages were perceived favourably because they depicted women as attractive without portraying them as sex objects. The young women also expressed a desire to see images of women in the TC messages as self-assured. This was a characteristic they strived for personally so representations of self-assurance held potential for attracting their attention to the message. Focus group participants expressed a preference for images of women that they could strive to be or see themselves being. Further, the young women indicated a preference for images of women

that reflected the emotions that were congruent with the negative consequences of smoking because this would assist with comprehension of the anti-smoking message. Even further, the findings suggested that seeing how smoking could negatively affect beauty was not perceived as the best way to message young women. Although the young women appreciated how the TC messages illustrated the harmful effects of smoking on women's beauty, they wanted to see more emphasis on how smoking affected other aspects of their lives.

4.2.4   Design features

Comments about the messages included reactions to the design features, including the use of colours and graphics. The participants thought that most of the messages required brighter colors to appeal to young women. For example, it was reflected in the poster comments that the bright pastel colors in "Above the Influence" were considered appealing, but many of the other messages were perceived as not including enough "bright" and "fun" colors. Also, some of the messages were thought to contain too many graphical distractions that steered a reader away from getting to the main point of the message. For example, the background in "America's Next Top Model" was perceived as too "cluttered" and drew attention away from the cigarette in the woman's hand. The participants also thought that the background and the woman's hair in "Chic?" was so distracting that the throat could be easily missed if they were just looking at it quickly. In sum, participants were concerned that some of the design features needed more attention in order to attract their attention and highlight the main point of the anti-smoking message.

4.3   Factors perceived to influence TC message effectiveness on social networking sites

In the focus groups, young women were invited to discuss the placement of the seven TC messages on social networking sites and factors that could be expected to influence their

effectiveness. The discussion focused on the following topics: instant impact, message novelty, images of women portrayed as self-assured, and gender stereotyping.

Instant impact was described as a necessary feature of TC messages placed on social networking sites if they were to be effective in gaining the attention of young women. Instant impact for participants meant that the anti-smoking message is easily comprehensible and understood instantly. Young women pointed out that messages with "instant impact" were important because they do not put very much time into looking at advertisements on social networking sites like Facebook:

> When you are 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 are not going to put a lot of time into looking at these and so you look at the picture [where] the girl kind of draws you in and then you see like, it's really quick, it's really simple and you get the message right away.

The focus group participants described some of the TC messages as having features that facilitated this kind of "instant impact." For example, the young women thought that the main point of the "Chic?" message, which was the slogan, 'Chic? No, throat cancer,' stood out because the slogan was in bright yellow letters and allowed viewers to "get the message right away." Focus group participants also thought that "The Truth" held potential as a good message for social networking sites because, by displaying the caption as a question rather than a statement and enhancing the image with bolder white lines around the throat, the message could be easily understood "really quickly."

Pictures were thought to play an important role in facilitating "instant impact." For example, the "America's Next Top Model" message was described as having a "strong picture" to facilitate comprehension of the message and one participant's poster comment said, "Even

without words, the picture is strong enough to convey the message that smoking has negative consequences, such as unhappiness." It must be noted, however, that this message was not thought to be suitable as a TC message directed towards young women because, as previously discussed, the use of sexualized young women was considered inappropriate.

It was apparent that some of the messages were thought to be too detailed and, therefore, too time consuming to read and comprehend, limiting their suitability for achieving the "instant impact" desired on social networking sites. Several participants said that they would not "click" on the "Poster Child" message because it was too lengthy. One participant even said, "As far as Facebook goes, I wouldn't read it unless I was in a waiting area." Similarly, the young women also thought that "Above the Influence" was too "wordy" for social networking sites.

Novelty also helped create the kind of strong image thought to be suitable for TC messages on social networking sites. Focus group participants identified the novel image in "Cigarettes Smoke People" as engaging and one that would motivate them to "click" on this message. The young women said that since "you don't know what it is" or "see stuff like that," you "click on it and start to look at it and [you are] like 'oh okay, that is what it actually means.'" However, not all participants thought this message was suitable for social networking sites. For example, one participant said, "I don't think that it's striking enough that if you saw it on a side bar or something, that you would click on it." Many participants described this message as "boring" because the colours were bland and the context was "old-school."

There was also noteworthy discussion by the focus group participants about how the self-assured image of the teenage girl in "Above the Influence" would make them want to "click" on it, which was demonstrated by one participant's comment: "Well, I wouldn't click on that one ["Poster Child"], I would probably click on that one over there, the yellow one [Above the Influence], because [it's] about being yourself and not following other people and all that jazz,

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it's just more realistic." It was reflected in the focus group discussions as well as comments on the Facebook pages that, because the girl is "deciding," they would want to "click on it and read it." Participants liked how it presented a teenage girl feeling good about her decision to resist being influenced to partake in drug, alcohol, or drug use.

The use of stereotypical gendered images of women was thought to inhibit young women's receptivity to the TC messages on social networking sites. For example, the young women unanimously thought that "Live to See it" was not suitable for reaching girls on social networking sites because the young women were portrayed as "sex objects," which did not "appeal" to them. One participant said, "If it were on Facebook, I definitely wouldn't look at it," a statement that resounded with all focus group participants. However, because this message was developed in Brazil, cultural influences in relation to participants' reactions must be considered. The young women also thought that "America's Next Top Model" gave the impression that a young woman's role entails maintaining sex appeal so that they are attractive to men. One participant thought that this message would be "clicked" on mostly by guys on social networking sites because of how women were represented.

In summary, participants identified several factors that would influence the effectiveness of the seven TC messages if they were to be placed on social networking sites. Instant impact was thought to be a critical feature of TC messages in gaining the attention of young women. Other aspects of the messages that were determined to influence young women's receptivity of TC messages on social networking sites included novelty of the message image, depicting women as self-assured, and portraying women as definable only by their sexuality.

4.4   Suggested changes for use on social networking sites

The participants made important suggestions about enhancing the effectiveness of TC messages for delivery through social networking sites. The participants' general thoughts about

delivering TC message into this medium, as well as their ideas about how to design TC messages to enhance young women's receptivity to them in this medium were captured in the following three themes: interaction, animation, and positive message framing,

4.4.1   Interaction

There was significant discussion among the young women in the focus groups regarding the need for interactive elements within TC messages on social networking sites. There were several different ways that the participants thought interaction could be incorporated into the messages, such as through social sharing/broadcasting, media games and information "links." The young women's discussions around these suggestions for interaction will now be presented.

4.4.1.1   Social sharing/broadcasting

Social sharing is a common term used to describe how social networking site users broadcast their thoughts and activities through certain features that are built into the sites. There are several different social sharing features within social networking sites that allow users to communicate information with each other. For example, in their comments on the Facebook page, the young women identified several options on Facebook that a TC message could be integrated with, such as "news feeds," "group pages," "fan pages," "walls," and "like/dislike" options. The focus group participants thought that the use of these features would enhance receptivity to TC messages in the social networking site medium rather than displaying them as stand alone messages on the "side bar" of a Facebook page, which is where most advertisements and messages are displayed. The young women said that they "don't really click on ads on Facebook" and further said that if a TC message was on their "side bar," they would "probably skip by it and not scroll onto it." Reasons that the participants gave for usually "ignoring" messages on the side bar included media viruses and not knowing where the messages would take them. The participants stated that 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 for messages, which is demonstrated in the following comments:

Participant 1: I just don't know where it's (messages on the side bar) taking me so I don't go there, but if it was actually part of Facebook somehow or was just posted somewhere and a bunch of people were "liking" it [and] it was being passed through the walls or whatever, then I would be more interested in it.

Participant 2: Being placed on a wall or even showing up on a news feed would be effective in that it would catch attention. It would do more than being where most ads are, which is the side bar. It is rare that I would ever read an ad there in the first place.

4.4.1.2 Media games

The young women also suggested that providing the option to "play" with the information in the messages would draw them in. For example, the participants' comments on the Facebook page suggested that viewers could be asked to "draw with their mouse" or "scroll" onto areas that would expand with information once they "clicked" on it. One participant specifically used "Poster Child" as an example and suggested only revealing the written information when you "scroll the mouse along the body" to learn more about the effects smoking.

4.4.1.3 Information "links"

The focus group participants also talked about how linking more detailed information to the messages would enhance the effectiveness of the anti-smoking message. The participants thought that social networking sites allowed for detailed information to be accessible to young women without it being overwhelming. Participants advised having a single, simple message was not enough to inform young women about smoking. It was suggested that messages lead users to

further information so that they can "learn from it and apply it to their lives." This was elaborated on in the following comment:

> I think with anything on Facebook there needs to be a follow up thing, like if you find something, then you should have access to like a whole bunch of information, but not just one thing, because you might be interested but then there is [just] a picture with no words, no nothing.

In addition, one participant suggested that TC messages on social networking sites provide access to detailed information in interactive, user-centered designs to be effective:

> Maybe something to grab your interest and then 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, it's just like, you kind of draw away from it.

The participants talked about what type of detailed information they thought would be most effective at messaging young women on social networking sites. They specifically suggested that TC messages on social networking sites should portray how smoking might affect them over time because this would help them make a connection between present choices about smoking and future consequences. This was demonstrated in the following discussion comment:

> I find ads that are effective are ones that show you before smoking and after smoking. Like it will show a lifetime. Like a little girl with her parents and she grows up and she is going to school and she is a teenager and she is smoking and it goes until she is an old lady and she is just like, 'if only I could turn back.'

Some of the young women explained that, since they are not experiencing any of the negative effects of smoking at present, it was hard for them to be concerned about what might happen to them when they are older, especially when TC messages are traditionally oriented to the future:

> When you are young and you smoke and you don't see the immediate effects [of smoking], [such as] lung cancer, then you can't really relate yourself to it, but if you see that in fifty years you are going to look like this and have these problems that you start thinking about it more.

A few participants thought that, even though some people may not want to view further information, providing the option to access further information would be a good idea. One participant said, "You never know, someone might like it and just completely ignore it and then, a week later, they click on it and they decide, 'hey, I want to go through this information.'" They also thought that linking information to the TC messages would let users easily access information that otherwise might be time consuming to find on "Google" or other websites.

4.4.2 Animation

The focus group participants also recommended incorporating animation into TC messages on social networking sites to gain the attention of young women and enhance the instant impact they thought would be effective. It was suggested on the Facebook page comments that TC messages include "pop-up" messages, and incorporate "flashing" or other types of movement in key elements of the images and text. One participant used the following rationale while discussing the use of animation:

> 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?'

4.4.3   Positive message framing

Also noteworthy was a preference by both smokers and non-smokers for TC messages that incorporated 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 portrayed the positives of quitting, such as demonstrated in the following participant's comment:

> Say if you took it [a TC message] to a website [where] like there's a bunch of facts, like if
>
> you stop smoking now, this will happen to you and that would turn you into a non-smoker
>
> in so many years, have facts like that, because a lot of people who are smoking see the ads
>
> [and] are like, 'ya, I get it, I know,' but if you push that you can get a fresh start and you
>
> know you can turn your life around, it would be different.

Similarly, some of the non-smoking participants also talked about how they would be inclined to "click" on TC messages that demonstrate the positives of not smoking. For example, one participant made the following comment while discussing the use of positive message framing:

> Maybe focus on the positive aspects of not smoking [rather] than the negative
>
> aspects of smoking kind of thing. I think just showing people that are happy and
>
> smiling and having people around them is like a sign of maybe security and like
>
> you have a good support and you have good self esteem.

Included as well were ideas related to disarming the tobacco industry's marketing approach by displaying messages that demonstrate how choosing to be smoke free will not result in low self-esteem or the loss of friends, two reasons that are widely used to promote smoking to young women.

In summary, the focus group participants offered several suggestions for preparing TC messages for delivery on social networking sites. The importance of enhancing TC messages

with the web-based technologies was emphasized, as well as the use of positively framed TC messages.

4.5 Summary

In this chapter, the findings of this interpretive descriptive study were presented. Adolescent girls' perspectives on delivering TC messages directed towards young women on social networking sites presented three main discussion topics: (1) participant evaluations of TC messages; (2) factors perceived to influence the effectiveness of TC messages on social networking sites; and (3) suggested changes for use on social networking sites. Seven TC messages were selected to provide the young women with a variety of messages for evaluation and discussion. Limitations of current TC message strategies in effectively reaching young women were described as well as suggestions to enhance the effectiveness of TC messages directed towards young women on social networking sites.

5 DISCUSSIONS OF FINDINGS, IMPLICATIONS AND CONCLUSIONS

5.1 Overview

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 findings highlight useful directions for the successful delivery of TC messages directed towards young women on social networking sites, thereby contributing valuable information to inform tobacco use prevention initiatives directed towards adolescent girls.

In this chapter, the most salient aspects of the findings will be discussed in relation to current research evidence. The discussion will focus on the identified usefulness of social networking sites for TC messages, strategies to enhance the effectiveness of TC messages on social networking sites, and the perceived efficacy of current smoking prevention efforts directed towards young women. Limitations of the study will also be addressed. Further, implications of the findings for the advancement of smoking prevention among young women are presented. Finally, this chapter will close with a conclusion.

5.2 Summary of findings

The aim of this interpretive descriptive study was to explore adolescent girls' perspectives about utilizing social networking websites as a medium to deliver TC messages directed towards young women. Data were collected using three semi-structured focus groups with 17 smoking and non-smoking adolescent girls. Analysis of these data revealed important perspectives and opinions on the utilization of social networking sites for the delivery of TC messages directed towards young women. Participant evaluations of seven existing TC messages directly targeting young women reflected concerns about the types of smoking images used and stereotypical representations of gender embedded within the TC messages. Important factors perceived to influence the effectiveness of TC messages disseminated through social networking sites

principally related to message features that might promote or inhibit "instant impact" of the messages on this medium. The focus group participants also made important suggestions regarding how TC messages could be enhanced using interactive, user-centered designs that are personally engaging to effectively reach young women. The key findings of this study will be discussed in this chapter.

5.3   Delivering TC messages on social networking sites

The findings of this study suggest that young women are receptive to the use of social networking sites for delivery of TC messages directed towards them, and believe that this media hold distinct advantages in reaching young women. This finding is supported in a recent survey of 167 young women aged 17 to 29 by Team Shan (March 2011), where participants suggested that utilizing social networking sites would be an effective way to message girls about smoking in relation to breast cancer. The authors state that this finding is a significant change from their 2008 survey when young women reported a preference for print materials (Team Shan). Hargatti's (2007) research also supports this trend. Based on a survey of 1,060 college students (56% female, 44% male) conducted in the US, Hargatti concluded that utilizing social networking sites to interact with others and share information has grown in popularity, particularly among young women.   There is also recent evidence that teenagers (aged 12 to 17) are twice as likely to use social networking sites than adults (73% versus 47%), and a larger number of older online teens (14-17 years old) are using these sites than younger online teens (82% versus just over 50%) (Lenhart et al., 2010). Given this knowledge of social networking site use among adolescents compounded with evidence that girls are more likely to use social networking sites than boys (e.g., Lenhart et al., 2007), the potential for reaching adolescent girls with TC messages on this medium holds promise.

It has been argued in previous research that we cannot expect adolescent girls and young women to be actively seeking health information in traditional formats and that they may be more likely to obtain health information through the internet (Gray et al., 2005; Radin, 2006). In addition, it has been documented that health information on the internet is largely trusted; 75% of online health seekers reported that they did not consistently examine the quality of the health information sources (Fox, 2006). Although the variable quality of internet-based health information can be problematic (Fox & Rainie, 2002), it has been suggested that this may lend additional support to the notion that the internet is well positioned for health promotion and interventions (Bennett & Glasgow, 2009).

The literature indicates that adolescents are inclined to use the internet to find health-related information. Since the year 2007, Health 2.0 has grown in popularity, where Web 2.0's "architecture of participation" (e.g., search engines, blogs, online communities, social networking sites) enables consumer-generated content around health (Sarasohn-Kahn, 2007). The use of the internet for health information has particularly grown among young women. While a third of online teens (ages 12 to 17) search the internet for health information, girls are twice as likely as boys to look for sensitive health information (23% versus 11%), such as information on drug or alcohol use (Lenhart et al., 2010). This reinforces the argument by Norman, McIntosh et al. (2008) that it is necessary to bring health care efforts into the mediums that are popular among youth, such as social networking sites.

Youth input and involvement in the design of TC messages has shown promising results. For example, Florida launched an aggressive youth smoking prevention campaign known as the "Truth" in 1998, in which messages were partially developed by teens in an effort to specifically target youth the same age (Farrelly, Niederdeppe, & Yarsevich, 2003; Lantz et al., 2000). The Florida Youth Tobacco Survey (FYTS) revealed that, from 1998-2000, there was a 40% and 18%

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drop in smoking among middle and high school students respectively, which were the fastest declining youth smoking rates in the country (Bauer, Johnson, Hopkins, & Brooks 2000). New research specifically indicates that directly involving young women in developing health promotion strategies and including their voices is an effective way to develop targeted messages (Bottorff et al., 2010; Team Shan, March 2011). Furthermore, these findings are supported in relation to using social media for health promotion, where engaging users to co-create content and evaluate how it is communicated is perceived to give a heightened authenticity to messages, as well as improve and build trusting relationships between the users and organizations (Schein, Wilson, & Keelan, 2010). The perspectives of the focus group participants in this present study hold potential for guiding the development and evaluation of tailored TC messages that resonate with other young women on social networking sites.

5.4 Strategies for enhancing TC messages on social networking sites

The participants provided some important suggestions for enhancing the effectiveness of TC messages for delivery on social networking sites. These suggestions related to the way that TC messages are integrated into social networking sites through the use of interactive media, including the social sharing/broadcasting features. Further, the participants suggested that the social networking site medium presents unique opportunities to effectively meet their information needs.

The focus group discussions centered on how the social networking site medium presents particular opportunities for quickly gaining the attention of young women, as well as successfully informing them and raising their awareness about the health effects of tobacco. The participants specifically pointed out that, while social networking sites are a preferred medium to access tobacco-related information, TC messages on social networking sites should be designed to function in a "two-step process" in order to be effective. The initial message should be simple

and interactive (i.e., media games) with little written detail, while further information is accessible through website links. These suggestions coincide with the Web 2.0 context, where information is characterized by interactivity, user-generated content, and multi-directional communication flows (Schein et al., 2010). This provides users with the control to access and interact with information in relation to the message foci, as well as manage the information in ways that resonate with them personally. In their experimental study involving university students, Sicilia, Ruiz, and Munuera (2005) concluded that when internet users can select the information and the order of how it is presented, control and user-centered involvement is high, and leads to more intense information processing. Moreover, interventions on the internet can be structured based on participant data (i.e., age, gender, interests, geographical location, etc.), which provides users with highly personalized messages (Strecher, 2007). It has been suggested that new media channels, such as social networking sites, provide users with the ability to access information that is most appropriate to them such that it is relevant and personally engaging (Fotheringham, Owies, Leslie, & Owen, 2000); therefore, enhancing tailored health interventions. Alternative media, such as television, radio, and print material, simply do not and cannot offer this potential for individual tailoring and interactivity of health interventions (Bennett & Glasgow, 2009).

The young women in this study emphasized that TC messages must be integrated into social networking site features to be effective, such as the social sharing/broadcasting features of Facebook, where they can interact with and share the TC messages with their peers. For example, Facebook provides users with the option to "like/dislike" information presented on their Facebook page, such as comments or photos presented by their peers, groups that have been formed, as well as advertisements and messages. If young woman decides to "like" a TC message, then all of her friends will view that she has "liked" the message, which has the

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potential to increase the likelihood that others will view the message, comment on it, and potentially "like" it as well. It is important to note that most of the participants in this study had more than 300 friends on their Facebook profile, highlighting the potential for wide reach on this medium. In recognition of these large communities and groups of people online, marketers are keen to advertise on social networking sites because of their potential to directly reach users in a personal and social environment (Boyd & Ellison, 2007). Furthermore, evidence shows that peers become an important influence in young women's lives throughout adolescence and into young adulthood (Steinburg, 2007). TC messages on social networking sites would be embedded within a peer-led environment, and literature indicates that using this medium to message adolescent girls may prove more effective as a result. Researchers have reported that young women have a strong inclination to post comments and join groups on social networking sites so that they can communicate and share information with each other (Lenhart et al., 2010), and that sharing thoughts, opinions, questions, or information with peers enhances message effectiveness (Samu & Bhatnagar, 2008). Therefore, positioning TC messages on social networking sites presents a prime opportunity to enhance the effectiveness of TC messages by offering young women the unique opportunity to interact with and share tobacco-related information with their peers on a 24/7 basis.

In reviewing current print-based TC messages, FG participants were critical of attempts to communicate the long-term health risks of smoking. The messages were perceived to be difficult to "connect" with and lacked the information needed to understand the health risks. The information needs of young women with regards to the presentation of health risk information in TC messages have not been systematically evaluated. In fact, a large portion of literature has concluded that displaying the long-term health consequences of smoking in TC messages is not effective for adolescents, and that TC messages are more effective for youth if they focus on

short-term consequences, such as nicotine-stained teeth/nails, bad breath, and feeling out of breath with exercise (e.g., Crawford, Balch, & Mermeistein, 2002; Pechmann, Zhao, Goldberg, & Reibling, 2003). However, the young women in the present study believed that knowing the long-term health consequences of smoking was important to them. Recent research supports this finding and has even indicated that smoking cessation attempts among adolescents were predicted by concerns about the long-term health consequences, such as cancer and lung disease (Myers & MacPherson, 2008). Furthermore, an experimental longitudinal study involving high school students revealed that long-term health fear appeals were more effective at preventing or reducing smoking among adolescent girls than short-term cosmetic fear appeals (Smith & Stutts, 2003). The young women in the present study perceived that social networking sites could facilitate interactive access to reliable information about the health consequences of smoking in a variety of formats without overwhelming viewers, and put viewers (youth) in control of deciding what kind of information they want to retrieve. This finding is also supported by other researchers (e.g., Sicilia et al., 2005). Because participants had some interesting suggestions about how health risk information could be displayed in meaningful ways (e.g., a timeline to illustrate short- and long-term health consequences), their input into the design of interactive health-risk information is likely to be helpful.

The importance of being able to make a relevant, personal connection with TC messages was reflected in discussions regarding the use of fear appeal TC messages. Participant discussions revealed varied perspectives around the effectiveness of fear appeal messages, particularly between the smokers and non-smokers in the focus groups. Current smokers demonstrated more favorable attitudes towards fear arousal than the non-smokers. Prospect theory has been used to explain differences in receptivity to gain-framed versus loss-framed health messages. Prospect theory has operationalized risk as the probability that a particular

outcome might occur, where people must choose between two alternatives: a certain outcome or an uncertain outcome (Rothman, Bartels, Wlashin, & Salovey, 2006; Tversky & Kahneman, 1981). According to prospect theory, gain-framed messages are argued to be more effective for prevention, especially when a message recipient is involved with the health issue, while loss-framed messages are more effective for detection (Rothman et al.). It would be expected then, that the focus group participants who smoked would be adverse to the fear-based messages; however, the opposite was found. This finding is supported in previous literature, which has indicated that fear appeal messages were received most positively by adolescent smokers and even motivated them to consider quitting (Cho & Boster, 2008; Goodall & Appiah, 2008). Although few studies have looked at prospect theory for smoking prevention and cessation, particularly with adolescents, the applicability of this theory for developing TC messages directed towards adolescents has been challenged (Goodall & Appiah).

The focus group participants in this study suggested that being able to make a personal connection with the messages was a key determining factor to message effectiveness rather than whether or not they employed a fear appeal approach. For example, one reason the smokers in this present study preferred fear appeal TC messages over alternative TC messages was because they were perceived as more realistic and "not candy-coated." Lynch, de Bruin, Cassimjee, and Wagner (2009), who examined the effectiveness of fear appeal TC messages among youth, reported similar findings. It was found that adolescents who smoked preferred fear appeal messages because many of the anti-smoking messages that did not employ this approach were too fabricated and unrealistic to make a relevant connection between themselves and the message (Lynch et al.). Other researchers that have examined the efficacy of framed TC messages for adolescents also agreed that saliency of TC messages was more important than whether or not a gain-framed or loss-framed approach was used (Goodall & Appiah; Rothman et al). Because

social networking sites offer users the ability to interact with and navigate through information pertaining to TC messages in ways that are personally engaging and meaningful, realistic relationships between the TC messages and the viewers may be made easier.

The focus group participants' perceptions that the emotional tone reflected in TC messages in relation to health and social risks of smoking is a critical factor in enhancing the effectiveness of TC messages is supported by the literature. Emotions play a role in directing attention and behaviour. Negative emotional states are thought to be precursors to problem solving or prevention goals, whereas positive emotional states communicate that there is no problem (Keller & Lehmann, 2008). It is expected, then, that negative emotional states are more persuasive than positive ones (Keller, Lipkus, & Rimer, 2002) and there is some evidence to support this hypothesis. Negative emotional tone in TC messages has been found to increase advertising effectiveness among youth, and these emotionally charged messages resulted in better recall (Biener, Gilpin, & Albers, 2004; Biener, Wakefield, Shiner, & Siegel, 2008). Further, emotionally charged messages have been shown to be more effective for women because they are more likely than men to engage in emotional appraisal (Dube & Morgan, 1996). Furthermore, there is evidence that intense emotional content enhances youth attention to TC messages and spurs discussion with others after exposure (Terry-McElrath et al., 2005). Taking into account evidence suggesting that sharing thoughts, opinions, questions or information with peers enhances message effectiveness (Samu & Bhatnagar, 2008) and that the primary focus of social networking sites is to facilitate and promote communication with others, the potential for emotionally charged TC messages on this medium becomes apparent.

There is evidence that the type of emotional content in health communication is a consideration in targeting messages to women. A meta-analysis of experimental studies on health communications concluded that women respond to emotional health communication messages

with social consequences to themselves or to significant others (Keller & Lehmann, 2008). The participants in this present study also suggested that presenting how smoking may negatively effect their personal ability to participate in social events (i.e., team sports) or how it may be a threat to significant others, such as friends, was perceived as an effective strategy that would make girls "think twice" about smoking. Portraying contexts that include important social groups supports the theory of reasoned action, which predicts that people are more likely to adopt a behaviour if it is perceived as valuable to a relevant group (Finlay, Trafimow, & Jones, 1997). Since social connections are emphasized on social networking sites (Zeng & Dou, 2009), and efforts to increase or maintain social capital on these sites is important to adolescent girls in particular (Lin & Lu, 2011), TC strategies that present smoking as having potential to negatively impact their ability to participate in important social events or as harmful to their friends is likely to be helpful in enhancing message effectiveness for young women on this medium.

In this study, both smokers and non-smokers in the focus groups preferred TC messages that encouraged or reinforced positive health behaviours associated with being smokefree, particularly on social networking sites. Since women join social networking sites for the purposes of enjoyment and experiencing positive experiences (Lin & Lu, 2011), this may be an important consideration in designing TC messages for social networking site. This reasoning bears further investigation and points to the importance of considering gender influences that influence the use of specific communication/information media. Despite a lack in literature that specifically addresses how gender might influence a preference for positively framed content online, it has been highlighted in the literature that positively framed TC messages are desirable among both smoking and non-smoking adolescent girls. For example, Curbow et al. (2007) reported that adolescent girls who had personal experience with smoking or who had friends who smoked suggested that TC messages include themes that assist girls in dealing with stressors and negative

emotions related to these stressors in positive, alternative ways to smoking. The researchers also concluded that adolescent girls who did not smoke may benefit from TC messages that support and reinforce their "healthy girl" state (Curbow et al.). Although TC messages are typically oriented to the negative consequences of smoking as apposed to the positives of quitting smoking or not smoking (Goodall & Appiah, 2008; Jung & Villegas, 2011), the findings of this study suggest that positive message framing may be an effective strategy to message young women.

5.5   Perceived efficacy of current TC efforts directed towards girls

In this study, participants pointed out some important limitations of current TC messages directed towards young women. The participants expressed concerns about the stereotypical gendered images in current TC messages. There is support for these concerns in the literature. For example, Greaves (2007) pointed out that stereotypical representations of women in TC strategies undermine women's economic and social progression in society. Although it is important that anti-smoking campaigns are gender specific, messages need to be developed "in ways which do not blame and devalue women and girls" (Gilbert, 2005, p. 243). Indeed, it has been suggested that TC efforts may be influencing social problems among young women, such as eating disorders and low self-esteem, through the consistent presentation of slim, attractive women in current smoking prevention campaigns (Haines et al., 2010). Presenting these stereotypical images of women is problematic because it communicates to young women that beauty and sexuality supersedes all other aspects of their lives. Cultural ideals of thinness and beauty presented in mass media messages have been associated with distorted perceptions of body image, low self-esteem and eating disorders (Brown & Bobkowski, 2011; Strasburger, Jordan & Donnerstein, 2010; Thompson & Heinberg, 1999). Congruent with the literature, the young women in this study indicated that messaging women within the confines of these gendered ideals is not the most effective way to prevent their smoking uptake.

Researchers have also challenged assumptions that young women take up smoking due to pressures around body image, peer pressure, and low self-esteem, and argue that this simplifies and even stereotypes the reasons why adolescent girls smoke (Haines et al., 2009). Instead, adolescent girls' tobacco use has been described as a collective social practice where smoking represents self-assertion, which in turn, gives young women voice, a powerful identity, and an ability to navigate through the terrain of peer relationships and convey who they are (Haines et al., 2009). Gilbert (2005) argues that continued uptake of smoking among young women goes beyond a lack of responsiveness to professional advice and that smoking is perceived as a way to express themselves and their autonomy. Therefore, using images that present women as submissive and vulnerable to smoking may not be consistent with the way that young women perceive their tobacco use and, therefore, is not likely to be the most effective way to approach tobacco use and prevention among young women. The findings of this study support this notion. Participants suggested that images of women that were displayed as confident and self-assured in the TC messages were more effective and impactful for them than images of women that were stereotypically passive.

5.6   Limitations

The findings should be considered in light of several limitations. First, the use of a relatively small sample size narrows the frame of reference for this study and may not represent all views. Also, despite the fact that this study specifically examined Facebook and Myspace and these exploratory findings may not be applicable to other types of social networking contexts, these are the most commonly used sites for social networking among today's youth. The focus groups included both smokers and non-smokers. Although smokers were not identified in the group, some may have felt constrained in what they shared. Finally, it is important to be mindful of the rapid changes in technology and the way social networking sites are used when applying

this study's findings to message development and implementation, as well as to future research. Nevertheless, the study provides some important new insights about the use of social networking for TC messages targeting young women.

5.7 Gender analysis

Gender is a socially constructed concept used to describe what it means to be male or female and includes roles, relationships, attitudes, behaviours, values and personality traits (Greaves & Hemsing, 2009; Health Canada, 2003). The concept is intertwined with social and cultural values, which significantly impacts tobacco-related behaviours (Greaves & Hemsing), as well as pro- and anti-tobacco marketing approaches (Greaves, 2007; Haines et al., 2009). Therefore, it is important to understand women's unique experiences of tobacco use in order to develop TC interventions that are gender-sensitive so that their needs are addressed and dominant discourses are disrupted. Since this study utilized a gender-sensitive approach, the implications will be framed through a gender-based lens.

5.8 Implications

The intent of this study was to contribute knowledge that health care providers, government and policy makers, and researchers might draw upon in endeavoring to develop effective TC strategies directed towards young women. The literature posits that drawing upon a gender perspective on tobacco use will contribute to a better understanding of epidemiological, social, economic, and international factors that influence and are influenced by tobacco use (Ernster, Kaufman, Nichter, Samet, & Yoon, 2000). The most pressing implications of this study's findings for policy, practice, and research will be presented in the following sections.

5.8.1 Practice implications

First and foremost, based on the findings of this study TC advocates should be encouraged to consider the use of social networking sites for TC messages. As explicated by

Norman, McIntosh, et al. (2008), there is an inherent need to go beyond traditional media and be innovative with the media that youth currently use to provide health information. Findings from previous research indicate that pro-tobacco efforts have capitalized on using media popular among youth for tobacco promotion and that most pro-tobacco references on the internet were found on social networking sites (Jenssen et al., 2009). Evidence that the tobacco industry has successfully integrated pro-tobacco messaging directed towards adolescents on social networking sites (Freeman & Chapman, 2010; Jenssen et al., 2009; Shepherd, 2009) and that girls are more likely to use social networking sites than boys (Gross, 2004; Hargattai, 2007; Lenhart et al., 2007; Rainie, 2002), reinforces the need to integrate TC messages onto social networking sites, particularly targeting young women. Moreover, given the evidence that peers play and important role in influencing adolescent girls' health behaviours (Lopez, Schwartz, Prado, & Pantin, 2008; Steinburg, 2007), and that social networking sites emphasize and promote peer-to-peer communication, positioning TC messages on the medium can prove to be very influential for this particular population. Furthermore, given that interactive media (i.e., Facebook) are the preferred media for communication and information sharing among women (e.g., Team Shan, March 2011), this opportunity to advance smoking prevention efforts for young women should not be overlooked.

One of the most striking findings that has resulted from this study was the taken-for-granted assumptions about gender that underpin many TC messages directed towards girls. 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. Greaves (2007) confirms that the TC movement has had 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. Therefore, the concerns raised by the participants in this study

around problematic gendered representations in current TC efforts reinforces the call to TC advocates to critically evaluate TC messages from a gender perspective, and incorporate views of young women in designing TC strategies. The findings suggest that efforts are needed to avoid reproducing stereotypical presentations of gender and femininity.

The findings also posit the necessity to consider the age of the target audience when designing and implementing TC messages. There is emerging evidence suggesting that TC advocates must be aware of the different developmental stages of adolescents when developing tobacco prevention messages because this will significantly impact their effectiveness (Ptolemy, 2011; Silver, 2001; Vardavas, Collolly, Karamanolis, & Kafatos, 2009). It has been documented that intentions to comply with health behaviours are positively correlated with age (Keller & Lehmann, 2008). The complexity of health communication directed towards adolescents is largely attributed to their transition from allowing their parents to make decisions for them to being largely influenced by their peers (Pechmann & Knight, 2002; Steinburg, 2007). Steinburg posits that the regulatory effectiveness of the cognitive control networks in adolescents is diminished due to the activation of the socioemotional network when in the presence of peers. The strong influence of peers on risk-taking behaviours during this transitional developmental stage, such as smoking, may be attributed to this socioemotional "over-riding" of cognitive processing of the dangers associated with smoking. Additionally, it has been found that adolescents aged 15 to 18 years old were more likely to engage in risk taking behaviours than younger adolescents (Lopez et al., 2008). Thus, presenting TC messages that present smoking as harmful not only to themselves, but also to their friends may prove to be an effective method in messaging adolescents, particularly older adolescents (15-18 years old). The focus group participants' preference for TC messages depicting how smoking can be harmful to their social environments supports this messaging strategy. It is important to consider how the age of

adolescents influences who and what they may be receptive to regarding health information when developing TC messages for adolescents.

Furthermore, research indicates that tobacco prevention and control assumptions made by adults do not necessarily reflect the smoking experiences of adolescent girls (DiNapoli, 2004; Haines et al., 2009). For example, Haines et al., (2009) interviewed 25 adolescent girls between the ages of 16 and 19 to investigate how social influences play a role in their smoking behaviours. The researchers concluded that attributing girls' smoking uptake to a lack of competence (i.e., inability to resist peer pressure, unable to understand the risks) is naïve and that smoking may, in fact, represent social competence because it is used to generate capital within a specific social field, a notion that lacks legitimacy in the adult world (Haines et al., 2009). There is a need for interventions that take into account the views and expectations of girls so that TC initiatives are consistent with their age-related beliefs and attitudes.

5.8.2   Policy implications

This study's findings point to the inherent need for government and policy makers to allocate funding to online TC research and interventions specifically targeting youth. Research in the area of digital communications and health promotion is in its beginning stages. In order to effectively deliver health information, government and non-government organizations must have a good understanding of how to deploy the features of online health information systems (Walther, Pingree, Hawkins, & Buller, 2005). Unfortunately, however, knowledge in this area is limited (Walther et al.). Given that youth internet use rates are high and that their online health seeking behaviours are steadily increasing, policy makers must prioritize research and interventions using this media channel in order to promote the health of our future generations.

Policies related to online TC initiatives should also include requirements for a gender-based analysis to ensure adequate attention is given to gender influences and the involvement of

target groups to ensure age-appropriate approaches. The findings of this study add to growing support in the literature that gender-based interventions targeting particular age-populations are likely to be effective among girls (e.g., Bottorff et al., 2010; Team Shan, March 2011). Since the internet has been recognized as a youth friendly medium for the delivery of health information, ensuring gender- and age-appropriate interventions online should be made necessary. It is essential that we do not uncritically move forward tobacco prevention initiatives directed towards girls. This is especially important because the creation of online health initiatives can be expensive (Walther et al., 2005).

5.8.3 Research implications

The use of interactive, web-based technologies for tobacco prevention is not well established. This study's findings provide useful directions for the development and evaluation of such efforts targeting young women, as well as other youth. One particular area of inquiry that requires further attention is how the environment and culture of social networking sites might influence attitudes and preferences for particular types of messages directed towards girls, such as positively framed messages. Little is known about how the social networking site medium plays a role in target audience preferences for types of TC messages and this requires extended inquiry.

Research on the use of social networking sites for TC messages directed towards young women at high-risk for smoking in specific sub-populations (e.g., Aboriginals, low socioeconomic status, etc.) should also be conducted. In the past, it has been argued that reaching high-risk groups for tobacco use through the internet is not worth it due to their lack of online health-seeking behaviours (Restino & Ratzen, August 1997), and lack of access to the internet (Cunningham, 2008). These arguments have been recently refuted. Atkinson (2009) examined a nationally representative cross-sectional survey in the United States and reported that social

media were found to penetrate the whole population regardless of education, race/ethnicity, or health care access. Given the relative novelty of using social media for health communication to high-risk populations, the exploration of using online TC interventions for high-risk populations represents a fruitful area for further study.

Research examining the effectiveness of online interventions is also needed. Researchers argue that, while the increasing number of online health interventions is encouraging, the effectiveness of these interventions is not well known (Shahab & McEwen, 2009). Although major progressions in online surveillance research have contributed to understanding the potential of the online environment for health communication, it is less useful for assessing the impact of participation in social media use on health (Chou, Hunt, Beckjord, Moser, & Hesse, 2009). Conducting evaluative research, such as through longitudinal cohort studies, is needed. Furthermore, qualitatively examining participants' perceptions and experiences of using social media for health interventions is also needed.

The development of methodologies for evaluating online interventions is also necessary. Morris and Ogan (1996) argue that the more traditional forms of broadcast and print media fit into the already established models and guidelines for conducting research. We cannot force-fit research on online interventions within these traditional models because the internet medium involves different ethical and methodological issues and challenges (Bassett & O'Riordon, 2002). For example, there is a need to find better ways to obtain informed consent, to differentiate between public and private behaviour, and to verify the data collected through the internet. Efforts are underway to develop constructive guidelines for future internet intervention research. It will be important to also develop guidelines for researching interventions offered on social networking sites.

5.9   Conclusion

      Tobacco is the leading cause of preventable death and chronic illness among Canadian

women and, therefore, remains a critical health issue among young women. Young women

continue to take up smoking at alarming rates and the gap between men and women's smoking

rates is narrowing. The internet has only recently become recognized and appreciated for its

contribution to adolescent smoking uptake. Although the Master Settlement Agreement has

significantly restricted pro-tobacco marketing, emerging media (i.e., internet) have provided pro-

tobacco advocates with new and anonymous mediums to promote tobacco products. Therefore, it

is critical to understand young women's perspectives on utilizing this medium as an avenue to

counter pro-tobacco advertising towards girls. The findings of this study provide important

suggestions for how TC messages directed towards young women can be disseminated on social

networking sites. The findings highlight adolescent girls' endorsement of receiving TC messages

through social networking sites. Also, the findings highlight necessary alterations for TC

messages to be placed on social networking sites, as well as ways to incorporate the TC messages

into the interactive features unique to social networking sites in order to effectively reach girls.

These findings support and also extend previous research findings regarding TC messages for

smoking prevention among young women. The use of social networking sites is an untapped

resource for effectively and positively impacting adolescent girls' smoking prevention.

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APPENDICES

Appendix A: Youth assent form

UBC

OKANAGAN

Title of Project: Adolescent Smoking Prevention through e-Networks (ASPeN)

Principal Investigator: Dr. Joan Bottorff
                                     Centre for Healthy Living and Chronic Disease Prevention
                                     University of British Columbia Okanagan
                                     Telephone: 250-807-8627

Co-Investigator: Laura Struik, UBCO Graduate Nursing student
                                     Master of Science in Nursing (MSN) Program—Thesis
                                     Telephone: 250-864-7879

Co-Investigator: Dr. Mary Jung
                                     Faculty of Health and Social Development
                                     University of British Columbia Okanagan
                                     Telephone: 250-807-9670

Co-Investigator: Dr. Claire Budgen
                                     Health and Counselling, Health and Wellness Centres
                                     University of British Columbia Okanagan
                                     Telephone: 250-807-9204

Background and Purpose of the Study:
New ways are needed to deliver messages to prevent smoking uptake among youth. The purpose of this study is to understand what girls think about current anti-tobacco messages, and how they should be modified to reach girls who use social networking websites (e.g., Facebook and Myspace). A better understanding of girls' perspectives will assist with the development of effective tobacco control messages for delivery over the internet.

Study Procedures: Girls between the ages of 15 and 18 will be asked to participate in one focus group interview led by members of the research team. Through a variety of activities and questions, reactions to currently used tobacco control messages targeting girls and young women will be gathered, along with suggestions about how they should be modified for delivery on social networking sites, such as Facebook and Myspace. In addition, a short survey will be completed that collects demographic information, internet use, and attitudes towards smoking. The discussion will be digitally audio-recorded and typed out by a secretary. The time required for this meeting will be 1.5 to 2 hours and refreshments will be served. Approximately one week after the group discussion, one of the researchers may contact participants by telephone to gather additional comments participants' may have about the discussion topics. This telephone

conversation will last approximately 10-15 minutes.

Risks and Benefits:
No risks are expected from participation in this study. There are no direct benefits for participating in this study. As a token of appreciation for participating in the study and to cover travel costs, each participant will each receive $40.

Confidentiality:
Your name and any information provided will be kept strictly confidential. Participants in the focus group will be asked to keep all comments and identifying information confidential. Although confidentiality regarding what is revealed in the focus groups is encouraged, it cannot be guaranteed by the research team. We will not use your name in the research reports. Number codes will be used to identify participants in the data collected. The information will be stored in a locked file cabinet and the computer files will be password protected. Only the principal investigator and co-investigators listed above will be able to access data received from this study. The information we get from this study, including drawings, text, or other discussion data collected from the participants, might be used again for future anti-tobacco messages directed towards youth. Also, this information may be used for more research on developing health promotion strategies for youth, but only if approved by the appropriate university committees.

Assent:
Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time. Your signature below indicates that you have received a copy of this form for your own records. Participation in this research requires parental consent. Your signature below indicates that you also agree to participate in this study.

If you have any questions or desire further information, you can contact Laura Struik (250) 864-7879, or Dr. Joan Bottorff, Supervisor, at (250) 807-8627. If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject information Line in the UBC Office of Research Services at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250.807-8832.

_____

I have read the above information and I have had a chance to ask any questions about the study and my involvement. I understand what I have to do and what will happen if I take part in the study. I freely choose to take part in this study and I have a copy of the assent form.

_____   _____
Please Print Name   Signature of Participant

_____
Date

☐ Check this box if you would like to receive a summary of the study findings.
  E-mail Address (please print): _____
  Mailing Address: _____
                   _____
                   _____
Telephone # (or where we can leave a message):_____

Appendix B: Parental consent form

THE UNIVERSITY OF BRITISH COLUMBIA

Title of Project: Adolescent Smoking Prevention through e-Networks (ASPeN)

Principal Investigator:	Dr. Joan Bottorff Centre for Healthy Living and Chronic Disease Prevention University of British Columbia Okanagan Telephone: 250-807-8627
Co-Investigator:	Laura Struik, UBCO Graduate Nursing student Master of Science in Nursing (MSN) Program—Thesis Telephone: 250-864-7879
Co-Investigator:	Dr. Mary Jung Faculty of Health and Social Development University of British Columbia Okanagan Telephone: 250-807-9670
Co-Investigator:	Dr. Claire Budgen Health and Counselling, Health and Wellness Centres University of British Columbia Okanagan Telephone: 250-807-9204

Background and Purpose of the Study:
New ways are needed to deliver messages to prevent smoking uptake among youth. The purpose of this study is to understand what girls think about current tobacco control messages, and how they should be modified to reach girls who use social networking websites (e.g., Facebook and Myspace). A better understanding of girls' perspectives will assist with the development of effective tobacco control messages for delivery over the internet.

Study Procedures: Girls between the ages of 15 and 18 will be asked to participate in one focus group interview led by members of the research team. Through a variety of activities and questions, reactions to currently used tobacco control messages targeting girls and young women will be gathered, along with suggestions about how they should be modified for delivery on social networking sites, such as Facebook and Myspace. In addition, a short survey will be completed that collects demographic information, internet use, and attitudes towards smoking. The discussion will be digitally audio-recorded and typed out by a secretary. The time required for this meeting will be 1.5 to 2 hours and refreshments will be served. Approximately one week after the group discussion, one of the researchers may contact participants by telephone to gather additional comments participants' may have about the discussion topics. This telephone conversation will last approximately 10-15 minutes.

Risks and Benefits:
No risks are expected from participation in this study. There are no direct benefits for participating in this study. As a token of appreciation for participating in the study and to cover travel costs, each participant will each receive $40.

Confidentiality:
Your name, your child's name, and any information provided will be kept strictly confidential. Participants in the focus group will be asked to keep all comments and identifying information confidential. Although confidentiality regarding what is revealed in the focus groups is encouraged, it cannot be guaranteed by the research team. We will not use your child's name in the research reports. Number codes will be used to identify participants in the data collected. The information will be stored in a locked file cabinet and the computer files will be password protected. Only the principal investigator and co-investigators listed above will be able to access data received from this study. The information we get from this study, including drawings, text, or other discussion data collected from the participants, might be used again for future anti-tobacco messages directed towards youth. Also, this information may be used for more research on developing health promotion strategies for youth, but only if approved by the appropriate university committees.

Consent:

Your consent for your child's participation in this study is entirely voluntary. You may refuse to allow your child to participate and she may withdraw at any time without any consequences to her or your family. The participants will be reminded again of this prior to commencing with the group interviews. If your child decides to stop participating during the group interview, they will still be eligible to receive the honorarium of $40 for participation in the project. By signing this consent form, you are agreeing to allow your child to participate in this study and acknowledge that you have received a copy of this consent form for your own records. By signing this consent form, you do not waive any of your legal rights.

If you have any questions or desire further information, you can contact Laura Struik (250) 864-7879, or Dr. Joan Bottorff, Supervisor, at (250) 807-8627. If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject information Line in the UBC Office of Research Services at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250.807-8832.

_____
I have read the above information and I have had a chance to ask any questions about the study and my involvement. I understand what I have to do and what will happen if my child takes part in this study. I freely choose to allow my child to take part in this study and have received a copy of the consent form.

_____
Parent's Signature   Date

_____

Child's name   Date

☐   Check this box if you would like to receive a summary of the study findings.
      E-mail Address (please print): _____
      Mailing Address: _____
                           _____
                           _____

      Telephone # (or where we can leave a message):_____

Appendix C: Participant consent form

THE UNIVERSITY OF BRITISH COLUMBIA

Title of Project: Adolescent Smoking Prevention through e-Networks (ASPeN)

Principal Investigator:	Dr. Joan Bottorff Centre for Healthy Living and Chronic Disease Prevention University of British Columbia Okanagan Telephone: 250-807-8627
Co-Investigator:	Laura Struik, UBCO Graduate Nursing student Master of Science in Nursing (MSN) Program—Thesis Telephone: 250-864-7879
Co-Investigator:	Dr. Mary Jung Faculty of Health and Social Development University of British Columbia Okanagan Telephone: 250-807-9670
Co-Investigator:	Dr. Claire Budgen Health and Counselling, Health and Wellness Centres University of British Columbia Okanagan Telephone: 250-807-9204

Background and Purpose of the Study:
New ways are needed to deliver messages to prevent smoking uptake among youth. The purpose of this study is to understand what girls think about current tobacco control messages and how they should be modified to reach girls who use social networking websites (e.g., Facebook and Myspace). A better understanding of girls' perspectives will assist with the development of effective tobacco control messages for delivery over the internet.

Study Procedures: Girls between the ages of 15 and 18 will be asked to participate in one focus group interview led by members of the research team. Through a variety of activities and questions, reactions to currently used tobacco control messages targeting girls and young women will be gathered, along with suggestions about how they should be modified for delivery on social networking sites, such as Facebook and Myspace. In addition, a short survey will be completed that collects demographic information, internet use, and attitudes towards smoking. The discussion will be digitally audio-recorded and typed out by a secretary. The time required for this meeting will be 1.5 to 2 hours and refreshments will be served. Approximately one week after the group discussion, one of the researchers may contact participants by telephone to gather additional comments participants' may have about the discussion topics. This telephone conversation will last approximately 10-15 minutes.

Risks and Benefits:
No risks are expected from participation in this study. There are no direct benefits for participating in this study. As a token of appreciation for participating in the study and to cover travel costs, each participant will each receive $40.

Confidentiality:
Your name and any information provided will be kept strictly confidential. Participants in the focus group will be asked to keep all comments and identifying information confidential. Although confidentiality regarding what is revealed in the focus groups is encouraged, it cannot be guaranteed by the research team. We will not use your name in the research reports. Number codes will be used to identify participants in the data collected. The information will be stored in a locked file cabinet and the computer files will be password protected. Only the principal investigator and co-investigators listed above will be able to access data received from this study. The information we get from this study, including drawings, text, or other discussion data collected from the participants, might be used again for future anti-tobacco messages directed towards youth. Also, this information may be used for more research on developing health promotion strategies for youth, but only if approved by the appropriate university committees.

Consent:
Your participation in this study is entirely voluntary and you may refuse to participate or withdraw from the study at any time. Your signature below indicates that you have received a copy of this form for your own records. Your signature below indicates that you also agree to participate in this study.

If you have any questions or desire further information, you can contact Laura Struik (250) 864-7879, or Dr. Joan Bottorff, Supervisor, at (250) 807-8627. If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject information Line in the UBC Office of Research Services at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250.807-8832.

_____

I have read the above information and I have had a chance to ask any questions about the study and my involvement. I understand what I have to do and what will happen if I take part in this study. I freely choose to take part in this study and have received a copy of the consent form.

_____   _____

Please Print Name   Signature of Participant

_____

Date

☐ Check this box if you would like to receive a summary of the study findings.
E-mail Address (please print): _____
Mailing Address: _____
_____
_____
Telephone # (or where we can leave a message):_____

Appendix D: Recruitment poster

Figure 1. Recruitment poster

UBC OKANAGAN	PARTICIPANT SURVEY	**Your initials:** _____

INSTRUCTIONS:

1. Please follow the instructions. Everyone should answer the question in SECTIONS A, B, E, and F. Note there are questions on <u>BOTH</u> sides of the paper.

2. Based on your responses you will either answer SECTION C <u>or</u> SECTION D. Please <u>DO NOT</u> answer both SECTIONS C and D.

3. Please read each question slowly and <u>carefully</u>.

4. Please mark your responses using either ● or ⊗. You do not need to fill in the entire circle.

5. If you change your mind, please completely ERASE your initial response so that we can be completely sure of your desired response.

6. If you do not understand a question, or would like to ask questions about any of the questions on the survey, please do not hesitate to let us know.

7. If you would like to leave us comments about a response, please do so. You can write in the margins or leave us a note on page 18. This is particularly helpful if you choose to not answer a question or insert an additional response option. If you do not see an option that makes sense to you, please make up your own response. We want this survey to accurately reflect what you think and feel!

8. When you are finished, please make sure you have answered all of the appropriate sections and then raise your hand and the researcher will pick up your survey.

How old are you today? _____ years old	Gender O Female O Male	What grade are you in OR what year of college/university education are you in? _____ th grade _____ year

Section A: Smokers in Your Environment

A1: Do any smokers live in the same house / apartment as you?

O Yes → How many? ▢▢

O No

A2: How many people smoke *inside your home* every day or almost every day?

O None

O 1

O 2

O 3

O 4 or more

A3: During the <u>past 7 days</u>, how often were you with someone when they were smoking ...

		never	**once**	**a few times**	**more than a few times**	**a lot**
a.	in a restaurant or cafe	O	O	O	O	O
b.	in a car	O	O	O	O	O
c.	in a closed room	O	O	O	O	O
d.	in your house	O	O	O	O	O
e.	in someone else's house	O	O	O	O	O
f.	at a mall / shopping centre	O	O	O	O	O
g.	at / near school	O	O	O	O	O
h.	at work	O	O	O	O	O

A4: During the <u>past 7 days</u>, how often has someone else's smoking <u>bothered </u>you ...

		never	**once**	**a few times**	**more than a few times**	**a lot**
a.	at home	O	O	O	O	O
b.	at / near school	O	O	O	O	O
c.	in a car	O	O	O	O	O
d.	on the street / bus stop	O	O	O	O	O
e.	at a party / social outing	O	O	O	O	O
f.	Somewhere else specify:	O	O	O	O	O

Section B: Lifetime Smoking Behaviour

B1: Have you ever tried cigarette smoking, even one or two puffs?
○ Yes
○ No

B2: How old were you when you took your <u>first puff</u> of a cigarette?

I was ___ years old.

I was   ___ years old, but I don't remember it very well.

○ I have never taken a puff of a cigarette.

B3: Have you ever smoked a whole cigarette?
○ Yes
○ No

B4: How old were you when you smoked your <u>first whole</u> cigarette?

I was ___ years old.

I was ___ years old, but I don't remember it very well.

○ I have never smoked a whole cigarette.

B5: About how many cigarettes have you smoked in your entire life?
○ I have never had a puff of a cigarette.
○ I have only had a puff or a few puffs.
○ 1-5 cigarettes
○ 6-15 cigarettes
○ 16-25 cigarettes
○ 26-99 cigarettes (less than 5 packs)
○ More than 100 (more than 5 packs)

B6: Have you ever felt like you were addicted to tobacco?
○ Yes
○ No

B7: How would you define yourself? <u>Please check all that apply.</u>

○ I am a non-smoker.   ○ I am an occasional smoker.
○ I am a heavy smoker.   ○ I am an irregular smoker.
○ I am a regular smoker.   ○ I am an ex-smoker.
○ I am a social smoker.   ○ I am a pot smoker.
○ Other, specify:

B8: Have you smoked cigarettes (any amount), at least once in the past month?

○ Yes, I have smoked at least once in the past month   ➜ *Go on to section C (page 4)*

○ No, I have not smoked at all in the past month   ➜ *Skip section C and go on to section D (page 6)*

C1: How many cigarettes per day do you smoke?
O Less than 1 cigarette
O 1 to 5 cigarettes
O 6 to 10 cigarettes
O 11 to 15 cigarettes
O 16 to 20 cigarettes
O 21 to 25 cigarettes
O Greater than 25 cigarettes

C2: In the past month, approximately how many <u>days</u> did you smoke cigarettes?
O 1 to 2 days
O 3 to 5 days
O 6 to 10 days
O 11 to 20 days
O 21 to 29 days
O Every day

C3: In the past month, on average, how many cigarettes did you smoke <u>each day</u> on school days (Monday-Thursday)?
O Less than 1 cigarette
O 1 to 5 cigarettes
O 6 to 10 cigarettes
O 11 to 15 cigarettes
O 16 to 20 cigarettes
O 21 to 25 cigarettes
O Greater than 25 cigarettes
O Not applicable to me

C4: In the past month, on average, how many cigarettes did you smoke per day on weekend days (Friday-Sunday)?
O Less than 1 cigarette
O 1 to 5 cigarettes
O 6 to 10 cigarettes
O 11 to 15 cigarettes
O 16 to 20 cigarettes
O 21 to 25 cigarettes
O Greater than 25 cigarettes
O Not applicable to me

C5: How old were you when you first started smoking regularly?

I was ____ years old.

I was ____ years old, but I don't remember it very well.

O I have never smoked regularly.

C6: Have you ever <u>seriously</u> thought about quitting smoking?
O Yes
O No

C7: How many times have you <u>seriously tried</u> to quit smoking in the past 12 months?

I have tried to quit ☐☐ times.

○ I don't remember.
○ I have not tried to quit smoking in the past 12 months.

C8: In the past 12 months, how many times have you quit smoking for at least 24 hours? If you have tried and been unsuccessful, enter "0".

I have quit ☐☐ times.

○ I don't remember.
○ I have not tried to quit smoking in the past 12 months.

➔ **Please <u>skip</u> Section D and <u>continue to</u> Section E ➔**

D1: How difficult is it for you to not smoke?
O Not at all difficult
O Not very difficult
O Fairly difficult
O Very difficult
O Extremely difficult

D2: How likely is it that you will ever smoke in the future?
O Very likely
O Somewhat likely
O Rather unlikely
O Very unlikely

D3: Overall in the past month (excluding your own smoking), how often were you exposed to secondhand smoke *in your own home*?

O Every day
O Almost every day
O At least once a week
O At least once in the past month
O Never

D4: Do you do things to try to avoid being around second hand smoke in your own home?

O Yes → *go to D5*
O No → *skip D5, go to D6*

> **D5: a) In a few words, please tell us what you do to avoid second hand smoke in your home.**

> **D5: b) In a few words, please tell us what things (if any) make it hard for you to avoid being around second hand smoke in your home.**

D6: Have you <u>ever</u> had any health problems as a result of someone else's smoking?

O **Yes** → Specify problem: _____
O **No**

D7: Do you have any <u>current health problems</u> as a result of someone else's smoking?

O Yes → Specify problem: _____
O No

Section E: Internet Usage and Patterns

E1: Please check all that apply.

O I have my own computer/laptop.
O My family home has a computer/laptop. How many are in the
household?_____
O I have access to computers/laptops in school.
O I have access to computers/laptops elsewhere, please specify_____

E2: How often do you go on the internet?
O Rarely
O Occasionally
O Regularly
 Approximately how many times per day do you go on the internet?_____

E3: Please select which ones <u>best</u> describes your ability to use computers/laptops.
O I have trouble navigating through the internet.
O I know how to easily navigate through the internet.
O I know how to blog.
O I know how to post pictures.
O I know how to post videos.
O I know how to create a web page.

E4: Do you use the internet to seek health information?
O No
O Yes. How often?_____

E5: Have you ever looked up smoking information on the web?
O No
O Yes. How often?_____

E6: Do you have a profile on any of the following social networking websites? Please check which ones apply.
OFacebook   OMyspace OFriendster OBebo Ohi5 OOrkut OPerfSpot OYahoo!360 OZorpia ONetlog
O No, I do not currently have a profile on a social networking website.
O I previously had a profile on a social networking website. Please specify_____

E7: If you have a profile on Facebook , Myspace, or both, how often do you visit these websites?
O Rarely
O Occasionally
O Regularly
 Approximately how many times per day do you visit these sites?_____

E7: How many friends do you have on your profiles?
Facebook_____   Myspace_____

➔ **Continue on next page**

Section F: About You

F1: What language do you speak <u>most often</u> at the home you are living in?
Please check only one response.

O English
O Other →Specify: _____

F2: Do you speak other languages <u>at home</u> on a regular basis?

O Yes →Specify: _____
O No

F3: Where were you born?

O Canada
O Other →Specify: _____

F4: How long have you lived in Canada?
O All my life

OR

O I have lived in Canada for

☐☐ years ☐☐ months.

F5: What is your 6 digit postal code? (i.e. V6T – 2B5) ☐☐☐ **-** ☐☐☐

F6: How would you describe yourself? <u>Please mark all that apply</u>.
O Aboriginal / First Nation   (e.g. North American Indian, Métis, Inuit)
O White / Caucasian
O Chinese
O Japanese
O Korean
O Filipino
O South Asian   (e.g. East Indian, Pakistani, Punjabi, Sri Lankan)
O South East Asian   (e.g. Cambodian, Indonesian, Vietnamese, Laotian)
O West Asian   (e.g. Afghan, Iranian)
O Arab
O Black (e.g. African, Haitian, Jamaican, Somali)
O Latin American
O Other → Specify: _____

F7: To which ethnic or cultural group(s) did your ancestors belong? (e.g. Canadian, French, Chinese, English, Italian, Scottish, Polish, Jewish, Greek, Chilean, Micmac, Cree, etc.)
 Please describe: _____
F8: Are you a member of an Indian Band/ First Nation?
O Yes →Specify: _____
O No

Thank you for completing this survey

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Appendix F: Focus group interview guide

FOCUS GROUP INTERVIEW GUIDE	**(90-120 minutes)**

Objectives:
- To increase our knowledge and understanding of adolescent girls' perspectives on delivering TC messages through social networking websites, such as Facebook and Myspace, towards young women.
- To explore adolescent girls' evaluations of current TC messages directed towards girls.
- To explore adolescent girls' thoughts and opinions on factors that may influence the effectiveness of delivering TC messages through social networking websites.
- To understand what changes to TC messages are recommended by adolescent girls to enhance the success of delivering them through social networking sites.
- To use the knowledge gained from these focus group sessions to inform social networking-based TC initiatives that are directed towards adolescent girls.

Number and composition of Focus Groups:
- Throughout the school year three focus groups (FG) will be conducted with 6-10 female adolescents per group held in Kelowna at the H2O Center.
  - 15-18 year old girls who are smokers.
  - 15-18 year old girls who are non-smokers.
  - 15-18 year old girls who have or have had experience using Facebook and/or Myspace
  - 15-18 year old girls who are fluent in English

  - To obtain this number, we will invite girls in this age group through posting posters at UBCO, Boys and Girls Clubs of the Okanagan, the H2O Center, and through an ad on Facebook.
  - Each FG will be approximately 90-120 minutes long.
  - Each FG participant will receive an honorarium of $40

General structure of Focus Groups:
- Parental consent, participant consent and participant assent will be obtained from participants prior to the FG session. As the participants arrive to the session, any further questions about the FG are answered; participants will be asked to complete a participant survey that covers demographics, attitudes towards smoking, and internet use patterns.
- Each focus group participant will receive an honorarium of $40.
- Refreshments will be served.
- Participants will be able to leave at any time throughout the session if they feel uncomfortable.

Participant Survey (15-20 mins.)
As participants come in, they will be asked to complete a participant survey and given some time to get refreshments as everyone settles in their seats. Also, ask all participants to write their first name on a name tag.

Part 1: WELCOME AND INTRODUCTION (5 mins.)

Script: Hello and welcome! Thanks for coming today to give us your 2 cents. Today is all about you - your ideas and your opinions on current TC messages directed towards girls and what you think of putting them up on social networking websites, such as Facebook and Myspace.

Participant Introduction
Script: We're going to begin by introducing ourselves and here's how we'll do it. When we say our names, we're also going to say what you enjoy the most during the winter. OR…describe your most favourite thing to do in your spare time. My name is Laura and…next . . . [next person]…

Excellent! Thank you. Now that we know your names, we want to hear your voices. All comments are welcome - we want to hear many different points of view. We're recording the session because we don't want to miss any of your comments. No names will be included in any reports. Your comments are confidential.

Do you have any questions before we start?

[Pause – answer any questions.]

We are turning the recorders on now.

[TURN ON RECORDERS]

Part 2: WARM-UP ACTIVITY – Ad Sorting (Boys, Girls, Unisex) (15 mins).
Script: *To help get warmed up and thinking about marketing strategies used to target specific audiences we are going to play a game. First, we need you to split up into two different groups and we will give each group randomly assorted ads. We will give each group three gendered categories (Boys, Girls, Unisex) and you are to discuss within your respective groups regarding which gender you think this ad is being marketed towards.*
Once you are done, we will compare each group and see if there are there is disagreement and/or agreement around where some of the ads belonged. We will then briefly discuss marketing strategies that you think are used to specifically target girls, boys and unisex.

[USE FLIP CHART TO JOT DOWN SUGGESTED MARKETING STRATEGIES USED FOR EACH GENDER CATEGORY]

Part 3: MESSAGES ON THE WALL ACTIVITY – Individual Evaluations of Current TC Messages Directed Towards Girls (25 mins.)
Script: *That was fun - on to the next activity! Do you see the messages posted up on the walls? Are any of them familiar? We want to know what your individual opinions and evaluations are on these currently existing anti-smoking messages that are directed towards girls your age. We have set up comment cards with 3 questions on them. Please answer each question so that we can hear what you have to say about them. If you are not sure about something or have a question, do not hesitate to ask.*

EACH POSTER WILL ASK THE FOLLOWING QUESTIONS:
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 THESE MESSAGES AND WHY?*

[Participants should have about 15-20 minutes. End the session when it looks as if everyone has had a chance to go around the room and answer each question on the board. You'll know if there is a missing answer if there is a color missing in the responses…each participant will have a different coloured pen.]

Part 4: MESSAGE VOTE AND ROLLING BALL—Most Favourite Message & Less Favourite Message (25 mins).
Script: Now that we have your thoughts and opinions on those messages on the wall we are going to take it one step further. We want to know which message is your most favourite and which message is your least favourite. We are going to give you each a sticker with a thumbs up and a thumbs down for you to stick on the messages of your choice. Here are the stickers……

You can see by the results of the voting…[need to adlib here based on the results of the votes]. To get the ball rolling with this discussion, I'm going to literally roll the ball to someone. That person has the floor to give their feedback on the question we're discussing. If you prefer not to comment, then roll the ball to another person, and it'll be their turn to speak.
[After the vote, the following questions will be asked to the entire group about each TC message posted on the wall].

1. *What do you think about this message? What are some particular things that you like or don't like about it?* [facilitator rolls the ball].
2. *Is the message clear? What does it make you think about around smoking?*
3. *If we posted this message on Facebook and Myspace do you think this would effective at reaching girls your age? Why or why not?*
   a. *Do you think other girls on Facebook or Myspace would find the words and images effective and memorable?*
   b. *Do you easily identify with the message? Can you put yourself in the scenario? (Prompt: What would you suggest we change to make it more identifiable for adolescent girls on Facebook or Myspace?)*
   c. *Are there other words or images you'd use instead?*
   d. *Are there other changes besides the words or images that you would incorporate into this message if it were to be posted on Facebook or Myspace? (Prompts: Does it need to be more interactive or lively?)*

Part 5: MESSAGE APPRAISAL—Facebook Page (10 mins.)
Script: Keeping your ideas in mind, we would like you to each take a paper copy of a Facebook or Myspace page. We have received some great feedback regarding what changes would help make TC messages more effective for adolescent girls. Now we want to solidify your suggestions by getting you to write or draw a picture around a smaller version of the chosen favorite message(s). This will help think about how the message might really look on Facebook/Myspace. We will stick the message on the Facebook/Myspace page and you can either draw or write something that we already talked about regarding ways to make it more effective or you can use your own creativity to suggest ways you think would help enhance this message. You can also include things that you think should be taken out of the message, as well as things you think that should be incorporated into the message.

Part 6: SUMMARY (5 mins.)
Script: Thank you so much for your valuable feedback. We are now concluding this session. Would anyone like to make any final comments, or would like to add to your observations or comments related to the messages or the discussion we've shared with you today?

Part 7: PARTICIPANT EVALUATION FORM
Script: We are now going to provide each of you with an evaluation form that asks you to briefly evaluate the session today. We want to know what you liked/disliked about each part of today's talk:

1. Today's talk:
    a. Warm-up activity – ad sorting?
    b. Messages on the wall activity – comment on the messages?
    c. Message vote and rolling ball– information exchange?
    d. Message changes– TC messages on Facebook or Myspace?
2. Did any of the information surprise you? What? Why?
3. What will be your take-away message from today's session? (e.g., that you'll share with your friends/family)
4. Could we do it better? How?

Part 8: CONCLUSION

Script: You will be receiving a $40 honorarium as a thank you for participating. Please sign the receipt booklet once you've received the honourarium . Thanks very much for your time!

<div align="right">(~2 hrs.)</div>