

**YOUTH AND ONLINE SEXUAL HEALTH SERVICES:
INTERSECTIONS OF THE SOCIAL AND THE TECHNICAL**

by

Wendy Marina Davis

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Abstract

Background: Sexually transmitted infections (STIs) remain a significant public health concern, especially among youth (ages 15-24), who account for an increasingly disproportionate rate of infection. Novel, web-based interventions are being developed to improve sexual health outcomes among youth (e.g., condom use; participation in testing). To date, much of the literature in this area employs a 'read-only' perspective (e.g., examining frequency of use; topics of interest). Some research also has begun to explore ways in which the nexus of the social and the technical aspects of web-based health interventions may affect experiences with online STI/HIV prevention (e.g., how youth identify salient, credible online resources). For many young people, accessing sexual health resources (e.g., STI/HIV testing; counseling) remains a stigmatized activity, and it is unlikely that this will be resolved solely through the web-based provision of these services (e.g., online enactments of gendered stereotypes; traditional 'sex-as-risk' discourses). The **objectives** of this thesis are to provide an in-depth analysis of young people's (1) perspectives on how the use of reverse discourse in online sexual health resources affects their perceptions of these resources; and (2) descriptions of their experiences with accessing online sexual health resources and their perceptions of the ways in which gender stereotypes feature in those experiences; and will discuss designing (and conducting further research on) online sexual health resources for youth. **Results:** Youth's experiences with online sexual health resources are heavily influenced by 'real world' youth culture (e.g., values; beliefs; practices). These analyses provide an in-depth examination of the ways in which reverse discourse

within online sexual health resource contexts can negatively affect perceptions of these resources, as well as illustrate the ways in which gendered stereotypes regarding sexual health help-seeking practices extend to online practices.

Discussion: Intersections of the social and technical aspects of Internet-based sexual health resources need to be addressed in order to generate more equitable opportunities for young people to engage with sexual health resources.

Preface

The research in this thesis was conducted according to the guidelines of the University of British Columbia Behavioural Research Ethics Board. UBC BREB H10-01939 approved interviews and focus groups of human subjects. Data were drawn from an ongoing study investigating youth's perceptions of and experiences with online sexual health services in British Columbia, led by Dr. Jean Shoveller (PhD, UBC). The 2-year study, *Online STI Testing and Youth*, is funded by the Canadian Institutes for Health Research. Under the primary supervision of Dr. Jean Shoveller (PhD, UBC) and co-supervision of Drs. John Oliffe (PhD, Deakin University) and Dr. Mark Gilbert (MD, University of Ottawa; MHSc, UBC), Davis conducted the following research activities:

1. **Data collection.** Davis conducted 18 qualitative, in-depth interviews with youth (out of a total of 20 included in this thesis) and facilitated all 3 focus groups and one youth roundtable event.
2. **Data analysis.** Data analysis was primarily conducted by Davis, with ongoing research team consultation. Feedback from Drs. Shoveller, Oliffe and Gilbert were subsequently incorporated into the thesis.
3. **Manuscript preparation.** Each manuscript was written by Davis; theoretical feedback was sought from Drs. Shoveller, Oliffe and Gilbert and incorporated into subsequent and finalized versions.

A version of Chapter 2 is under consideration for publication. [Davis, W.], Shoveller, J.A., Oliffe, J.L., & Gilbert, M. 'Sounds like the person you're drinking with': Examining youth's perspectives on the use of reverse discourse in web-based sexual health interventions. Submitted February 2012.

A version of Chapter 3 is under consideration for publication. [Davis, W.], Shoveller, J.A., Oliffe, J.L., & Gilbert, M. Interrogating gendered stereotypes: Young people's descriptions of online sexual health approaches. Submitted February 2012.

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Dedication

To my mom and my dad

Chapter 1.0 Introduction

1.1 Sexual health outcomes among Canadian youth

Sexually transmitted infections (STIs) remain a significant public health concern, especially among youth (ages 15-24), who account for an increasingly disproportionate rate of infection. For example, rates of gonorrhoea among Canadians aged 15-19 have almost doubled in the past decade (rising from 55.1 per 100 000 to 102.5 per 100 000 from 1999 to 2009), while rates among 20-24 year-olds have more than doubled during this time (from 66.6 per 100 000 to 145.2 per 100 000) (PHAC, 2010a). A similar dramatic increase is seen in chlamydia rates among Canadian youth (ages 15-24 years) (PHAC, 2010b).

1.2 Online approaches

There are compelling public health reasons to develop novel intervention approaches to improving sexual health outcomes among youth (e.g., increasing condom use; decreasing STI prevalence; improving participation in testing), and web-based strategies offer promising complements to human-delivered interventions. The Internet is a medium with which youth are familiar and receptive, with an estimated 97% of Canadians and 93% of Americans (ages 12-29) being Internet users (Fox, Rainie, Horrigan, Lenhart, & Spooner, 2000; Gray, Klein, Noyce, Sesselberg, & Cantrill, 2005). Additionally, the web offers a degree of convenience and anonymity for locating information about sensitive health topics (e.g., STIs). While many young users report that the Internet is not their sole source

of health information – they also turn to family, schools, and to a lesser extent, friends – it is often the *first* place they look (Hesse et al., 2005). Recent years have seen an global increase in the number of online sexual health interventions for youth, including: (a) the delivery of static website content (e.g., www.avert.org); (b) interactive, moderated message boards, (e.g., www.goaskalice.columbia.edu or www.scarleteen.com); (c) risk/knowledge assessment questionnaires (JANCIN, 2009); (d) email/chat outreach (Harvey, Churchill, Crawford, & Brown, 2008); (e) online partner notification (e.g., www.inspot.org); and (f) online STI/HIV testing (e.g., <http://www.iwantthekit.org/>). Locally, the British Columbia Centre for Disease Control (BCCDC) is developing an online sexual health service program (OSHSP), including web-based information and counseling resources, email partner notification, as well as online STI/HIV testing service, in an effort to increase participation in testing by young people (and other population subgroups) and to decrease the spread of infection.

While young people frequently seek health information on the Internet (Hesse et al., 2005), research suggests that many are reluctant to completely trust online health information (Gray et al., 2005), including sexual health information (Jones & Biddlecom, 2011). Furthermore, health information-seeking is a complex process, wherein youth rely upon a wide range of online sources and operationalize a unique set of practices for identifying salient, credible, and high quality information (Adams, de Bont, & Berg, 2006; Borzekowski & Rickert, 2001; Eysenbach, 2006; Eysenbach & Köhler, 2002; Gray et al., 2005; Hu, 2010; Jones & Biddlecom, 2011;

Laurent & Vickers, 2009). Therefore, in order to best design online sexual health services to meet the needs of youth, and to not exacerbate barriers associated with existing, conventional (i.e., face-to-face) services (Harvey, Churchill, Crawford, & Brown, 2008; Shoveller et al., 2009), an examination of youth's perspectives and experiences with accessing online sexual health resources is necessary.

1.3 Intersections of the social and the technical

The evolution of the web over the past decade has reshaped the way the Internet is used. No longer is it a place where users are on the receiving end of a one-way information flow of static, "read-only" material. Increasingly, there is a move "from publishing to participation...to an ongoing and interactive process" (Flew & Smith, 2011). This is true in all fields with an online presence, including the rapidly expanding domain of web-based technologies in health and medicine. In order to better understand consumers' online health practices (and thus our ability to influence them), we must (re)-conceptualize online health information-seeking as a set of "communication processes rather than information dissemination or educational processes" (Cline & Haynes, 2001). Unfortunately, to date, much of the literature in the area of e-health has failed to move beyond a 'read-only' perspective, remaining focused on the Internet as a "high-tech conveyor in the rapid diffusion of information or health lessons" (Hesse et al., 2005). In particular, research describing youth's use of the Internet as a sexual health resource tends to focus on usage patterns (e.g., frequency of use; topics of interest) (Bull, Phibbs, Watson, &

McFarlane, 2007; Jones, Biddlecom, & Hebert, 2011; Kanuga & Rosenfeld, 2004; Suzuki & Calzo, 2004).

Thus, this relatively nascent field of study presents new opportunities to discover what makes for effective interventions to improve youth sexual health. Drawing on knowledge developed in multiple disciplines (including and in addition to health) – the current thesis contributes to a growing body of theoretical and empirical work that begins to illustrate the ways in which the virtual world is situated within the physical and social world. Cyberspace is both a “psychological and social domain” (Ben-Ze’ev & Ben-Ze’ev, 2004), wherein youth’s online behaviours are governed by conventional social norms and expectations. Thus, youth’s online experiences are heavily influenced by ‘real world’ youth culture (e.g., values; beliefs; practices); social behaviours in virtual environments may not be identical to those in the physical world, but the two are intricately connected (Suzuki & Calzo, 2004; Yee, Bailenson, Urbanek, Chang, & Merget, 2007). New work related to other, more nuanced aspects of the ‘online experience’ is emerging (Jones, 2011; Selkie & Benson, 2011). For example, it is now argued that for many youth, going online can be an extension of their ‘real-world’ identities, as they negotiate online constructions of important social cues (e.g., gendered stereotypes, power dynamics within relationships; relations to peers) (Macfarlane & McPherson, 2007; Mazzarella, 2005). A small, but growing, body of research also has begun to explore other ways in which the nexus of the social and the technical aspects of web-based health interventions affects experiences with online STI/HIV prevention (e.g., how

website attributes may affect perceived credibility; how youth identify salient online resources) (Gray et al., 2005; Jones et al., 2011; Shoveller, Knight, & Davis, 2011; Simkins, 2007).

While several studies have found the intersections of multiple factors (e.g., one's gender, cultural background, sexual identity) are important influences on face-to-face communication during clinical encounters (Goldenberg, Shoveller, Ostry, & Koehoorn, 2008a; Shoveller et al., 2009; Shoveller, Knight, Johnson, Oliffe, & Goldenberg, 2010), there is a paucity of information to illuminate how these forces might play out within technology-driven sexual health services, including online STI/HIV testing. For many young people, accessing sexual health resources (e.g., STI/HIV testing; sexual health counselling) continues to be a stigmatized activity (Lichtenstein, 2003), and it is unlikely that this will be fully resolved solely through the web-based provision of these services (e.g., heteronormative online spaces; online enactments of gendered stereotypes; traditional 'sex as risk' discourses).

1.4 Reverse discourse

Framing Internet use for health as *health communication* invites an evidence base for online sexual health interventions that is informed by social theory. Whether and how positive health outcomes are facilitated by Internet use depends not only on messages (i.e., content) but the *meanings* invoked by those messages for users. In constructing messaging for online sexual health interventions, designers have

tended to rely on wisdom from conventional, in-person programming, which suggests that youth want sexual health education to be “empathetic, non-judgmental, and able to create a 'safe environment' in order to facilitate the discussion of difficult subjects” (p. 33) (Hilton, 2003), and to use relaxed and informal methods of delivery (Forrest & Strange, 2002; Goldenberg, Shoveller, Koehoorn, & Ostry, 2008b; Shoveller et al., 2009). With this in mind, some web-based sexual health promotion efforts utilize reverse discourse.

Reverse discourse is a Foucauldian concept, developed by Foucault only in limited detail, with his work on the topic being contextualized in the homosexual civil rights movement. However, it is possible to consider this concept in the broader context of Foucault’s discussions relating to discourse, power, and resistance, wherein the marginalized are able “to speak” on their “own behalf, to demand that legitimacy or ‘naturalness’ be acknowledged, often in the same vocabulary, using the same categories by which it was medically disqualified” (p. 101) (Foucault, 1978). Reverse discourse is a fundamentally subjective and social phenomenon wherein dominant notions of what is sacred and what is profane are contested, in an attempt to disrupt existing power structures. This lens is applied in examining the messaging and meanings inherent in online sexual health promotion – the acknowledgement and rejection of shame associated with some sexual behaviours (e.g., having sex outside of a monogamous partnership) and efforts to challenge those actions that are deemed negative (e.g., by virtue of their inherent ‘risk’) by those in power. In theory, this serves to both challenge the stigmatization of “risky”

behaviours and increase appeal to youth (e.g., by using ‘their’ language). It is argued that this creates an empathetic ‘information’ environment, reducing prejudice against ‘risky’ and/or ‘immoral’ sexual behaviours (e.g., premarital sex; multiple partners) (Ingham, 2005; Kehily, 2002).

Previous work in the fields of Political Science (Serafim, 2006), Sociology (Kingfisher, 1996), Literature (Da Silva, 1998), and Comedy Studies (Weaver, 2010) has examined the use of reverse discourse as a deliberate methodology. A recent analysis of InSPOT (see inspot.org, an anonymous online partner notification service for sexually transmitted infections) describes the use of several forms of reverse discourse (Simkins, 2007). Another study examined the use of reverse discourse in sexual health promotion messaging, wherein it was used as an analytical lens through which to examine HIV/AIDS messaging in the 1980-90s (Simkins, 2007). However, little is known about the effects of reverse discourse in online sexual health interventions, nor do we understand its potential value as a strategy of resistance. Given the sensitive and easily stigmatized nature of sexual health seeking practices, it is important to explore and understand youth’s perspectives on the use of reverse discourse in online sexual health promotion messaging. Furthermore, perceived meanings of reverse discourse are heavily influenced by other features of youth’s social environments (e.g., gendered stereotypes) – a reality that is likely to profoundly impact online sexual health practices.

1.5 Gendered online practices

An abundance of evidence demonstrates that online habits and experiences vary considerably by gender (McMahan & Hovland, 2009; Richard, Chebat, & Yang, 2010). Within the health realm, there is evidence that health information-seeking patterns and practices among men and women are substantially different (Seale, Ziebland, & Charteris-Black, 2006). For example, results from recent Pew Internet & American Life Project studies show that women are significantly more likely than men to go online to search for health information, and are more likely to hold positive beliefs concerning the beneficial effects of Internet health information-seeking (Rice, 2006). When conducting Internet searches, women are more likely than men to focus on an illness or its symptoms, while men tend to focus on disease prognosis and treatment (Fox, Rainie, Horrigan, Lenhart, & Spooner, 2002). Compared to women, men are less concerned with the perceived credibility of online health information.

Men and women also have distinct and unique preferences and perceptions when it comes to accessing and navigating websites. Much of what is known about the different ways in which men and women experience the online world originates in the literature in the field of e-commerce. Research in this area examines the differences between men and women's online practices, revealing gender-based dissimilarities in preferences, satisfaction, and ease of website use, depending on aesthetics and content (both linguistic and visual). A combination of cues (e.g., colours, layout, tone of written content) renders online spaces inherently

“gendered” (e.g., website features ‘mirror’ the gender of the web designer) (de Cabo, Gimeno, & Martínez, 2011; Moss & Gunn, 2006).

Features of social context (e.g., gendered stereotypes; stigma) are known to exert considerable influence on experiences with conventional sexual health service provision (e.g., STI testing; sexual health counseling). A growing body of work examines the complex relationships between gender, identity, and social structures and considers how the stigmatizing effects of gendered stereotypes shape youth’s experiences with sexual health services. For example, pervasive social norms that place high value on young women’s sexual ‘morality’ (e.g., limiting their number of sexual partners; staying ‘clean’) may lead women to fear being labeled negatively for accessing testing, or for testing positive for an STI (Goldenberg, Shoveller, Koehoorn, & Ostry, 2008b; Nwokolo, McOwan, & Hennebry, 2002; Shafer et al., 2002). In fact, some women cite fear of rejection or blame from their partner(s), family, or health care provider as a reason to avoid testing (Sheahan, Coons, Seabolt, Churchill, & Dale, 1994). Meanwhile, dominant ideals of masculinity simultaneously glorify men’s sexual promiscuity (i.e., men having multiple partners) and reinforce attitudes and beliefs that discourage men’s use of health care services (e.g., denial of illness in favour of self-monitoring and self-treatment of symptoms) (Courtenay, 2004; Lee & Owens, 2002; Robertson, 2007). Within heterosexual relationships, women are often seen as the caretakers of sexual health (Darroch, Myers, & Cassell, 2003), effectively shaping expectations and burdening women with primary responsibility for safe-sex practices (e.g., advocating for condom use; procuring oral

contraceptives; being tested for STI/HIV) (Oliffe et al., in press). Overall, this social milieu contributes to an environment that fundamentally *genders* young people's experiences with conventional, in-person sexual health services, a reality that potentially is extended to web-based services.

1.6 Thesis objectives and overview of thesis chapters

The current thesis aims to provide an in-depth analysis of young people's:

- (1) Perspectives on how the use of reverse discourse in online sexual health resources affects their perceptions of these resources (Chapter 2);
- (2) Descriptions of their experiences with accessing online sexual health resources and their perceptions of the ways in which gender stereotypes feature in those experiences (Chapter 3).

Chapter 2 focuses on the use of reverse discourse as it relates to perceived saliency/credibility of sexual health information resources and hypothesizes how the use of reverse discourse techniques may dispel or reproduce existing conceptualizations of youth sexual behaviour as inherently risky and/or immoral. Chapter 3 examines the ways in which online sexual health information seeking may be a gendered experience and includes young people's descriptions of the ways in which they view masculinities and femininities as featuring in those experiences. Chapter 4 includes a discussion of the potential implications that the empirical

findings presented in Chapters 2 and 3 may have for designing (and conducting further research on) online sexual health resources for youth.

Chapter 2.0 ‘Sounds like the person you’re drinking with’: examining youth’s perspectives on the use of reverse discourse in web-based sexual health interventions¹

2.1 Introduction

There is a strong public health impetus to develop new strategies to promote sexual health among youth (<25) (CATIE, 2011; Moses & Elliott, 2002; White, Kelly, Oliver, & Brotman, 2007), and Internet-based approaches are being developed to complement conventional (e.g., clinic-based; school-based) services (Bailey, 2010; Levine, 2011; Lim et al., 2012; Rietmeijer & McFarlane, 2009; Rosenberger, Reece, Novak, & Mayer, 2011; Shoveller et al., 2011). As a result, increasing attention is turning towards the use of the Internet to reach populations at high risk for STI/HIV infection (e.g., youth ages 15-24; men who have sex with men). This emergent field of study presents new opportunities to re-conceptualize what makes for effective interventions to address the prevention and treatment of STIs and to draw on theoretical constructs developed in disciplines other than health to better understand what online approaches might be more (or less) effective.

An important body of literature to be drawn on in the current thesis pertains to the evidence describing various aspects of adolescents’ use of the Internet for sexual health information (Borzekowski & Rickert, 2001; Gray et al., 2005; Jones &

¹ A version of this chapter is under review for publication. Davis, W., Shoveller, J.A., Oliffe, J.L., & Gilbert, M. ‘Sounds like the person you’re drinking with’: Examining youth’s perspectives on the use of reverse discourse in web-based sexual health interventions. Submitted February 2012.

Biddlecom, 2011; Kanuga & Rosenfeld, 2004). In general, much of the research in this realm focuses on usage patterns (e.g., frequency of use; topics of interest); however, new work related to other, more nuanced aspects of the 'online experience' is emerging (Gray et al., 2005; Jones & Biddlecom, 2011). For example, it is now argued that for many youth, going online is an experience beyond mere information-seeking; instead, it can be an extension of young people's identities, as they negotiate online constructions of important social cues (e.g., gendered stereotypes; power dynamics within relationships; relations to peers) (Macfarlane & McPherson, 2007; Mazzarella, 2005). A small, but growing, body of research also has begun to explore other ways in which the nexus of the social and the technical aspects of web-based health interventions affects experiences with online sexual health promotion (e.g., how features of a website affects perceived credibility; how youth identify salient online resources) (Gray et al., 2005; Jones et al., 2011; Simkins, 2007).

Previous research has shown that several factors appear to be related to the perceived credibility and saliency of sexual health information and resources. For example, many youth want sexual health education to be 'empathetic, non-judgmental, and able to create a 'safe environment' in order to facilitate the discussion of difficult subjects' (Hilton, 2003), and to use relaxed and informal methods of delivery (Audrey, Holliday, & Campbell, 2006; Measor, 2004; Mellanby, 2001; Williams & Bonner, 2006). Much of the work in this area has focused on the provision of peer-led health promotion and education (Audrey et al., 2006), as an

alternative to adult-led instruction. Proponents of this approach cite several advantages over more conventional, adult-led approaches, including increased credibility, empowerment, acceptability, and success associated with peer-led delivery (summarized (Turner, 1999). Such strategies reportedly draw on several important theoretical models (e.g., Social Learning Theory; Social Influences Theory) to inform peer-education initiatives (Kirby, 1994; Wilton & Keeble, 1995). Within these interventions, it is suggested that learning and/or behaviour change is enhanced when the supplier of sexual health information is perceived to share key characteristics with the recipient(s) (e.g., behaviour; experience; social status; cultural background)(Harden, Oakley, & Oliver, 2001).

In some instances, this thinking appears to have been extended and applied within some web-based sexual health promotion efforts, primarily via the use of reverse discourse (Foucault, 1978). Reverse discourse – the acknowledgement and rejection of shame associated with stigmatized concepts – is intended both to challenge negative judgments of ‘risky’ behaviours (e.g., having sex outside of a monogamous partnership) and to appeal to youth (e.g., by using ‘their’ language). Reverse discourse is a Foucauldian concept, originally developed in the context of the homosexual civil rights movement (Foucault, 1978). However, in the current analysis, reverse discourse is considered within the broader context of Foucault’s discussions relating to discourse, power, and resistance, wherein the marginalized are able ‘to speak’ on their ‘own behalf, to demand that legitimacy or ‘naturalness’ be acknowledged, often in the same vocabulary, using the same categories by which it

was medically disqualified' (p. 101). Reverse discourse is a fundamentally subjective and social phenomenon wherein dominant notions of what is sacred and what is profane are contested, in an attempt to disrupt existing power structures. This lens is applied in examining the messaging and meanings inherent in online sexual health promotion. In particular, the analysis will focus on the acknowledgement and rejection of shame associated with behaviours (e.g., having sex outside of a monogamous partnership) that are stereotypically deemed to be negative (e.g., by virtue of their inherent 'risk') by 'experts' (i.e., those in power). These messages are delivered using the same language and concepts that are traditionally associated with 'unsafe' sexual practices (e.g., having multiple sexual partners is referred to as 'casual sex').

Several studies have found the intersections of multiple factors (e.g., one's gender, cultural background, sexual identity) are important influences on face-to-face communication during clinical encounters (Goldenberg, Shoveller, Ostry, & Koehoorn, 2008a; Goldenberg, Shoveller, Koehoorn, & Ostry, 2008b; Lichtenstein, 2004; Lichtenstein & Bachmann, 2005; Shoveller et al., 2009; Shoveller et al., 2010); however, there is a paucity of information to illuminate how these forces might play out within online sexual health services. While the provision of web-based services offers advantages (e.g., anonymity; convenience) (Shoveller et al., 2011), it is unrealistic to assume that stigma associated with the utilization of sexual health services will be completely dispelled through this approach (e.g., heteronormative online spaces; online enactments of gendered stereotypes).

Many young people report that the Internet is the *first* place they look for health information (Hesse et al., 2005). Thus, it is important to understand and respond to youth's perspectives about online resources, particularly their perceived salience and credibility. To identify and mitigate the possibility of the new online sexual health interventions to unintentionally reinforce stigma associated with STI/HIV, or to exacerbate existing barriers to service access for vulnerable subgroups of youth, we need to understand youth's perspectives. Without accounting for these perspectives, intervention planners risk repeating many of the problems associated with conventional services (i.e., face-to-face services) (Harvey et al., 2008). Thus, the current chapter sought to examine and understand youth's perspectives on the use of reverse discourse in web-based sexual health promotion initiatives, and to understand how it may affect young people's experiences accessing these resources.

2.2 Methods

2.2.1 Recruitment

A purposive sampling strategy was employed (Shadish & Cook, 2002) to select a wide range of participants (ages of 15-24), deliberately selecting youth who, by virtue of their social contexts, could share insights into the needs of a variety of youth. Recruitment efforts included posters at various 'youth hang-outs' (e.g., drop-in centres, community colleges), as well as targeted online advertisements (e.g., Craigslist, Facebook). Efforts were made to recruit in spaces (online and otherwise) populated by vulnerable youth, such as multicultural youth centres, low-threshold

service centres for street-involved youth, and list-serves for queer youth. Youth contacted our office by phone or email, and were screened for eligibility (e.g., previously sexually active, lived in the study area, fluent in English, had considered or had undergone STI testing). As the study progressed, sampling needs were discussed by team members and adjusted according to emergent findings.

2.2.2 Data collection and analysis

Data were collected using in-depth, individual interviews with 20 youth participants, as well as focus groups (3 groups with 4 participants per group). Interview and focus group guides were developed and pilot tested by members of the research team. Informed consent was obtained from all participants, who were asked to also complete a brief socio-demographic questionnaire. Ethics approval was obtained from the University of British Columbia Behavioural Research Ethics Board. Upon completion of an interview or focus group, participants received a \$25 cash honorarium. All interviews and focus groups were audio- or video-recorded, transcribed (with all identifying information removed), and transcripts were checked for accuracy. Transcripts were coded and data organized using NVivo 8 qualitative analysis software. Constant comparative techniques informed the analysis (Corbin, 1998), and emergent findings were used by the research team to iteratively revise the interview and focus group guides. In addition, a five-hour Youth Roundtable event (composed of 13 youth, 3 of whom had taken part in an interview or a focus group) gave the opportunity to verify, correct, and conceptually advance emergent and evolving findings through workshop and group activities.

Youth were compensated for their participation with an \$80 honorarium. The materials (e.g., transcripts of audio-recordings; paper results of group activities) resulting from this event were included in the analysis, and were used to vet and advance thematic results.

North American, English-language sexual health websites (n=15) were reviewed during qualitative in-depth interviews and focus groups with youth participants. Youth were asked to share their perspectives on written (e.g., clinical versus colloquial language) and visual (e.g., medicalized images; sexualized images) presentations of sexual health information on the websites, taken in isolation. Text and image sample selection included a variety of styles, and included samples that could potentially be interpreted as reverse discourse by study participants. Selection of these examples was informed by an understanding of the concept of reverse discourse in the context of contemporary sexual health messaging (e.g., identifying examples of slang, colloquialism, and vernacular), and by previous analyses of enactments of reverse discourse in sexual health messaging (Myrick, 1996). Interviews were semi-structured and used open-ended questions, providing participants with opportunities to discuss the ways in which various online representations could affect their experiences accessing online sexual health services. Interviews were conducted in a research office, or in private space made available for use by community partners (e.g., drop-in service meeting room), and each lasted approximately 1-1.5 hours.

2.3 Results

2.3.1 Study participants

In total, interviews and focus groups were conducted with 12 male, 19 female, and 1 transgendered youth (mean age: 20 years). Table 1 shows participants' self-identified socio-demographic characteristics, and Table 2 summarizes participants' previous STI/HIV testing history.

Table 1: Participants' self-reported socio-demographic characteristics

Age Group	<i>n (%)</i> *
15 - 19 years	15 (47)
20 - 24 years	17 (53)
Gender	
Female	19 (59)
Male	12 (38)
Transgender (F)	1 (3)
Ethnicity (self-identified)	
Aboriginal	4 (13)
East Asian/Southeast Asian	6 (19)
Euro-Canadian	19 (59)
South Asian	1 (3)
Other	2 (6)
Country of Birth	
Canada	22 (69)
Other	10 (31)
Length of Stay in Vancouver	
< 1 year	4 (13)
1 - 5 years	9 (28)
6 - 10 years	3 (9)
11 - 15 years	3 (9)
>15 years/Entire life	13 (41)
Living Arrangement	
Alone	2 (6)
University Residence	5 (16)
With Friends/Roommates	6 (19)
With Partner/Spouse	2 (6)
With Parents/Family	12 (38)
Shelter/Transition House/Street	3 (9)
Other	2 (6)

Table 1 (continued): Participants' self-reported socio-demographic characteristics

Sexual Orientation	
Bisexual	1 (3)
Lesbian	1 (3)
Gay	4 (13)
Straight	23 (72)
Two-Spirit	1 (3)
Other	2 (6)
Current Sexual Activity	
Not currently sexually active	7 (22)
With one partner	22 (69)
With more than one partner	3 (9)

Table 2: Participants' self-reported STI testing history

Tested Previously	<i>n (%)</i> *
No	10 (31)
Yes	22 (39)
Last Tested (n=22)	
Within 1 month	5 (16)
Within 6 months	10 (31)
Within 1 year	3 (9)
1 year or more	4 (13)

* Percentages may not add up to 1 due to rounding.

In reviewing the sample of sexual health websites, youth identified a variety of potentially problematic phrases and images. While there was not absolute agreement among participants as to precisely which language or imagery had a negative impact on their impressions of the websites, most participants identified more explicit or colloquial language (e.g., 'no-strings sex', 'screw around', 'fuck friend') as an enactment of reverse discourse. In general, compared to their reactions to text samples, participants had less intense opinions about images, although some found more 'sexy' images (e.g., a photo of two youth kissing) to be an enactment of reverse discourse.

When asked to consider online sexual health resource designers' motivations for utilizing textual and image-based enactments of reverse discourse, nearly all participants perceived an intention by the designer to: (i) catch the user's attention by using words or images that are more striking or explicit; (ii) align content with dominant portrayals of youth culture; or (iii) anticipate and pre-empt youth's discomfort or embarrassment with the sensitive nature of the topic, and to mitigate this discomfort through the overt use of colloquial language and/or explicit images. One youth, Justin theorized that these techniques were used on sexual health websites *'because a lot of people would relate to that language and sort of use it already. So it's common, so they would know what it means.'* Often, youth's initial responses to reverse discourse presentations focused on the perceived intentions of the website designers. Implicit in many of these reflections was a perceived lack of authenticity. As one young woman, Coral, told us: *'It seems like they are trying to like fit in. I know it sounds ridiculous, but like fit in with the reader.'* Like many youth in the study, Coral sensed that website designers were attempting to resonate with youth by using 'their language'. Ultimately, these efforts had the opposite effect: youth sensed that the authors of this content were not, in fact, their peers, but were instead 'outsiders' (i.e., sexual health intervention designers). Instead of seeming authentic, inauthenticity emerged, as youth perceived the 'youthful' messaging style as feigned.

2.3.2 Saliency and credibility

More explicit content elicited negative responses from youth in terms of perceived appeal, trust, and quality of these websites. Youth explained that when sifting through the abundance of sexual health information on the Internet, they undertake a complex process of identifying information that is personally salient, or relevant to their needs. For many youth participants, reverse discourse detracted from this saliency. For example, many youth valued a professional, straightforward approach to the delivery of sexual health content. As Sarah explained:

Like, when you are looking for an answer you want someone who sounds like they know what they are talking about, not somebody that sounds like the person you are drinking with.

While acknowledging that particular words or phrases might catch youth's attention or be seen as humorous, most participants suggested that they would not perceive information presented in this way to be 'worth' processing. For many participants, delivering sexual health information without an appropriate level of seriousness effectively rendered the message as being without value. As one youth described: *"It will make you laugh. But at the same time, like you are probably not gonna remember anything you read from it, because it doesn't go into your brain as something serious."*

Youth often suggested that there is a *'time and a place'* for sexual topics to be discussed in a casual or humorous way, but that the use of reverse discourse in an

online sexual health resource was not necessarily the most appropriate or effective means of health communication. Some youth were more direct; they said that reverse discourses that challenge conventional norms about youth sexual behaviour are inappropriate in an online context – many preferring instead to discuss such things with friends. As Sarah explained:

They are trying really hard to sound sort of like the friend you would talk to. If you are gonna go online, I mean that's why you have friends. Like if you were gonna talk to your friend, you talk to your friend, you wouldn't go to a website, you know what I mean?

Furthermore, the use of reverse discourse often had a detrimental impact on the perceived credibility of a website. Youth made clear that they valued a professional approach to online sexual health information provision, and that reverse discourse negated this. For example, Elisa explained:

If I was reading this on a website I would probably leave the website right away because it doesn't seem like it's something that a very credible source would use at all. Like the 'f' word, 'heavy love stuff', like once again that doesn't seem very serious at all. Like, I know what it means but not something that I would probably continue reading.

Participants particularly objected to the use of reverse discourse enacted as slang within sexual health websites. One young woman, Bridgette expressed that the way a websites “talks” has significant effect on how well she trusts it as a source of information, and that the use of a colloquialism detracts from the trustworthiness of online sexual health messaging. For example, in response to the use of the word “cum”, she exclaimed that the website was *“not too trustworthy. I don’t know it just sounds silly. To me anyhow, it just seems like some teens talking.”*

2.3.3 Social context

Many participants acknowledged that enactments of reverse discourse on a sexual health website could potentially be a deterrent for some youth, depending on their current social context (e.g., living situation; sexual identity disclosure status.) For example, Vidia suggested that, for youth from more conservative or religious backgrounds, enactments of reverse discourse in this area could be off-putting. She explained that, for these youth sexualized images on sexual health websites (e.g., images of youth kissing): *“could be somewhat offensive. Like they wanna learn about sex but they don’t wanna see people going at it. Like they didn’t search for porn or like sexy movies, they searched for facts.”* As a young woman who identified as a lesbian, Vidia acknowledged that for many youth, engaging in same-sex sexual interactions can be laced with stigma and shame, making it even more difficult to seek relevant sexual health resources. She asserted that this might motivate some youth (e.g., some LGBT youth) to visit websites that were absent of any risqué content. She suggested that, to avoid creating additional barriers for these youth, online sexual

health resources should avoid “*big pictures of people making out, or having the words ‘sex’ super, super big. Basically don’t make it super crude or risqué, or intimidating.*”

In addition, the use of reverse discourse also appeared to be differentially perceived by youth depending on their cultural or ethnic background. Participants stressed the importance of youth’s relationships with cultural norms as being influences in how reverse discourse would be perceived. For example, for a youth who is unfamiliar with contemporary lingo, slang, or idioms associated with sexual health topics, the more nuanced aspects of this language could be ‘lost’ in an online context that used frequent examples of reverse discourse and/or employed slang or colloquialisms. As one woman, Ramona, explained:

You need to be fluent in English, and kind of be born in the Western world to understand that. And I think that a lot of my immigrant friends would not.

2.3.4 Reinforcing stigma

Many youth reacted negatively to seeing youth sexual behavior presented in what they perceived to be a callous or crude manner, and tended to have negative associations with such depictions. For example, upon reviewing website content that discussed the implications of casual sex, using the colloquial terms ‘fuck buddy’, one youth, Jane, told us: “*It’s so offensive. I think it’s like you’re just a ‘fuck buddy’,*

you're nothing else to that person. There are so many other ways you could describe it."

Some participants expressed that casual depictions of youth sexual behavior do not align with their own personal conceptualization of sex. In response to one website's references to 'recreational sex', Olivia explained that: *"It's not a good message [to send]. It's more serious. You shouldn't be viewing it this way."* Many other youth agreed that, to them, sex was a serious topic, and deserved to be discussed in a respectful way. One young man, Trevor, told us: *"I don't think [these terms] should be included in a site talking about something so serious. It's funny, now, to talk about these sites [in this interview], but like, if you were actually looking for information..."*

Some youth commented that rather than dispelling the stigma associated with youth sexual behavior, the use of reverse discourse had the potential to exacerbate conceptions of youth sexual behavior as inherently risky or immoral. Enactments of reverse discourse that endeavor to dispel shame associated with stigmatized concepts sometimes invoked a boomerang effect, serving to re-stigmatise youth sexual behaviour. For example, one young woman, Aimee, told us:

I don't think I'd respond very well to that. Well, the vulgarity almost ...[pause] reinforces shame [...] If I got that information, I think I would feel more awkward.

2.3.5 Potential benefits

A few youth in the study, especially youth who described themselves as relatively well informed and comfortable with sexual health topics, acknowledged the potential role and benefit of reverse discourse in online sexual health resources. For these youth, reverse discourse offered safe spaces within which to explore sexual health topics, with a sex-positive agenda and a non-judgmental approach. As one young woman, Lira, explained:

To me, it sounds like someone is actually interested in and passionate about the topic of sexual health and wants to convey that to people reading it.

While *these* youth were amenable to the use of reverse discourse in sexual health promotion, they often recognized that this might not work well for all youth. For example, when asked about seeing more explicit content on a website, Daniel told us: *“Personally I don’t mind, but I know some people that would.”* During a focus group, one youth pointed out that as a relatively empowered and privileged university student he felt receptive to enactments of reverse discourse, but that other youth may be differentially positioned in terms of their willingness and capacity to uptake information presented in this way. For example, one young man, Trevor, explained that while the use of reverse discourse may be effective for youth who occupy social positions that allow them to be receptive to this strategy, it may inadvertently create barriers to access for other youth. He acknowledged that, as a university student, he was likely to have been exposed to a wide variety of sexual

health information, and thus was more likely to be receptive to reverse discourse approaches. However, he questioned: *“What about for a group that don't know any information. Like we probably know a larger chunk than a lot of kids who don't go to university, and haven't graduated high school.”* As Trevor suggested, for these youth, enactments of reverse discourse would likely be less accessible.

2.4 Discussion

These findings reveal how, despite the best intentions, the use of reverse discourse can have undesired and unpredicted effects on youth's perceptions of online sexual health promotion efforts. While, for some youth, enactments of reverse discourse can have neutral or even positive effects on their experiences with web-based sexual health resources (e.g., by conveying an engaged tone to the reader), these approaches did not resonate with many of the participants. In fact, often the opposite effect was achieved – many youth perceived these approaches as artificial and/or exaggerated representations of youth's own discourses pertaining to sexual health. Reverse discourse also was perceived to have negative effects on the saliency and credibility of online sexual health information. Young people in this study suggested that negative social mores were associated with explicit portrayals of young people's sexual lives on the websites, revealing how reverse discourse potentially re-stigmatizes youth by re-emphasizing youth sexual activity as inherently risky or immoral. This research illuminates the importance of

considering these and other socio-technical aspects of Internet-based sexual health interventions.

Health promotion efforts should be informed by both evidence and theory (Barak, 2003; Barak & Fisher, 2001; Crosby & Noar, 2010; Green, 2000). However, the theoretical and empirical foundations underpinning the use of reverse discourse in online sexual health promotion are unclear. Some ways in which reverse discourse has been employed within sexual health promotion interventions include peer-delivered information that aims to be relatable to youth, use their own language and break down communication barriers about a stigmatized topic. While these approaches have been enthusiastically promoted (World Health Organization, 1991) and are informed by behavioural theories (e.g., Social Learning Theory), the evidence for their effectiveness remains inconclusive (Harden et al., 2001; Turner, 1999).

It is also worth examining the use of reverse discourse in this area from a Foucaultian perspective. While the adoption of such an approach is an attempt to operationalize a reverse discourse, ultimately, these are the strategies used by intervention planners to achieve public health goals (e.g., decreasing the spread of sexually transmitted infections; lowering teen pregnancy rates). Reverse discourses are intended to contest dominant notions of what/who is compliant and what/who is rebellious, wherein existing power structures are contested. However, rather than being subversive in nature, these strategies may not reflect youth sexual

empowerment beginning to 'speak for itself', nor a youth sexuality demanding the legitimization of its own 'naturalness', as described by Foucault (1978). Shoveller and Johnson (2006) describe the shift from adult- to peer-led models of sexual health education over the past two decades, and argue that the adoption of young people as the 'voices' advocating for 'safe choices' constitutes a perpetuation of the sex-as-risk discourse of adult 'experts', rather than an empowering experience.

Furthermore, by consistently juxtaposing enactments (or rather, interpretations) of youth culture with traditional risk discourse, it serves to re-stigmatize youth sexual behaviour as inherently 'risky' (Fortenberry, 2003). Stigma is a socially constructed concept, and according to Goffman's foundational work on the subject, can be associated with physical attributes (e.g., a sexually transmitted infection), moral attributes (e.g., engaging in risky behaviour), or 'tribal' affiliation (Goffman, 1986). Nack extends this concept of 'tribe' beyond familial/ethnic associations in the context of sexual behaviour norms attributed to a particular group (Nack, 2002). Youth represent a socially distinct group, and youth's understanding of their identities as sexual beings is informed by many of the morals that are entrenched in negative social constructs of youth sexuality (e.g., stigmatization of certain sexual behaviours as 'risky' or immoral). Normative conceptions of young people's sexual behaviour shape youth's views of the 'tribe' of sexually active youth to which they belong (or will belong), and some approaches may risk exacerbating stigma associated with youth (especially those who are sexually active).

Greaves et al (2010) describes the “internalized stigma” resulting from “developed processes of self-stigmatisation and secondary deviant identities” (p. 527). Often, the context that would inspire a young man or woman to seek online sexual health services might already render likely the harbouring of some internalized stigma (e.g., about behaviour they suspect may be ‘risky’). Youth experiencing anxiety related to prior sexual behaviour who encounter reverse discourse in web-based sexual health resources may interpret it as a reification of their suspicions. In this regard, enactments of reverse discourse potentially serve to augment internalized stigma (that a youth may already be experiencing). For many youth, stigma (both internal and external) represents a significant barrier to accessing conventional sexual health services and information (Fortenberry et al., 2002; Lichtenstein, 2003; Lichtenstein & Bachmann, 2005; Rusch et al., 2008; Shoveller et al., 2009). Thus, it is imperative that novel, online approaches attend to and avoid possible sources of stigma within web-based interventions.

Furthermore, by framing youth sexuality in this way, health promotion efforts risk oversimplifying youth’s sexual behaviour/experiences – a complex, multifaceted aspect of young people’s lives. Schalet (2004) describes the ‘dramatization of adolescent sexuality’, highlighting internal conflicts between ‘impulse and cognition’ – two paradigms that ‘limit us in our ability to conceptualize and promote’ positive adolescent sexuality. Conventional social norms reinforce these as contradictory states – sexually, young people are either informed and ‘in-control’, or uninformed and ‘risky’ (Shoveller & Johnson, 2006). Both paradigms equate sex with risk, and

assume that the best way to promote healthy sexuality among youth is by stressing its inherent risks (Schalet, 2011). In some ways, the use of reverse discourse in online sexual health promotion may unintentionally re-emphasize this dichotomy (e.g., by consistent ‘representations’ of youth sexual culture in the context of risk). Instead, efforts should focus on sharing important information with youth pertaining to their sexual health without buttressing this misleading, reductionist perspective.

There are several limitations to the findings described in this chapter. As a researcher, my interpretation of reverse discourse is based on a theoretical sensitivity to the concept, one with which the youth in this study were not (presumably) familiar. Thus, examples of reverse discourse (according to the aforementioned lens) were offered, as well as other text and images, allowing participants to draw on their own understandings and reactions, without imposing the interviewer’s own perceptions on the discussions. In addition, the sample was composed of youth who volunteered to participate in a research study about sexual health, and thus were likely to have a moderate-to-high comfort level with such topics (which provides an interesting juxtaposition to the largely negative reactions to the use of reverse discourse). In fact, in many ways, youth’s (often strong) reactions to online representations of reverse discourse were surprising, given the strong theoretical basis for informal, peer-‘voiced’ approaches. Rather than lending credence, and/or contesting contemporary conceptualizations regarding youth sexuality, web-based enactments of reverse discourse within sexual health

resources had several unintended, negative effects. While these findings are not meant to be generalizable to all youth, or all online interventions, they represent a starting point from which to examine, question, and perhaps reassess the use of reverse discourse in promoting sexual health to youth online.

Chapter 3.0 Interrogating gendered stereotypes: young people's descriptions of online sexual health approaches²

3.1 Introduction

3.1.1 Background

In Canada, and in many Western, high-income countries, STIs (including chlamydia and gonorrhoea) disproportionately affect youth, with rates that are high and climbing sharply (Division of STD Prevention, 2011; HPA, 2008; PHAC, 2010a; 2010b). Unfortunately, significant knowledge gaps remain with respect to sexual health for many youth in Canada (White et al., 2007), and youth engagement in STI testing remains a public health challenge (CATIE, 2011; 2011; Mill et al., 2008; Moses & Elliott, 2002). With this in mind, novel intervention strategies are harnessing the capacity of the Internet to reach populations at risk of poor sexual health outcomes.

Many young people report using Internet in their quest for sexual health (e.g., searching online for STI testing options; finding information on safe sex practices) (Borzekowski & Rickert, 2001; Hesse et al., 2005; Jones, 2011; Jones & Biddlecom, 2011). Compared to conventional, in-person approaches, web-based sexual health education and services are new in Canada. As such, comparatively little research attention has been paid to this emerging field. Furthermore, health information-seeking is a complex process, wherein youth rely upon a wide range of online

² A version of this chapter is under review for publication. Davis, W., Shoveller, J.A., Oliffe, J.L., & Gilbert, M. Interrogating gendered stereotypes: Young people's descriptions of online sexual health approaches. Submitted February 2012.

sources and operationalize a unique set of practices for identifying salient, credible, and high quality information and services (Adams et al., 2006; Borzekowski & Rickert, 2001; Eysenbach & Köhler, 2002; Gray et al., 2005; Hu, 2010; Jones, 2011; Jones & Biddlecom, 2011). Some research has begun to explore more nuanced aspects of web-based sexual health service utilization (Gray, Klein, Cantrill, & Noyce, 2002; Jones & Biddlecom, 2011).

3.1.2 Gender and online health activities

In terms of frequency of Internet use, young men and women are now generally thought to 'log-on' with similar regularity (Brodie, Flourney, Altman, & Blendon, 2000; Fallows, 2005; Helsper, 2010). However, women and men visit different websites when they are online and communicate in different ways while on the web (Seale et al., 2006; Wasserman & Richmond-Abbott, 2005). For example, there is some evidence that when using the Internet, women are somewhat more motivated by interpersonal communication, while men tend to be more information-driven (Jackson, Ervin, & Gardner, 2001). Some research has shown that women are more frequent users of the Internet for health information than men (Baker, Wagner, Singer, & Bundorf, 2003; Brodie et al., 2000; Escoffery et al., 2005), although there is conflicting evidence on this (Hanauer, Dibble, & Fortin, 2004). In fact, a large, nationally representative longitudinal study of Americans 12+ years of age found that men and women used the Internet to address a health problem for oneself (or, for a loved one) with similar regularity (Ybarra & Suman, 2008).

When they are online, women are more likely than men to focus on a specific illness or its symptoms, while men tend to focus on disease prognosis and treatment (Johnson, Oliffe, Kelly, Galdas, & Ogradniczuk, 2011; Knight et al., in press; Rainie, 2002). Compared to women, men appear to be less concerned with the perceived credibility of online health information (Robertson, 2007). Women report more effort required to find the health information they are seeking, while men report more positive online health seeking experiences (e.g., higher satisfaction with the information they locate; greater ease in locating it) (Addis & Mahalik, 2003; Barker, Ricardo, Nascimento, Olukoya, & Santos, 2010; Lee & Owens, 2002; O'Brien & Hunt, 2005; Oliffe et al., in press; Robertson, 2007; Shephard, 1996; Shoveller et al., 2010; Ybarra & Suman, 2008). The potentially moderating influence of gender on online health information-seeking behaviour (e.g., differing attitudes towards using the web for this purpose) are only beginning to be explored (Ilie, Van Slyke, & Green, 2005; Mo, Malik, & Coulson, 2009).

3.1.3 Gendered stereotypes and sexual health practices

Socio-cultural factors (e.g., perceptions of masculinities and femininities) exert considerable influence on young people's health behaviours (e.g., accessing health care)(Barker, Ricardo, Nascimento, Olukoya, & Santos, 2010; Johnson et al., 2011; Lee & Owens, 2002; Oliffe, Kelly, Bottorff, Johnson, & Wong, 2011; Tolman, Striepe, & Harmon, 2003). A emerging body of work seeks to understand the relationships between young people's gender, identity, and social context (Popay, 2000), and how these factors intersect with gendered stereotypes to shape experiences with

conventional sexual health services (Goldenberg, Shoveller, Ostry, & Koehoorn, 2008a; Shoveller et al., 2009; Shoveller et al., 2010). Within staff-client interactions, gender stereotyping is a salient issue for many youth in sexual health contexts (Lichtenstein & Bachmann, 2005; Shoveller et al., 2009).

For example, pervasive social norms that place high value on young women's sexual 'morality' (e.g., limiting their number of sexual partners; staying 'clean') may lead women to fear being labeled negatively for testing positive for an STI (East, Jackson, O'Brien, & Peters, 2011; Goldenberg, Shoveller, Koehoorn, & Ostry, 2008b; Nwokolo et al., 2002; Shafer et al., 2002). In fact, some women cite fear of stigma from peers or health care provider (e.g., being labeled as promiscuous or 'unladylike') as a reason to avoid testing (Goldenberg, Shoveller, Ostry, & Koehoorn, 2008a; Lichtenstein, 2003; Shoveller et al., 2009; Shoveller et al., 2010), while other cite fear or blame from their partner(s) or family (Lichtenstein & Bachmann, 2005; Sheahan et al., 1994; Shoveller et al., 2009). Dominant ideals of masculinity (i.e., self-reliance; physical toughness) conflict with many requirements of health care-seeking (e.g., admitting the need for help), effectively discouraging men's use of health care services (Addis & Mahalik, 2003; Courtenay, 2004; East et al., 2011; Goldenberg, Shoveller, Koehoorn, & Ostry, 2008b; Lee & Owens, 2002; Nwokolo et al., 2002; Robertson, 2007; Shafer et al., 2002). For example, despite targeted sexual health promotion efforts, many young men do not feel they have permission to engage in discussions about sexual health concerns with male peers or service providers (Lichtenstein, 2003; Shoveller et al., 2010), a phenomenon especially

evident among men who align with 'traditional' beliefs about gender roles (Emmers-Sommer, Nebel, & Allison, 2009; Sheahan et al., 1994). Within heterosexual relationships, women are often the primary caretakers of sexual health (Darroch et al., 2003; Oliffe et al., in press; Shoveller et al., 2010), effectively shaping expectations that the responsibility for safe-sex and sexual health resides with women partners (e.g., advocating for condom use; procuring oral contraceptives; accessing STI testing).

Overall, this creates an environment that exposes young people's experiences with sexual health services to the stigmatizing effects of gendered stereotyping, a reality that potentially is extended to web-based services (Emmers-Sommer et al., 2009; Magee, Bigelow, DeHaan, & Mustanski, 2011; Mo et al., 2009; Robinson & Robertson, 2010; Thelwall, Wilkinson, & Uppal, 2010). This chapter uses data from a qualitative study with 32 young men and women (ages 15 to 24 years) to examine a group of young people's descriptions gendered stereotypes as they pertain to online sexual health approaches.

3.2 Methods

3.2.1 Recruitment

Young people (ages 15 to 24 years) were recruited through the use of posters (e.g., at local sexual health clinics; at community colleges), and online using targeted ads (e.g., Craigslist; Facebook). A purposive sampling strategy was utilized to recruit participants from a variety of ages and backgrounds and to capture a diverse set of

experiences. Participant demographics were reviewed to aid recruitment of a range of youth from diverse social locations. For example, the perspectives of youth who identified as lesbian, gay, bisexual, and transgendered (LGBT) were solicited by recruiting from local queer youth drop-in centres and LGBT youth list-serves. Recruitment was also conducted at multicultural community centres, youth transition houses, and drop-in services for street-involved or at-risk youth. Participants were English-speaking youth (ages 15-24) who lived in the study community (Metro Vancouver) and who had been sexually active and had tested (or considered being tested) for STIs. Eligibility was confirmed by phone or email, and participants were invited to participate in an interview (or a focus group, if one was scheduled), to take place at a university office. The study received approval of The University of British Columbia Behavioural Research Ethics Board.

3.2.2 Data collection

In-depth, individual interviews and focus groups were conducted by a trained, experienced researcher, and took 1.5-2 hours to complete; youth received a \$25 honorarium for their participation. Three focus groups were conducted: one men-only, one women-only, and one focus group with both men and women. During the interviews and focus groups, participants were encouraged to draw on their experiences, where possible providing details about specific social contexts to share their perspectives (e.g., relationships with sexual partners; gendered expectations of sexual behaviour) about sexual health-seeking behaviours, including the use of online resources. Internet-based STI testing, and web-based sexual health education

and counseling were discussed with participants, who were asked to consider a range of services when sharing their perspectives. Midway through the interview, youth browsed and reviewed four sexual health websites, including local, national, and international resources. The four websites stdresource.com; sexualityandu.ca³; optionsforsexualhealth.org; and scarleteen.com were selected to solicit participants opinions about a range of styles and approaches, while not overwhelming youth with too many sites within the time frame of the interview. Participants were also encouraged to share their perspectives about any additional online resources they may have used previously.

3.2.3 Analysis

Interviews and focus groups were transcribed, and all identifying information was removed (e.g., participants were assigned pseudonyms). Transcripts of interviews and focus groups were organized using qualitative data analysis software (QSR NVivo 8™). Constant comparative techniques informed the analysis (Corbin, 1998; Darroch et al., 2003; Oliffe et al., in press). An initial set of codes was developed to organize the data and compartmentalize the analyses; transcripts were coded line-by-line to identify concepts embedded within youth's narratives. As data collection progressed and participants shared novel viewpoints, new concepts were identified and incorporated into the interview question guide and the coding. As data were gathered throughout the study, the codes were more fully defined and labeled; the

³ The website for sexualityandu.ca was updated with significant design changes midway through the study.

coding also advanced to more theoretical levels to include analyses that examined the ways in which the data included references to social constructions of masculinity and femininity. Thirteen youth met for a five-hour event (a Youth Roundtable), wherein initial findings were reviewed, and discussed and expanded upon, for which they were compensated with an \$80 honorarium. These sessions were audio-recorded and transcribed, and the resulting data were used to verify, correct, and conceptually advance the results.

3.3 Findings

3.3.1 Study participants

In total, interviews and focus groups were conducted with 12 male, 19 female, and 1 transgendered youth. Participants' mean age was 20.0 years. See Table 1 for participants' self-identified socio-demographic characteristics, and Table 2 for their previous STI/HIV testing history.

3.3.2 Gendered virtual spaces

Targeting cues: Participants exhibited a high degree of sensitivity to the perceived gender of a website – that is, to whom they perceived the website was targeted. During their review of the four websites, youth identified several visual website cues through which they judged the gender-sensitivity. Participants frequently highlighted specific colours, fonts, and URL names as indicators of the website's intended gender audience. Colour palettes containing pinks, or softer pastels were

more frequently described as female-friendly (although these sites contain sexual health information that could be useful to both young men and women). For example, the primary colours of sexualityandu.ca are purple, turquoise, and pink, on a white background – a colour combination that many youth recognized as feminine, and therefore targeted to women. However, this website contains a great deal of information relevant to both men and women (e.g., breast self-examination; testicular self-examination).

For many youth, another powerful indicator of the targeted gender was the content that caught their attention. That is, content understood by participants as primarily relevant to females also prompted users to infer that the website was likely women-centred. Topics included pregnancy, contraception, and sexual assault, and the inclusion of one or more of these explicit headings, though nestled within other subject matter, prompted most youth to deem the entire site as targeted towards women (rather than men). One young man, Daniel, commented: *“So I think this one is more directed to a woman, it has more things about...pregnancy and...things about the pill...it’s important [for girls] to know.”* Daniel’s account frames pregnancy and knowledge of the contraceptive pill as important topics with which young women in particular *should* be familiar (a common narrative throughout this study).

Some youth initially acknowledged the websites under review could be *“for both”*, but frequently elaborated that it might be *“more for women.”* One young man, Sunny, described the website as being high quality and potentially useful for both genders,

before acknowledging that, based on the content, it was aimed *primarily* at young women:

I think it's both, but I can see it more kinda female-friendly, I guess? Just 'cause there's like, "am I pregnant?" and date rape and contraceptives, so it seems like it's more for girls.

The site's main page, in fact, features information on many topics, including sexual health and STIs; but, because the site's topic headings pertaining to pregnancy, sexual assault, and contraception were featured prominently, Sunny concluded that he resided outside the principal target audience because it was not relevant to men.

By reading colours and content, some websites were understood as 'female-orientated' even though the topics were in fact relevant to all youth. This tendency to read some content as feminine reveals the transferability to virtual spaces of gendered stereotypes that portray young women as the sole caretakers of many aspects of sexual health (e.g., negotiating contraception use; preventing sexual assault; coping with pregnancy concerns).

By acknowledging that some topics are strategically directed at women, but rejecting the notion that this content is only relevant to females, a few youth resisted traditional gender roles. One woman, Melissa, examined the content of sexualityandu.ca and told us:

I mean it has like the birth control, pregnancy...like that obviously is targeted towards women... but that's going to be on any website. They all have to have a pregnancy thing. I mean really that can be applicable to men and women. If you're pregnant there's two people involved, it's not just a one-person thing.

Of the four websites that were reviewed by youth, none were read as being targeted to men. Yet embedded in these sites were content pertaining specifically to young men's sexual health, and included were images of young men (as well as images of young women, and young men and women together). That is, many look and feel aspects of the site led youth to experience sexual health websites as reinforcing gender norms – finding them to be predominately feminine; these inferences tend to be based on socially accepted norms of femininity, such as 'girly' colours or fonts. Furthermore, youth recognize many aspects of sexual health as fundamentally female domains, enhancing the perceived feminine atmosphere of these online spaces.

Youth's preferences: When using online sexual health websites youth often expressed a preference to use a resource that they felt aligned with various aspects their own identity (e.g., age; sexual experience; gender identity). Drawing on previous experiences using online sexual health resources, participants described websites targeted towards either women or men as gender sensitive. For example, for many young women, a 'more feminine' website was understood as a better

source of information on oral contraceptives. Other young women spoke of having a higher comfort-level with sexual health websites that were more feminine. For example, during a focus group, several young women described their preference for seemingly 'feminine' sexual health websites over more neutral ones:

Lira: If I was looking for specifically contraceptive information, I probably tend to subconsciously be attracted to something that seems feminine.

Megan: That's kind of what I was thinking, too.

Researcher: And why do you think that?

Megan: Guys aren't taking birth control.

Researcher: So, you would look for a feminine website?

Megan: Yeah. Because to me, it's written by someone like me. Someone who knows something about me. Because we both like something similar.

Indeed, many youth actively seek out gender-sensitive sexual health websites. For example, in the same focus group where Megan and Lira expressed their opinions, Trevor described how he avoids seemingly feminine websites, and expressed an active preference for male-friendly online spaces:

If I went onto a Web site that looked like it was written more for a feminine side, I would probably go off straight away. And find something more [suitable for me]. ...If it was between a neutral site and a masculine site, I'd choose the site that's written for me. (Trevor)

Like other young men in this study, Trevor argued for a sexual health websites with a masculine look and feel, without articulating what that would constitute.

3.3.3 Gendered stereotypes about online sexual health resource-seeking

Participants shared their perspectives on the ways in which they viewed gender affecting youth's experiences with accessing online sexual health resources. Much of their discussion was framed in ways that aligned with or re-affirmed many gendered stereotypes about sexual health practices. The vast majority of participants suggested that women sought online sexual health information and services much more frequently than men, citing women's relatively higher interest, need, and inclination to use these resources.

Differing 'needs': One of the primary reasons mentioned by participants for women's supposed higher use of the Internet for sexual health purposes was that women had "*more of a need*" to access sexual health information and services than men, frequently explained by women's heightened sense of sexual vulnerability (e.g., they have the potential to become impregnated). One woman, Bridgette, explained that young women would be more likely to look up sexual health information online because "*they are the ones that would get pregnant. They get worried, and then they'd wanna know. I don't know, most of the guys I know seem more like blasé; they don't care. Girls want like protection and stuff. But everyone's different, some guys do care.*"

Implicit in Bridgette's commentary, and indeed the commentary of many of the participants, are notions of gender that place importance on women's need to 'take care' of themselves, while excusing men from this responsibility (although she notes with optimism that "some guys *do* care"). Young men were often described as the worry-free partner in a heterosexual dyad, with the capacity to assume that any sex-related anxieties would naturally reside with the woman. Another participant commented that because of social norms that may cause a woman to be labeled as 'slutty' or 'dirty' for contracting an STI, women might have a greater need to keep themselves free of STIs by staying informed and seeking relevant services by any means (including the Internet).

Differing acceptability: Several participants commented that an additional reason for the perceived greater use of online sexual health resources by young women was related to the higher level of social acceptability associated with some health topics considered exclusively feminine. Youth explained that some topics, including contraception and menstruation, were associated with less stigma than others, such as STI testing or STI symptoms, within online sexual health resources. Because women were expected to keep themselves informed on particularly 'female' topics, utilizing online sexual health resources was affirmed as due diligence. Less stigmatizing and potentially embarrassing subjects were seen to effectively serve as 'gateway' topics for some young women, allowing them to more surreptitiously seek out information that could potentially be incriminating, such as locations of local STI

testing services. Megan described how her searches for 'feminine' sexual health information online facilitated her learning about more sensitive topics, like STIs:

Like, I hate to say. But I almost feel like girls are more interested in safe sex. Just because we are the ones who stand getting pregnant. Or we would be stuck with that kind of thing. Looking that up [online], I think the STIs come into it. Because I just connected it. I would look up both. Whereas, that's what I mean. I might go to a Web site looking up birth control. And then, looking up STIs, as well, or something. Whereas guys are like, OK. Got my condom. I'm good to go.

Conversely if a young man were to be searching for topics 'relevant' to them such as STIs this could carry significantly high levels of stigma.

Differing nature/disposition: In addition to being expected to abide by gendered social expectations, young women were also described as being more intrinsically inclined to go online for sexual health activities. Participants frequently distinguished between what they saw as men's and women's differing personality-based predispositions to use web-based sexual health resources. One young woman told us:

Yeah I mean I think females are probably the ones that are more likely to go looking... like... to go check... you know...I mean I have no idea, I'm not a guy, but I feel like women are more paranoid in general so they're like, 'Okay, let's look this stuff up.' (Melissa)

Melissa's description reflects another common stereotype about young women and their perceived heightened attention to sexual health issues. Indeed, many participants suggested that young women are more fearful by nature, or more likely to be anxious, and thus are more likely to access online sexual health resources than young men. Correspondingly, one young woman spoke of men's reluctance to conduct online searches for sexual health as being related to their more 'worry-free' demeanors:

Roxanne: I think like in general, I would think that just men in general, like males would be less likely to search anything.

Researcher: And why do you think men in general might be less likely?

Roxanne: I think they are just less worrisome usually. [laughs]

Researcher: About?

Roxanne: About anything. Girls are very like everything has to be going perfectly and they need to know exactly what's gonna happen and exactly what's gonna be like, and what they need to know beforehand where as men are just like "ah, we'll see what happens." I think they'd like pay attention less when they are hearing about STIs and things like that, whereas girls are more concerned. That was a really big generalization but...

Other participants suggested that men would have differed in the ways in which they used online sexual health resources, suggesting that, once online, men would

be more information-driven, and less likely to spend time browsing websites extensively, or at a leisurely pace. For example, one young woman, Coral, explained that young men would not want to access a sexual health website *“that has like games about sexual health and stuff. I mean, they probably just wanna go on, read what they wanna know, and get off”*. Coral compared young women’s online practices to young men’s, saying that, in contrast, young women would be more likely to spend time perusing a site for additional, superfluous resources and sites to which they could return (e.g., for future reference).

There was also a general perception among the study participants that men were less likely than women to be able to talk about sexual health issues face-to-face (e.g., with friends; sexual health educators). Both men and women in the study frequently characterized men as being reluctant to discuss these issues in person, due to social norms that discouraged such behaviour (see Knight et al, 2012). Often, youth imparted that for a young man to seek information pertaining to sexual health was to admit vulnerability – something that contradicts pervasive masculine ideals of independence and virility that comes from men’s ‘natural instincts’ about sex:

I feel like guys compared to girls anyway, may be more proud. They think that they're all ready and don't need that help. They've gotten enough information already. And I've heard people talk like that before. And you would be surprised about how much information they actually don't know. I think that's one of the

biggest problems these days. It's people thinking they know more information than they actually do. (Trevor)

By limiting the acceptability of openly pursuing sexual health information (both in-person and online), gendered stereotypes were seen to affect men's online sexual health seeking behaviours. One young woman, Jane, expressed that men would be more likely than women to "put up a wall", and refuse to access sexual health resources online. She explained:

You know how guys are, all, 'Oh I don't want to look for directions because I'm a man, I can find everything'. So it's kind of like the same thing that they can deal with it themselves. While the young women would probably just, like if they need help they would go and get it. Think a little more logically, I think, if that makes sense? (Jane)

Like many participants, Jane's narrative is complicit with gender norms that reinforce stereotypes about masculinity, while excusing men from responsibilities associated with sexual health practices.

In the same vein, however, these gendered stereotypes were perceived by youth as making young men somewhat more prone to go online than to seek in-person help, (while remaining much less likely than young women to do either). In fact, citing heightened privacy and anonymity, the Internet was frequently described by

participants as a medium with a very high potential to fill the existing gap in sexual health information, counseling, support for young men:

I definitely think they'd be more likely to access a website than like ask a peer or ask a nurse. Just 'cause it's something you can do kind of privately and not tell anyone, and it's like that.

While the capacity for the Internet to allow men to bypass external judgments and masculine expectations (e.g., by offering anonymous and private access to services), participants re-emphasized that young men's internalized notions of what constituted masculine behaviour (e.g., being self-reliant; avoiding health care) would still constitute a significant barrier to access, regardless of the help-seeking forum.

3.4 Discussion

These findings highlight the gendered nature of the online sexual health care-seeking experience. Youth's descriptions of gender norms within online sexual health resource utilization align with other research findings that illustrate the role of gender norms in informing sexual health practices (Addis & Mahalik, 2003; Barker, Ricardo, Nascimento, Olukoya, & Santos, 2010; Lee & Owens, 2002; Magee et al., 2011; Mo et al., 2009; O'Brien & Hunt, 2005; Oliffe et al., in press; Robertson, 2007; Robinson & Robertson, 2010; Shephard, 1996; Shoveller et al., 2010; Thelwall

et al., 2010). While life-course issues (including biology based variations) are implicated in gender differences in sexual health care practices (e.g., using online resources for sexual health), these discrepancies are likely due also, in part, to the influence of gender norms, including those previously described (Corbin, 1998; Goldenberg, Shoveller, Koehoorn, & Ostry, 2008b; Greene, 2000; Lichtenstein, 2003; 2004; Shoveller, Johnson, & Langille, 2004; Shoveller et al., 2010). In their descriptions of young men and women's use of online sexual health resources, many of these gender norms were (re)produced by youth participants. For example, most youth suggested that young women seek online sexual health information and services much more frequently than young men. This greater propensity for use of online sexual health resources was explained in a variety of ways (e.g., women's higher interest in seeking sexual health care and information; perceived higher need for women to protect their sexual health; women's greater natural inclination to seek help in general). Often, youth drew heavily on the stereotype of the adventurous and free-willed man, in contrast to the constraints and gender disability associated with being a woman, especially in the context of heterosexual partnerships. While biology and female reproductive anatomy does render the heterosexual encounter as more likely to impact the woman's biology – both in terms of reproductive and STI issues (Gray-Swain & Peipert, 2006) – participants' discussions tended to rely on the social construction of sex (e.g., women bearing primary responsibility for unplanned pregnancies; women experiencing more stigma if an STI is contracted).

Many topics contained within sexual health websites are important for healthy sexuality of women *and* men (e.g., taking steps to prevent sexual assault is important for young men; pregnancy affects both sexual partners); yet, participants typically described online sexual health content as relevant only to women. In this way, most participants reinforced stereotypes about masculinity, wherein women subordinately take responsibility for maintaining sexual health and safety, while men are de facto concerned primarily with performance and pleasure (Goldenberg, Shoveller, Koehoorn, & Ostry, 2008b; Greene, 2000; Lichtenstein, 2003; 2004; Oliffe et al., in press; Shoveller et al., 2004; Shoveller et al., 2010). Despite *some* efforts to target men, the visual culture of many sexual health websites overwhelmingly positions femininity as the primary reference for sexual health care behaviours. This conflation of women and sexual health within virtual settings buttresses existing gendered stereotypes about responsibilities within sexual relationships (Medley-Rath & Simonds, 2010; Oliffe et al., in press). Furthermore, as youth try to find salient, high-quality information and services about on the Internet (Gray et al., 2005; Medley-Rath & Simonds, 2010), the feminization of many online spaces could potentially act as a deterrent for young men trying to access ‘relevant’ sexual health information. This effect could be especially magnified for those young men who are unfamiliar with online sexual health resources. Previous research has called attention to the feminization of ‘real-world’ STI clinic spaces and has noted the barriers this can present to young men wishing to access such services (Shoveller et al., 2009).

Moreover, for the young men in this study, using online sexual health resources implied two things with respect to their perceptions about their own masculinities. First, it was perceived as signifying a need for assistance or an interest in health care – behaviour that would be resisted by stereotypical masculine ideals that endorse male independence and sexual prowess (Addis & Mahalik, 2003; Barker, Ricardo, Nascimento, Olukoya, & Santos, 2010). Second, in contrast to young women, who could be accessing such sites for an array of reasons (e.g., birth control information), young men’s use of these resources could be interpreted as evidence of them having an STI. Both of these realities function as potential barriers for young men and closely mirror known access impediments for in-person sexual health services for young men (Knight, 2011; Lichtenstein, 2003; Lichtenstein & Bachmann, 2005; Shoveller et al., 2009; Shoveller et al., 2010).

These discussions with youth offer a glimpse of the ways in which social norms that govern young men and women’s gender performances shape the ways in which online sexual health resources might be used by youth. Furthermore, these findings reveal how some gender-related barriers associated with conventional sexual health services may be reproduced online. For example, while many sexual health websites include information targeted towards young men as well as young women (presumably to reach both genders), participants consistently perceived these sites as either neutral or feminized, leaving young men with a paucity of ‘male-friendly’ online sexual health resources. In many ways, online spaces are inherently *gendered* (Mo, et al., 2009); attempts by online program designers to offer neutral spaces may

fail to acknowledge the influences of a wider set of social relations (e.g., gender norms) within which youth operate (and to which they contribute) (East et al., 2011; Knight, 2011; Magee et al., 2011; Shoveller et al., 2004; 2011). Therefore, 'gender neutral' online approaches potentially translate into yet another sphere within which gendered social norms (e.g., concerning men's and women's roles and responsibilities relating to sexual health) remain and are reaffirmed. Previous work in youth sexual health and STI testing (Oliffe et al., in press) highlighted similar issues, whereby men are assumed to be less interested in or committed to investigating aspects of sexual health including contraception and pregnancy. Though much of the current work is based on data drawn from people who primarily have experience with services offered via traditional clinics, it was clear that the 'virtual' examples that were reviewed by participants did little to disrupt those gender norms.

Overall, the tendency was to juxtapose men's and women's pursuit of online services; however, there were nuances within the youth's responses – youth often acknowledged that despite it being more in young women's 'nature' to access online (and offline) sexual health resources, perhaps web-based provision freed men to operate outside masculine ideals that traditionally inhibit their use of these services. Citing heightened privacy and anonymity, the Internet was frequently described by participants as a medium with high potential to fill the existing gap in sexual health information, counseling, support for young men. However, juxtaposed with a perceived lack of male-friendly online sexual health resources, this represents a

missed opportunity to reach young men, many of whom experience unmet sexual health needs.

Broader applications of the findings described in this chapter are limited in some ways. While the young men and women in this study commented on content and styles they considered to be feminine within the websites reviewed, they were offered little opportunity to identify content and styles particularly suited for young men. It has been argued that, often, masculinities are more fully understood from this angle – what is not of masculine appeal or engaging for men with respect to their sexual health. Ultimately, knowing what is ‘un-male’ does little to inform what is ‘male-friendly’, and researchers are left with little insight to what might constitute a masculine ‘look-and-feel’ toward offering men-centred online sexual health resources.

In addition, youth who participated in this study self-selected and were willing to discuss issues pertaining to sexual health and sexuality, and, while efforts were made to engage with youth from a variety of backgrounds and life experiences, it is likely that this sample was more comfortable with issues pertaining to young people’s sexuality than youth at large. Furthermore, both the virtual and the ‘real’ worlds within which youth access sexual health information and services are rapidly changing; thus, these findings afford a snapshot of contemporary youth culture at the time this study was conducted (whether these findings remain constant over significant periods of time remains unknown). Also, within the time

limitations of the interviews and focus groups, only a small number of websites were able to be reviewed in-depth; thus, this analysis is not claimed as being drawn from a systematic evaluation and gender comparison of existing web-based sexual health resources. Instead, these findings inform a starting point for an empirical review of the gendered qualities of online sexual health websites available to youth – building on important work in this area (Buhi et al., 2010; Horvath, Iantaffi, Grey, & Bockting, 2011; Keller, LaBelle, Karimi, & Gupta, 2004; Knight et al., in press) – an important next step in understanding the ways in which gendered stereotypes and intervention design approaches function to affect youth’s use of web-based sexual health resources.

Much of the broader literature concerning men and health care seeking suggests that men tend to seek help only when faced with a problem – most often pain – as opposed to proactive or pre-emptive approaches (Addis & Mahalik, 2003; Johnson et al., 2011; Knight et al., in press; O'Brien & Hunt, 2005). In this regard, STI information is the key concern, and a symptom thereof is typically what brings men online for related information (and/or toward service providers). In light of these findings, the idealistic notion that the provision of health services online might be the catalyst to change men’s self-health and/or help-seeking is presumptuous, if not naïve.

Chapter 4.0 Discussion

The current thesis demonstrates how youth's experiences with online sexual health resources are heavily influenced by 'real world' youth culture (e.g., values; beliefs; practices). These analyses provided an in-depth examination of the ways in which reverse discourse within online sexual health resource contexts can negatively affect perceptions of these resources, as well as illustrated the ways in which gendered stereotypes regarding sexual health help-seeking practices extend to online practices. These findings advance the empirical and theoretical knowledge about youth's experiences accessing online sexual health services.

4.1 Summary of findings

Chapter 2, *'Sounds like the person you're drinking with': Examining youth's perspectives on the use of reverse discourse in web-based sexual health interventions* examined the use of reverse discourse in internet-based sexual health promotion and analyzes youth's perspectives on this approach. Youth were asked to provide their perspectives on samples of written (e.g., clinical language; colloquial language) and visual (e.g., generic, stock images; sexualized images) depictions of sexual health topics on English-language sexual health websites. More explicit styles elicited negative responses from youth in terms of perceived appeal, trust, and quality of these websites. For example, negative social mores were associated with some of the more explicit portrayals of young people's sexual lives on the websites, revealing how reverse discourse re-stigmatizes youth by re-emphasizing youth sexual activity

as inherently risky or immoral. Reverse discourse was perceived to have negative effects on the saliency and credibility of online sexual health information.

Chapter 3, *Interrogating gendered stereotypes: Young people's descriptions of online sexual health approaches*, provided insights into the ways in which gendered norms feature in youth's receptivity to and recommendations for online sexual health resources (e.g., Internet-based Sexually Transmitted Infection (STI) testing; online sexual health education). Gendered stereotypes can influence youth's experiences accessing conventional, face-to-face sexual health services; however the interconnections between gender and youth's uptake of online sexual health resources is poorly understood. Study participants discussed and critiqued an array of existing websites, suggesting the graphics and content anchored them as feminized spaces. Many gender stereotypes that influence non-virtual health-seeking behaviours prevailed in youth's descriptions about the likely end-users of online sexual health resources. For example, young women were represented as being more frequent users of online resources than young men, due to young women's 'nature' (e.g., diligence around self-sexual health), desire to maintain a good reputation (e.g., to remain free of STIs for fear of being labeled negatively), and the social milieu (e.g., norms that frame young women as caretakers of sexual relationships). Some online services were described as 'male-friendly' because they were perceived to provide young men the opportunity to access sexual health services anonymously amid avoiding potentially emasculating face-to-face discussions with peers, partners or providers.

4.2 Implications for web-based sexual health interventions

The current thesis provides new evidence to inform online sexual health interventions for young men and women. While a growing body of research supports online approaches to sexual health services (as compared to face-to-face clinical encounters)(Bilardi et al., 2009; Peeling, 2006; Ross, Ison, & Radcliffe, 2006), we have yet to fully explore the nexus of the social and technical aspects of online sexual health websites. The current thesis offers new insights regarding the role of social factors (e.g., ethnicity, sexual identity) and how they are thought to affect experiences with online sexual health resources (Daneback et al., 2011; Magee et al., 2011; Romocki, 2004; Ross et al., 2006).

Some other research challenges the idea that online approaches effectively 'neutralize' the effects of negative social relations (e.g., stigma; stereotyping) (Christofides & Islam, 2009; Holmes & O'Byrne, 2006). Acknowledging the socio-technical nature of the human-computer interface (Mackenzie et al., 2007), new intervention approaches must attend to the complexities inherent in online sexual health services (e.g., Internet-based STI/HIV testing; web-based sexual health counselling; email-based partner notification) (Simkins, 2007). For example, it is known that women and men communicate differently online (as they do offline) (Guiller, 2007) and online communication is prone to the incorporation of 'real world' stereotypes (e.g., conformation to gendered expectations about behaviour; differential responses to masculinized/feminized text) (Christofides & Islam, 2009). While the face-to-face interactions benefit from the nuances of contextualized body

language, conversation flow, and setting (be they positive or negative), online interactions lack this advantage, and may be constructed and/or understood differently (Garcia, Standlee, & Bechkoff, 2009; Ho, 2008).

For example, while the use of reverse discourse (e.g., to contest negative judgments relating to youth sexual behaviour) may be effective in some face-to-face contexts, the current thesis suggests that this might not always be the case in virtual contexts. Instead, intervention designers should consider focusing on engaging youth online through a professional, information-driven approach. While online approaches that convey an engaged, non-judgmental attitude are important, consideration must be taken to avoid more explicit portrayals of young people's sexual lives on the websites with which negative social mores may be associated. In this way, online sexual health interventions may avoid re-stigmatizing youth sexual activity (e.g., as inherently risky or immoral). Furthermore, as previous research has shown that youth are reluctant to fully trust web-based sexual health resources (Jones, 2011; Jones et al., 2011), it is imperative that interventions of this nature cultivate an approach that fosters a sense of trust, respect and credibility – something potentially undermined by the employment of reverse discourse. While reverse discourse may be employed to reach youth by using 'their language', slang or colloquialisms should be used with caution. Acknowledging that there are tradeoffs between conveying accurate information and avoiding overly clinical language, online sexual health resources should strike a balance and convey informative content that resonates with the audiences (and is within an accessible reading

level).

As discussed in the current thesis, in many ways, online spaces are inherently *gendered* (Mo et al., 2009). Attempts by online program designers to offer ‘neutral’ spaces may fail to acknowledge the influences of a wider set of social relations (e.g., gender norms) within which youth operate (and to which they contribute) (East et al., 2011; Knight, 2011; Magee et al., 2011; Shoveller et al., 2004; 2011). To begin to address this, intervention planners can take several possible approaches. Somewhat analogous to conventional health practices, young men’s online sexual health-related practices (e.g., searching for local STI/HIV testing services) are likely to be shaped by masculine ideals (Knight et al., in press). Thus, efforts should be made to design online sexual health resources that are especially ‘male-friendly’, keeping in mind what has been learned about engaging men online in disciplines other than health (Jackson et al., 2001; Moss & Gunn, 2006). Inherent in this is the idea that interventions must, in some ways, meet men ‘where they’re at’; however, care must be taken to avoid inadvertently reproducing limiting portrayals of gender roles (e.g., stereotypes about men as being sexually irresponsible) and/or endorsing male patriarchal hegemony (Knight, 2011; Larkin, Andrews & Mitchell, 2006). Instead, interventions must take a careful, nuanced approach, and be considerate of intended as well as unintended consequences related to gendered aspects of youth’s sexual health.

Alternatively, efforts could be taken to engage men within sexual health websites targeted towards 'both' genders. However, many 'gender neutral' approaches to online approaches potentially translate into yet another sphere within which gendered social norms (e.g., concerning men and women's roles and responsibilities relating to sexual health) remain and are often re-produced. In designing new interventions, there is an opportunity to purposefully re-write gender within online sites (Barker, Ricardo, Nascimento, Olukoya, & Santos, 2010; Robinson & Robertson, 2010). For example, date rape could (re)chronicled as a men's issue – with men positioned much more positively as being part of the solution, including lobbying and more aggressively legislating against it). Similarly, youth pregnancy could also be reshaped as a shared issue (e.g., information framing responsibility for pregnancy prevention as a shared responsibility within heterosexual partnerships).

4.3 Implications for future research

While the current thesis offers an analysis of youth's descriptions of gendered stereotypes relating to online sexual health website use, a possible next step would be to collect primary data regarding gendered access to sexual health sites. For example, a quantitative analysis examining how young men and women use web-based sexual health resources (e.g., in what circumstances; how often particular sexual health websites are used by men versus women) would contribute valuable insights to gendered aspects of web-based sexual health resource use. This type of

research could further illuminate the validity and usefulness youth's predictions of what they 'would' do, using evaluative data indicating what they actually 'do' do.

It has been argued that, often, masculinities are more fully understood by considering what is *not* masculine. Knowing what is 'un-male' does little to inform an understanding of what is particularly 'male-friendly' within web-based sexual health resources. In order to gain insight into what might constitute a masculine 'look-and-feel', an important next step – which could ultimately inform the design of many prospective interventions – would be to understand what type(s) of content and design would optimize the engagement of young men, contributing to the development and expansion of men-centred online sexual health resources. For example, young men could be engaged to share their opinions on what might constitute male-friendly content and/or design, in order to improve saliency of and access to web-based sexual health resources for young men.

4.3 Strengths and limitations

The current thesis constitutes an exploration of youth's perspectives on web-based sexual health resources, which will ultimately contribute to the development of more youth-'friendly' sexual health services for young men and women. While interviews and focus groups were designed in an open-ended way to facilitate participant introspection and insightful discussions, ultimately, youth may describe online experiences and behaviour dissimilar to behaviour actually exhibited (Suler,

2004). Furthermore, compared to a larger sample typically used in quantitative studies, the current thesis draws data from a relatively small number of interviews and focus groups. However, these in-depth data collection activities allowed for a more in-depth exploration of issues that may have been challenging to explore using quantitative methodology, and the purposive sampling strategy allowed for the exploration of a diversity of perspectives.

While the feasibility and acceptability of internet-based sexual health interventions for youth has been established, rigorous evaluations are regrettably infrequent (Bennett & Glasgow, 2009; McFarlane, Kachur, Klausner, Roland, & Cohen, 2005; C. Rietmeijer, 2007). The utilization of web-based approaches to promote youth sexual health is often described as something of a 'new' frontier (Bennett & Glasgow, 2009; Rietmeijer & McFarlane, 2009); and, Internet-based initiatives are being developed with great urgency and proliferation. Unfortunately, at the leading edge of these avant-garde initiatives lies a "Catch-22" situation: if technology-based approaches are to remain up-to-date with the dynamic web-environment, interventions must be simultaneously developed and studied (as opposed to the more traditional pilot-evaluate-deploy strategy). In Canada in particular, online sexual health services are relatively new and have received little research attention. In order to best design online sexual health services to meet the needs of youth, and to not exacerbate barriers associated with existing, conventional (i.e., face-to-face) services (Harvey, Churchill, Crawford, & Brown, 2008; Shoveller et al., 2009), such an examination of youth's perspectives is necessary to incorporate into the development and

implementation of new online approaches. To ensure timely and effective translation of knowledge, ongoing research findings were shared with BCCDC program planners throughout the data collection and analysis process through my integration with the OSHSP planning team (e.g., through participation in regular working group meetings). Ultimately, by engaging in research that explores some of the socially embedded aspects of youth's participation in Internet-based sexual health activities, we can pave more equitable access to sexual health resources for youth, both online and offline.

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Appendices

Appendix 1: Interview guide for youth

Online STI Testing & Youth Interview Guide

Description of Online Sexual Health Services Program: We'd like to tell you a bit about a new program that is being developed to try and address some of the difficulties young people might have in getting tested for STIs and in getting answers to their sexual health questions. First of all, we are developing a website where young people can access sexual health information, as well as chat online anonymously with a nurse, one-on-one.

Review the informed consent and interview structure: This session will be audio taped and will last about 1 to 1.5 hours. We'll begin our interview by completing a brief questionnaire (3-5 minutes). Then I will ask you some questions about your experiences with STI testing. While we're talking, I'll ask you about your experiences with STI testing services, as well as what you think about using online sexual health services. During the interview, I'll be taking a few notes about the events and experiences you describe to me.

1. Where did you hear about our study?
2. Can you tell me why you decided to volunteer for our study today?

*The next set of questions are about the **sexual health website** service that will be offered:*

Saliency and Credibility of website

3. Where would you prefer to get your sexual health information from -- your peers, or nurses/doctors?
 - Who are you most comfortable asking questions to?
 - Who do you trust more?
4. Have you ever looked for **health** information online? Tell me about this.
5. Where do you get your sexual health information from? Have you ever looked for **sexual health** information online? Tell me about the process you go through when you do this.
 - What information do you look for? Are you able to find it?

- What sexual health information is *difficult* to find online? Is there anything you'd like to see more of online?
6. How do you go about finding information on sexual health on the internet (i.e., what search strategies would you use)?
 - For example, what would you type into Google?
 - What would you type into Google if you were looking to get tested for STIs in your community?
 - Have you ever tried to find a way to get an STI test online (e.g., referral to local clinic, mail order 'kit')? What did you find?
 7. What do you think might motivate someone to access online sexual health information?
 8. What would make you return to a sexual health website, once you've visited it?
 9. Okay, thinking about a few of the things we talked about, I'd like to show you some existing sexual health websites and ask for your thoughts on them. For each of them, I'd like to know:
 - What do you like about it?
 - What don't you like about it?
 - How well would you trust information on this website? Why?
 - Who do you think this website is targeted towards? Males/females/both? Teenagers/adults/both?

List of 5 websites:

<http://www.stdresource.com/>

<http://www.sexualityandu.ca>

<http://www.optionsforsexualhealth.org/>

<http://www.scarleteen.com>

- Which website is your favourite? Why?
 - Which website would you trust most? Why?
10. Would you find any of these features helpful on a sexual health website (would you actually use them)? Why or why not?
 - Email a question to a nurse to answer
 - Post a question to a message board or forum for a nurse to answer
 - Post a question to a message board or forum for other forum users to answer
 - Instant messaging or chat with a nurse
 - Follow a blog with sexual health advice and information
 - Listen to podcasts on sexual health topics
 - Watch videos on sexual health topics

- FAQ section on sexual health topics

Socio-technical nature of the human-computer interface

11. **[Language Style]** Next, I'd like to show you some samples of text from a few sexual health websites. I'd like you to have a look at them, and then give me some of your opinions on the different words used. I'm really interested in your responses to the different phrasing used. How would you feel about seeing each of these writing styles on a sexual health website? [Show text sample page 1 to participant]
 - Why do you think the websites use these various types of writing styles?
 - What effects would each of these writing styles have on your opinion of the websites they are from? Which would you trust the most? Which would you most want to read?
 - Can you think of any ways that any of these writing styles might make it less likely for some youth to visit the sites they are on?
12. **[Reverse Discourse]** Now, I'd like to show you some text samples that use certain words and phrases. Please have a read through, and then I'd like to hear your opinions on the use of these words and phrases in a sexual health website. Please take a moment and use a highlighter to highlight any words or phrases that stick out to you.
 - **First of all, do any of these words stick out to you?** Do any of them make you feel uncomfortable, or do any of the words seem unnecessary on a sexual health website?
 - Why do you think some websites use these kinds of words and phrases?
 - What effect does the use of these words and phrases have on you? How, if at all, does it affect your trust of the websites? How, if at all, does it affect your desire to read this information?
 - How does it make you feel about youth sexual behavior to see it presented in this way?
 - **Next, are there any words or phrases in this text that you think are particularly good in getting the message across?** Are there any words or phrases that you can think of that could replace some of the words you flagged as problematic?
13. Now I'd like to show you some examples of some images used on a few sexual health websites. I'd like you to have a look at them, and give me your opinions on them. How would you feel about seeing each of these images on a sexual health website?
 - Why do you think the websites use these types of language?

Diversity

14. In our previous studies, we've talked with a diverse group of youth about accessing sexual health services and sexual health information. We've heard from a lot of different youth that accessing these things isn't always straightforward or easy, for a variety of reasons. We'd like to share with you two stories of youth who both have a need to access sexual health services and information.

Jim is a 20-year-old male who identifies as heterosexual. Jim grew up in a household where sexual health was openly discussed, and his parents were not troubled by the fact that he is sexually active and not married. Jim attends university and lives in a student residence, where he has his own room and a personal laptop computer. He openly discusses sexual health issues with his friends, and has even heard of a few good websites on the subject from them.

Our second story is about John. John is a 17-year old young man who attends high school in Vancouver and lives at home. John's parents are very conservative, and sexuality was never discussed as Jonathan was growing up. They don't believe in sex before marriage, and are unaware that he identifies as gay and has sex with other men. Jonathan doesn't have many friends he can talk to about sexual health issues that are important to him. His family has one shared computer, and it is in the living room.

Thinking about the lives and circumstances of Jim and John, what do you think might be some features of each of their stories that make it easier or harder for them to access online sexual health information? [Examples of probes:]

- For example, how do you think their respective ages might affect how they access sexual health information online
 - How do you think their different sexual identities might affect how they access online sexual health information differently?
15. Thinking about the diversity of **young people you know**, how comfortable do you think they would feel comfortable accessing sexual health information online?
- Now, thinking **beyond** your peers/friends, to the diversity of young people, can you think of any groups of youth that would be less likely to access online sexual health information? Any that would be very likely?
 - How do you think the comfort level of young men would compare to that of young women? Why? Who do you think would access it more often?
 - How easy do you think it is for gay or bisexual youth to access sexual health information online that is relevant to them? How easy do you

think it is for transgender youth to access sexual health information online?

- How easy do you think it is for youth who are street-involved to access sexual health information online?
- How easy do you think it is for youth from a variety of cultural or ethnic backgrounds to access sexual health information online? For example, youth who identify as Aboriginal, or youth who may be of a visible minority?
- What “*type*” of young person do you think would **not** visit a sexual health website?
- Who do you think would be more likely to access sexual health information online, someone who is ‘responsible’ or someone who is less ‘responsible’?

*The next set of questions are about the **online STI testing** service that will be offered:*

In addition to the sexual health website this new program being developed will bring STI testing online. Patients will be able to fill out an online risk assessment then download a lab requisition for urine/blood tests at a lab (a lab requisition is the sheet that lets the lab know what tests you need to do). You will also be able to obtain your *negative* results online, and they will also have online access to sexual health counselors if you have any questions about your results.

**Previous experiences with STI testing services
[Appreciative Aspects, and Barriers associated with conventional testing]**

16. Tell me the story of how you came to be tested for STIs. Start anywhere you want. Remember, you don’t have to answer any questions you don’t want to.
17. Thinking back on your experiences accessing testing, what experiences or characteristics of a clinic might encourage you go back to that particular clinic? [Example probes]:
 - Did the staff at any particular clinic make you feel especially welcome? Tell me about this.
 - Was it very convenient to get to any particular clinic? Tell me about this.
18. Was there anything that would make you *not* want to go back to a specific clinic for STI testing? [For example:]
 - Did you ever run into anyone you knew?
 - Did you have to wait a long time in the waiting room?
 - Was the clinic inconveniently located?

19. Thinking about the online testing that will be offered, what do you think about this service?
- What appeals to you most about this service?
 - What would motivate you to use this service?
 - Are there any reasons that would make you *not* use this service?
 - Are there any youth or groups of youth that you can think of that would be more likely to use this service? Why?
 - Are there any youth or groups of youth who you think would be less likely to use this service? Why?
 - Do you think that the online STI testing service might help promote STI testing in groups who maybe wouldn't normally go to a doctor's office or clinic to get tested? If yes, how?
20. Would you feel more or less comfortable answering questions about your sexual history online as compared to in person? Why?
- Would you trust what the system recommended for you to be tested for? How would that trust compare to a doctor or a nurse's recommendations?
21. What kinds of personal identifiers would you feel comfortable providing when you ordered an STI test online? For example, your full name, date of birth, address, personal health number (e.g., Care Card)
- How would needing to provide these identifiers affect how comfortable you feel accessing the service?
 - How comfortable would you feel creating an account linked to your personal identifiers?
22. Many people use their handheld devices (such as their mobile phones) to access the internet. What do you think about accessing online STI testing in this way?
- What about accessing sexual health information in this way?
 - How would it compare to using a computer to access sexual health information?
 - For example, would it feel more or less private to you?
 - What do you currently use your cell phone/mobile device for? (e.g., texting, email, accessing the internet)
23. How easy would it be for you to download, print out a lab requisition, and bring it to the lab with you?
- Do you have a printer at home you could use?
 - Would you want the form emailed to you or sent to your mobile device?
 - How would you feel about pre-selecting the lab that you would be going to, is it meant you were able to pick up the lab requisition at the lab you were visiting, and not have to print it out?

24. Have you ever visited a private lab (e.g., BC Biomedical Laboratories or LifeLabs)?
- Was it for STI or HIV testing?
 - Did you have to show any kind of ID?
 - What was your experience like?
 - Would you be willing to return there as part of online testing?
25. When your results are ready, would you want to check for them yourself, or would you like to be notified when they are ready?
- How would you prefer to receive your test results (online, email, text, phone, in-person)?
 - How would you *not* want to be notified?
 - How comfortable would you feel getting positive results online? Would you rather have these given in person or over the phone?

Saliency and Credibility

26. What are some features of an online STI testing website that might make you deem it “good quality/expert/trustworthy”?
- What are some features that might make you deem it “bad quality/non-expert/untrustworthy”?
27. How do you think social media might be used to promote online STI testing?

Socio-technical nature of the human-computer interface

28. Who do you think would be more likely to use an online STI testing service, men or women? Why?
29. How do you think you would feel about yourself if you accessed online STI testing? (e.g., more responsible/less responsible)

Diversity

30. We have talked a lot about diversity, and about the different types of people that this online STI testing service could reach. Thinking about everything we’ve talked about, do you have any new ideas on how the service could be designed in a way that promoted testing in groups of young men or women who possibly wouldn’t normally go for testing?
- For example:
 - youth who may not feel comfortable answering questions about their sexual history
 - youth who are street-involved

- youth from a cultural background where sexual health is not freely discussed
- youth who identify as LGBT

Final thoughts

31. Is there any other advice you'd like to share with us about the new online sexual health services program?
32. Have your opinions changed from when we first told you about the service, or do you feel the same as your initial reactions?
33. Lastly, individual interviews are just one part of this project. We're looking at engaging youth in a variety of ways, including a youth working group, and a youth roundtable. You don't have to commit to anything now, but would you be willing to be contacted at a later date to see if you're interested? There is an honorarium involved in the other parts of the project as well.

Appendix 2: Focus group guide for youth

Online STI Testing & Youth Focus Group Guide

Review the informed consent and focus group structure: This session will be audio taped and will last about 1 to 1.5 hours. We'll begin our focus group by completing a brief survey (5 minutes). Then I will ask you some questions about your experiences with STI testing. While we're talking, I'll ask you about your experiences with STI testing services, as well as what you think about using online sexual health services. During the interview, I'll be taking a few notes about the events and experiences you describe to me.

Part 0 – Survey

Part 1 - Self Introduction (~ 5 min)

Purpose: To help the participants to learn about each other and become more comfortable with sharing their opinions later on during the group discussions.

1. Please introduce yourself to the group and tell the group something about yourself.
2. Where did you hear about our study?
3. Can you tell me why you decided to volunteer for our study today?

Part 2 - Source of Sexual Health Information (~ 20 min)

Purpose: First, to identify what methods or strategies the participants are currently using to access sexual health information. Second, to identify the types of problems they encounter while accessing sexual health information.

(We could collect information on the type of channels they use to access sexual health information on the survey. During the focus group we could discuss the answers they provide.)

1. Where do you prefer to get your sexual health information from?
 - Who are you most comfortable asking questions to?
 - Whose information do you trust the most?
2. Have you ever looked for **sexual health** information online?
 - How is this done, please describe the search strategies you use.
 - What information do you look for? Are you able to find it?
 - What sexual health information is *difficult* to find online? Is there anything you'd like to see more of online?

- Have you ever tried to find a way to get an STI test online (e.g., referral to local clinic, mail order 'kit')? What did you find?
3. Are there any sexual health websites you really like?
 4. What would make you return to a sexual health website, once you've visited it?

Part 3 – Evaluation of Existing Sexual Health Websites (~ 30 min)

Purpose: To identify what is working well and what isn't working well in terms of how the existing websites are reaching and appealing the youth population.

Saliency and Credibility of website

1. Okay, thinking about a few of the things we talked about, I'd like to show you some existing sexual health websites and ask for your thoughts on them. For each of them, I'd like to know:
 - What do you like about it?
 - What don't you like about it?
 - How well would you trust information on this website? Why?
 - Who do you think this website is targeted towards? Males/females/both? Teenagers/adults/both?

List of 5 websites:

 - a. <http://www.stdresource.com>
 - b. <http://www.sexualityandu.ca>
 - c. <http://www.optionsforsexualhealth.org>
 - d. <http://www.scarleteen.com>
 - Which website is your favourite?
2. Would you find any of these features helpful on a sexual health website (would you actually use them)? Why or why not? Email a question to a nurse to answer
 - Post a question to a message board or forum for a nurse to answer
 - Post a question to a message board or forum for other forum users to answer
 - Instant messaging or chat with a nurse
 - Follow a blog with sexual health advice and information
 - Listen to podcasts on sexual health topics
 - Watch videos on sexual health topics
 - FAQ section on sexual health topics

Socio-technical nature of the human-computer interface

1. Next, I'd like to show you some samples of text from a few sexual health websites. I'd like you to have a look at them, and then give me some of your opinions on the different words used. I'm really interested in your responses to the different phrasing used. How would you feel about seeing each of these writing styles on a sexual health website?
2. Now I'd like to show you some examples of some images used on a few sexual health websites. I'd like you to have a look at them, and give me your opinions on them. How would you feel about seeing each of these images on a sexual health website?

Part 4 – Diversity (10 min)

34. In our previous studies, we've talked with a diverse group of youth about accessing sexual health services and sexual health information. We've heard from a lot of different youth that accessing these things isn't always straightforward or easy, for a variety of reasons. We'd like to share with you two stories of youth who both have a need to access sexual health services and information.

Jim is a 20-year-old male who identifies as heterosexual. Jim grew up in a household where sexual health was openly discussed, and his parents were not troubled by the fact that he is sexually active and not married. Jim attends university and lives in a student residence, where he has his own room and a personal laptop computer. He openly discusses sexual health issues with his friends, and has even heard of a few good websites on the subject from them.

Our second story is about John. John is a 17-year old young man who attends high school in Vancouver and lives at home. John's parents are very conservative, and sexuality was never discussed as Jonathan was growing up. They don't believe in sex before marriage, and are unaware that he identifies as gay and has sex with other men. Jonathan doesn't have many friends he can talk to about sexual health issues that are important to him. His family has one shared computer, and it is in the living room.

Thinking about the lives and circumstances of Jim and John, what do you think might be some features of each of their stories that make it easier or harder for them to access online sexual health information? [Examples of probes:]

- For example, how do you think their respective ages might affect how they access sexual health information online

- How do you think their different sexual identities might affect how they access online sexual health information differently?
35. Thinking about the diversity of **young people you know**, how comfortable do you think they would feel comfortable accessing sexual health information online?
- Now, thinking **beyond** your peers/friends, to the diversity of young people, can you think of any groups of youth that would be less likely to access online sexual health information? Any that would be very likely?

Part 5 – Previous STI testing experiences (~ 15 min)

Purpose: To learn about the types of STI testing experiences the participants have had. To identify the issues (including diversity issues) they encounter and the types of improvement they might like to see in the context of STI testing.

1. If somebody feels comfortable starting us off, could you share your STI testing experiences? Start anywhere you want. Remember, you don't have to answer any questions you don't want to.
36. Thinking back on your experiences accessing testing, what experiences or characteristics of a clinic might encourage you go back to that particular clinic? [Example probes]:
- Did the staff at any particular clinic make you feel especially welcome? Tell me about this.
 - Was it very convenient to get to any particular clinic? Tell me about this.
37. Was there anything that would make you *not* want to go back to a specific clinic for STI testing? [For example:]
- Did you ever run into anyone you knew?
 - Did you have to wait a long time in the waiting room?
 - Was the clinic inconveniently located?

Part 6 – Online STI testing (~ 25 min)

Purpose: To elicit the participant's attitude toward online STI testing service and gather any recommendations they may have for improving or making the service more fitting for their needs.

Description of Online Sexual Health Services Program: A new program is being developed to address some of the difficulties young people might have in getting tested for STIs and in getting answers to their sexual health questions.

First of all, we are developing a website where young people can access sexual health information, as well as chat online anonymously with a nurse, one-on-one. Furthermore, a new program is being developed to bring STI testing online. Patients will first fill out an online risk assessment and then download a lab requisition for urine/blood tests at a lab (a lab requisition is the sheet that lets the lab know what tests you need to do). You will also be able to obtain your *negative* results online, and they will also have online access to sexual health counselors if you have any questions about your results.

1. What do you think about the online testing service?
 - What appeals to you most about this service?
 - What would motivate you to use this service?
 - Are there any reasons that would make you *not* use this service?
 - How do you think the online STI testing service might help promote STI testing in groups who maybe wouldn't normally go to a doctor's office or clinic to get tested?
2. How comfortable do you feel about answering questions about your sexual history online? What about in comparison to answering it in person?
3. Are there any kind of personal identifiers you would feel uncomfortable providing when you ordered an STI test online?
 - How would the need to provide identifiers such as your full name, date of birth, address, personal health number (e.g., Care Card) affect how comfortable you feel accessing the online STI testing service?
 - How comfortable would you feel about creating an account linked to your personal identifiers?
4. Many people use their handheld devices (such as their mobile phones) to access the internet. What do you think about accessing online STI testing in this way?
 - What about accessing sexual health information in this way?
 - How would it compare to using a computer to access sexual health information? Would it feel more or less private to you?
 - What do you currently use your cell phone/mobile device for? (e.g., texting, email, accessing the internet)
5. How easy would it be for you to download, print out a lab requisition, and bring it to the lab with you? Do you have a printer at home you could use?
 - Would you want the form emailed to you or sent to your mobile device?
 - How would you feel about pre-selecting the lab that you would be going to, is it meant you were able to pick up the lab requisition at the lab you were visiting, and not have to print it out?
 - Would you be willing to go to a private lab as part of online testing?

6. How would you prefer to receive your test results (online, email, test, phone, in-person)? How would you *not* want to be notified?
7. How comfortable would you feel getting positive results online? Would you rather have these given in person or over the phone?
8. I'd like to show you an example of social media being used to promote sexual health. So by social media, we mean youtube, twitter, facebook and other things like that. Do you think social media could be used to promote online STI testing? If so, how? If not, why?
9. How do you think gender matters in terms of willingness to use an online STI testing service? Please explain.
10. How you think accessing online STI testing could affect how you perceive yourself?

Diversity

11. Out of the vulnerable groups we've talk about, who do you think would be most likely to use online STI testing? Who do you think would be least likely? Why? How could we improve the service for those who would be least likely?

Part 7 - Final thoughts (5 min)

12. Is there any other advice you'd like to share with us about the new online sexual health services program?
13. Have your opinions changed from when we first told you about the service, or do you feel the same as your initial reactions?
14. Lastly, ask about willingness to participate in youth working group, and a youth roundtable. (Contact information, Honorarium)