The influence of social capital on the timing of first sexual intercourse among Canadian youth

Lisa Smylie
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THE INFLUENCE OF SOCIAL CAPITAL ON
THE TIMING OF FIRST SEXUAL
INTERCOURSE AMONG CANADIAN YOUTH

by

Lisa Smylie

A Dissertation
Submitted to the Faculty of Graduate Studies
through the Department of Sociology, Anthropology and Criminology
in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at the University of Windsor

Windsor, Ontario, Canada
2009
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by

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ABSTRACT

THE INFLUENCE OF SOCIAL CAPITAL ON THE TIMING OF FIRST SEXUAL INTERCOURSE AMONG CANADIAN YOUTH

Lisa Smylie
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Supervisor: Eleanor Maticka-Tyndale, PhD

This dissertation examines the nature of social capital and the mechanisms of its development and mobilization as it relates to the sexual behaviour of young people in Canada between the ages of 16 and 19 years. It extends the youth-centred social capital literature, pioneered by Virginia Morrow, and builds upon its foundations to integrate it with the youth sexuality literature.

Using cycles two through four of the National Longitudinal Survey of Children and Youth (NLSCY), the dissertation examines the relative influence that social context at various sites, including family, school, peers, leisure activities and community groups, has on the timing of first sexual intercourse among Canadian youth. It explores how these influences differ by gender and at three time points during adolescence. The results suggest that social capital in peer groups is the dominant influence on the timing of first sexual intercourse, but that social capital within the family and within broader community relationships also exert an influence. The analysis suggests that the influence of social capital on the timing of first sexual intercourse differs for males and females and is dynamic, with various contexts differing in their influence as young people transition through adolescence.

Drawing on in-depth interviews with young people in Southwestern Ontario, it examines the nature of social capital for this age group and the ways in which young people actively develop and mobilize their social capital. The findings suggest that social capital is actively developed by young people in the context of daily interactions with family members, peers, and community members. The findings demonstrate the constraints placed on young people's ability to develop and mobilize social capital by community infrastructure, age and gender. The findings point to the ways in which social capital influences the sexualities of young people through social norms, lines of communication, information channels and opportunities.

The dissertation concludes by suggesting a need for policies and public health practice that move beyond a focus on individual behaviours and that address the social contexts influence the sexual decisions of young people.
With love and gratitude, to Mom and Dad
for giving me life, love and the thirst for knowledge

AND

To my mentor and friend, Eleanor Maticka-Tyndale.
She encouraged me when I could not see the light at the end of the tunnel and never gave up.
ACKNOWLEDGMENTS

Though the dissertation process was very lonely at times, it was far from a solitary venture and I have many to thank for their assistance through its completion. I am sure that I have forgotten and might deeply offend a few people, but doubtless you know who you are and no doubt will extract a suitable apology.

My sincerest gratitude goes to my mentor Eleanor Maticka-Tyndale, who not only shares my dedication to the enhancement of sexual health of all people, but shares my burden of perfectionism as well. She has lead sexual health research internationally, and, with much enthusiasm, energy and the utmost generosity, has guided those who follow this legacy. I gained so much from my time with her. Not just knowledge about conducting research or about sexual health or how to be a better writer, though I gained these things too. But I gained recognition from well-respected academics, and invaluable 'social capital' through the professional networks she introduced me to that resulted ultimately in a job offer. Too few graduate students are fortunate enough to have a mentor like Eleanor. For providing me with a doctoral fellowship, conference funding, office space, mentoring and guidance throughout my doctoral studies; for her good humour and empathy for the 'idiosyncrasies' of the NLSCY data; for her sense of optimism and for remaining remarkably straight-faced through all the months it took to get my dissertation drafts to her; and for hanging in there with me with unwavering support and encouragement during many delays: through my comps, in starting this project, during the (thankfully successful) quantitative analysis, and finally, in finishing the written product. 'Thanks' seems so inadequate for her contribution to this project and for the endless opportunities she provided me to further my career in the field of sexual health.

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made possible by the years of dedication, support and encouragement that I received from them. For your joy in my accomplishments, your faith in my success, your dedication to me during times of frustration and your enduring support, thank you. I also owe them thanks for their generosity extending, in the end, to assisting me financially during the last stage of my research. And to my brother, John – for the weekly, if not daily motivating question: YES, I am finally done!!

Quantitative data for this dissertation were drawn from the National Longitudinal Survey of Children and Youth and I would therefore like to express my appreciation to Statistics Canada and to the team of researchers and analysts assigned to developing, implementing and publishing the data. I would like to extend my gratitude to Dr. Saul Schwartz and his team at the RDC in Ottawa for their help with the many “glitches” and “anomalies”, and for their friendly banter during the very long days spent agonizing over the data set. A special thanks to Dana Boyd and the staff of the Windsor-Essex County Health Unit – without you I would not have made contact with some of the participants in this study.

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This project was nurtured in a stimulating and supportive environment, which I have come to value immensely, provided by the Department of Sociology, Anthropology and Criminology at the University of Windsor. While this work was, for the most part, an individual effort, related aggravations tended to be
shared by many in the department. With much appreciation, I acknowledge the support, encouragement and technical, academic and collegial assistance so graciously supplied by: Barry Adam, Bob Arnold, and Nombuso Dlamini whose collective knowledge about the research process, social theory, sexuality, and research methods is astounding and whose collective guidance I am most fortunate to have been under; Catherine Brooke who heard too much about this project and still made herself available for countless lunches, dinners, and the odd “kreme”-filled donut, who extended her generosity to providing me with a place to stay during my defense, who acted as chauffeur and chef on my defense day to ensure it was as stress free as possible, and who scrambled during the eleventh hour to ensure that hard copies of this volume found their way into the hands of committee members – I can’t wait to return the favour!; and the many faculty and graduate students who have intermittently challenged, taught and stimulated me in our conversations, and who provided constructive comments on earlier drafts of this manuscript. Whether you were providing technical advice, guidance or much needed emotional support, each of you have in some significant way or another assisted in the rather extended intellectual journal and the practical task of completing my PhD. The victory of the completion of this degree belongs to all of us.

***

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LS, September 2009
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author's Declaration of Originality</td>
<td>iii</td>
</tr>
<tr>
<td>Abstract</td>
<td>iv</td>
</tr>
<tr>
<td>Dedication</td>
<td>v</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>vi</td>
</tr>
<tr>
<td>List of Tables</td>
<td>x</td>
</tr>
<tr>
<td>List of Figures</td>
<td>xi</td>
</tr>
<tr>
<td>List of Appendices</td>
<td>xii</td>
</tr>
<tr>
<td><strong>Introduction</strong></td>
<td>1</td>
</tr>
<tr>
<td>References</td>
<td>15</td>
</tr>
<tr>
<td><strong>Chapter 2</strong></td>
<td></td>
</tr>
<tr>
<td>Methodology</td>
<td>21</td>
</tr>
<tr>
<td>References</td>
<td>46</td>
</tr>
<tr>
<td><strong>Chapter 3:</strong></td>
<td></td>
</tr>
<tr>
<td><em>Focusing on Youth: Employing a youth-centred conceptualization of social capital to investigate the role of social context in the timing of first sexual intercourse among Canadian youth</em></td>
<td>48</td>
</tr>
<tr>
<td>References</td>
<td>96</td>
</tr>
<tr>
<td><strong>Chapter 4:</strong></td>
<td></td>
</tr>
<tr>
<td><em>Qualitative insights into the nature of young people's social capital and its impact on sexual behaviour: Transitions, fluidity and contextuality</em></td>
<td>114</td>
</tr>
<tr>
<td>References</td>
<td>182</td>
</tr>
<tr>
<td><strong>Conclusion</strong></td>
<td></td>
</tr>
<tr>
<td>References</td>
<td>187</td>
</tr>
<tr>
<td><strong>Appendix A: Methodological Notes on Missing Values</strong></td>
<td>201</td>
</tr>
<tr>
<td><strong>Appendix B: Electronic Invitation for Participants</strong></td>
<td>204</td>
</tr>
<tr>
<td><strong>Appendix C: University of Windsor Ethics Application and Letter of Approval</strong></td>
<td>205</td>
</tr>
<tr>
<td><strong>Appendix D: Interview Guide</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Vita Auctoris</strong></td>
<td>218</td>
</tr>
<tr>
<td>Number</td>
<td>Table</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Table I.</td>
<td>Conditions for imputing missing data on the dependent variable</td>
</tr>
<tr>
<td>Table II.</td>
<td>Descriptive statistics for percent of missing values on all variables across all cycles, by gender</td>
</tr>
<tr>
<td>Table III.</td>
<td>Distribution of the sample for demographic characteristics and sexual behaviour, by gender</td>
</tr>
<tr>
<td>Table IV.</td>
<td>Sample distribution on key independent variables, by gender</td>
</tr>
<tr>
<td>Table V.</td>
<td>Descriptive statistics for continuous independent variables, males</td>
</tr>
<tr>
<td>Table VI.</td>
<td>Descriptive statistics for continuous independent variables, females</td>
</tr>
<tr>
<td>Table VII.</td>
<td>Bivariate coefficients for logistic regression of timing of first sexual intercourse on selected independent variables, males</td>
</tr>
<tr>
<td>Table VIII.</td>
<td>Bivariate coefficients for logistic regression of timing of first sexual intercourse on selected independent variables, females</td>
</tr>
<tr>
<td>Table IX.</td>
<td>Coefficients for multivariate logistic regression of timing of first sexual intercourse on the independent variables remaining in the final trimmed model, males</td>
</tr>
<tr>
<td>Table X.</td>
<td>Coefficients for multivariate logistic regression of timing of first sexual intercourse on the independent variables remaining in the final trimmed model, females</td>
</tr>
<tr>
<td>Table XI.</td>
<td>Characteristics of cycle 4 non-respondents based on data provided by the Person Most Knowledgeable, by gender</td>
</tr>
<tr>
<td>Number</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>Figure 1</td>
<td>72</td>
</tr>
</tbody>
</table>

Conceptual Model
**LIST OF APPENDICES**

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A</td>
<td>Methodological Notes on Missing Values</td>
<td>201</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Electronic Invitation for Participants</td>
<td>204</td>
</tr>
<tr>
<td>Appendix C</td>
<td>University of Windsor Ethics Application and Letter of Approval</td>
<td>205</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Interview Guide</td>
<td>218</td>
</tr>
</tbody>
</table>
Chapter 1

INTRODUCTION

The transition to adulthood has been the subject of considerable scholarship by \textit{inter alia} sociologists, psychologists, health scientists, historians, and demographers owing to its policy significance and, within the past several decades, because of the extension of this transition beyond the teen years. ‘Adolescence’ as a discrete life stage, that typically spanned the teenage years and marked this transition from childhood to adulthood, emerged in the 20\textsuperscript{th} century in response to the needs of changing social, political and economic environments in countries of the Western world (Comacchio, 2006; Evans & Heinz, 1993; Feldman & Elliot, 1990). Adolescence has been described as a socio-historical product of high unemployment, a marked decline in family-run farms, rapid economic expansion resulting from industrialization and the increased need for skilled labour. Thus, in economically advanced societies, adolescence has become a period of prolonged socialization and semi-autonomy in which full-time education delays full-time employment.

The events that typically mark the points of entry and exit from adolescence are well recognized. Entry is marked by physical maturation as evidenced in first menstruation for girls and signs of secondary sex characteristics for boys. Exit is marked by social maturation evidenced in taking on the roles and responsibilities of an adult, including completion of formal schooling, entry into the labour force, departure from the natal home, and first marriage. Therefore, during these years, young people gradually develop physically into adults, but do not assume the social and economic privileges, roles and responsibilities associated with adulthood.
Environmental factors and nutrition have contributed to earlier physical maturation while socio-cultural factors have substantially increased the age at which each of the exit indicators is experienced. The higher premium placed on education and the increased demand for skilled labour has kept young people in school and out of the labour force for longer. For example, in 1971, approximately 75% of Canadian young adults had left school by age 22 years, compared to only 50% in 2001 (Clark, 2007). Consequently, the average age of entry into the labour force full-time has also risen. A study of the 2001 Canadian Census by Clark (2007) demonstrated that compared to their counterparts in 1971, men between 19 and 24 years were much less likely to be employed full-time, while women under the age 24 years were less likely to be employed full-time. Delayed school departure and entry into the labour force has prolonged the period of social and economic dependence. These changes carry significant implications for the permanent departure from the natal home and for the timing of first marriage. The age of first marriage has increased in much of the Western world for the past several decades. In Canada, the average age of first marriage has been steadily increasing since the 1960s. In 1971, 65% of men and 80% of women had been married at least once by the age of 25 years. These percentages dropped to 34% of men and 49% of women by 2001 (Clark, 2007). By the beginning of the 21st century, adolescence spread from an age prior to the teen years to well into the third decade of life in Canada, not unlike much of the Western world.

This prolonged period of adolescence has contributed to the establishment of a youth culture in which young people attempt to distinguish themselves from both children and adults. Youth culture and the forms of social expression it promotes bring youth in conflict with adults who themselves are pulled between a desire to protect and control those who are dependent on them and a desire to foster growth, independence and adult forms of responsibility. Adults simultaneously castigate adolescents for 'problem behaviors', branding them as undisciplined and
ungovernable, while viewing them as in need of protection (Comacchio, 2006: viii). A focus on the problematic aspects of ‘adolescence’ in contemporary research likewise parallels the socio-cultural creation of ‘adolescence’ as a distinct life stage. As Lesko (2001) suggests, ‘adolescence’ was a category historically created by scholars for the purpose of “naming, studying, diagnosing, predicting, and administering an identifiable adolescent population” (Lesko, 2001: 6). ‘Adolescence’, as Lesko describes it, is “a technology to produce certain kinds of persons within particular social arrangements” (p. 50).

The tendency toward the problematizing of adolescents is evident in the extensive literature on adolescent sexuality. A great deal of scholarly attention has been focused on the problems of adolescence, and in particular, on adolescent sexuality as deviant, ‘risk’-laden and damaging to health. Fears of risk posed by adolescent sexual behavior appear to be substantiated by data for sexually transmitted infections (STIs) in Canada that show that those aged 15 to 24 carry the greatest burden of infection for two reportable STIs, genital Chlamydia and gonorrhea (Public Health Agency of Canada, 2007). Concerns over STIs, including HIV, as well as teen pregnancy, have driven contemporary research on adolescent sexuality to focus on ‘risk’ behaviours associated with transmission and prevention such as birth control and condom use, number of partners and the timing of first sexual intercourse.

Doubtless that the emerging sexual behaviour of many youth poses serious health ‘risks’, it does not emerge in isolation. Instead, the sexual behaviour of youth is embedded within broader social contexts. The timing of first sexual intercourse is particularly alluring to scholars for its social significance. Socially, the event of ‘losing one’s virginity’ marks a rite of passage from ‘child’ to sexual adult. Traditionally for women, this event was coincident with or had a close association with marriage. Over the past 60 years, however, it has temporally and socially shifted, its association with marriage weakening. Currently, adolescence
is the age when most people begin to explore their sexuality and initiate sexual relationships.

Several social forces have been identified as contributing to this change. Both Giddens (1992) and Seidman (1992), for example, point to a sexual revolution in contemporary Western cultures that began after World War II. Amidst claims of women to gender equality, the rise of feminist discourses, the proliferation of contraception and new reproductive technologies (Giddens, 1992), the family and marriage became decentred as sex was freed from its association with reproduction. A "culture of eroticism" (Seidman, 1992) developed in which the body was constructed as a site of sexual pleasure and self-expression, accompanied by elaborate languages of erotogenic zones, sexual techniques, and sex acts. Sex became legitimated for its pleasurable, expressive and communicative qualities, separated from marriage and reproduction.

Amidst a more sexually open, expressive and eroticized society, the alignment of sex with pleasure, the availability of contraception, and the decentring of the family with respect to sex, arose a more sexually liberal youth culture (Comacchio, 2006). In Canada, this was evidenced in the trend toward earlier age of first intercourse, beginning in the late-1940s (Maticka-Tyndale, 2001). This reported trend was more pronounced for women than men. The historical gender gap in first intercourse was virtually eliminated by the late 1970s when the timing of first sexual intercourse stabilized at a median age of around 17 years for both sexes (Boyce, Doherty-Poirier, MacKinnon, Fortin, Saab, King & Gallowe, 2006; Maticka-Tyndale, 2001; McKay, 2004; Rotermann, 2005; Rotermann, 2008).

The recognition that sexual activity is socially-ordered, patterned by norms and subject to social control, has made sexuality sociologically interesting for decades. The bulk of early sociological scholarship on the timing of first sexual intercourse among youth focused on individual variations and determinants, using population-level statistics to document the social organization of sexual
behaviour by *inter alia* gender, age, ethno-racial identification and social class. A growing proportion of more recent scholarship, however, has identified factors best described as contextual. Contextual factors given particular salience are features of the social environment relevant to young people as they begin to develop patterns of sexual behaviour in the teen years, including family, peer groups, school and the broader community.

The most salient contextual factor relative to adolescent sexuality within this literature is the family. At the most general level, there is research to suggest that feeling connected to one’s family is an important predictor of young people’s sexual behaviour (Meyerson, Long, Miranda, & Marx, 2002; Perrino, Gonzalez-Soldevilla, Pantin & Szapocznik, 2000; Resnick, Bearman, Blum, et al., 1997). Research that delves into the mechanisms through which this connection with family exerts its influence, however, is varied, though two general currents can be identified. First, parents appear to influence young people’s sexuality and sexual behaviour by fostering specific values and beliefs, and by establishing specific norms. Studies show that when parents communicate values and norms related to sexual behaviour, youth are more likely to discuss sexual behaviour with them and to abide by these norms (Dilorio, Kelley, & Hockenberry-Eaton, 1999; McNeely, Shew, Beuhring, Sieving, Miller & Blum, 2002), to be less likely to initiate sexual intercourse in their teens (Aspy, Vesely, Oman, Rodine, Marshall, & Leroy, 2007; Karofsky, Zeng, & Kosorok, 2000; McNeely, Shew, Beuhring, Sieving, Miller & Blum, 2002; Whitaker & Miller, 2000), to be less likely to get someone pregnant or to become pregnant (Miller, Benson, Galbraith, 2001), and to be less likely to engage in sexual health-compromising behaviour such as inconsistent condom use, absence of birth control and multiple sexual partners (DiClemente, Wingood, Crosby, Cobb, Harrington, & Davies, 2001; DiClemente, Wingood, Crosby et al., 2001). It is important to note, however, that whether this communication of values and norms results in sexual health-enhancing or
compromising behaviour depends on the nature of the norms being communicated. For example, families that endorse sexual health-compromising behaviour have been linked to high rates of pregnancy among young people (Fernandez-Kelly, 1995).

The second current in the literature suggests that the family structure may also be a mechanism through which influence is exerted on the sexual development of young people. A number of studies suggest that youth from single-parent homes are significantly more likely to engage in risky sexual behaviour than those from two-parent families (Dorius, Heaton & Steffen, 1993; Ellickson & Morton, 1999; Upchurch, Aneschensel, Sucoff & Levy-Storms, 1999; Whitbeck, Yoder, Hoyt & Conger, 1999; Wu & Thomson, 2001). In a US study, McLanahan and Sandefur (1994) found that pregnancy rates among teens were higher among young women from single-parent homes than those from two-parent families. There is some evidence in this literature to suggest that it is the lower amount of parental supervision within single-parent families that leads to increased and earlier sexual activity (Browning, Leventhal & Brooks-Gunn, 2004; Dorius et al., 1993; Rosenthal, Smith & de Visser, 1999).

Developmentally, peer groups are typically regarded as the second major contextual influence on young people's sexuality. Peer groups are an important predictor of young people's sexual behaviour owing to the amount of time spent within these social groups, and to the social identity development occurring within these groups during adolescence (Taylor, Repetti, & Seeman, 1997). In his review of the literature on adolescent sexual behaviour, Douglas Kirby (2001) suggests that a sizable proportion of the research on peer group influence supports the conclusion that young people are most likely to adopt sexual norms of their peers and/or engage in sexual practices they believe are approved by their peers. As was discussed for the influence of family, whether peer group influence results in sexual health-enhancing or compromising behaviours may depend on the
nature of the norms promoted within the peer group. Typically, peer groups have been regarded in the literature as exerting a sexual health-compromising influence on young people's sexual behaviour, owing to the more permissive attitudes towards sex thought to be held by youth. Nevertheless, while some studies have suggested that peers promote less than consistent condom and birth control use (Boyer, Tschann, & Shafer, 1999; Maticka-Tyndale, 1997; South & Baumer, 2000) and earlier age of first sexual intercourse (Browning, Leventhal, & Brooks-Gunn, 2004), peer group norms have also been shown to promote sexual health-enhancing behaviours (Kirby, 2001).

Given the vast amount of time youth spend at school, it is not surprising that a third contextual factor relevant to adolescent sexuality is the school environment. Previous research points to the role youths' connectedness to their schools plays in avoiding sexual health risk behaviours, such as multiple partners and inconsistent condom use (Resnick et al., 1997; Voisin, Salazar, Crosby, et al., 2005), and in abstaining from sexual intercourse (DeVries, Free, Morison, & Saewyc, 2008; Hellerstadt, Peterson-Hickey, Rhodes, & Garwick, 2006). Conversely, a lack of educational commitment as evidenced in dropping out of school is strongly associated with early sexual intercourse (Dorius et al., 1993; Maticka-Tyndale, 2001). Very few studies have examined whether it is enrollment in school itself or specific aspects of the school environment that provide a protective influence for youth. For example, previous research has shown that educational commitment and attachment to school, evidenced by high grades, significantly reduces the likelihood that youth engage in unsafe sexual behaviour (Dorius et al., 1993; Scales & Leffert, 1999). Other studies suggest that schools may serve as a microcosm of positive adult influences for youth (Crosby, DiClemente, Wingood, Salazar, Rose, & Sales, 2007). In particular, studies have shown that high levels of perceived support from teachers among youth is associated with a lower likelihood of reporting having ever engaged in sexual intercourse and a greater likelihood of
consistent condom use among youth who did report sexual intercourse experience (McNeely & Falci, 2004).

Organized social activity and involvement in broader community contexts have also been a focus in the adolescent sexuality literature. Several studies in the US have shown youths' membership in a variety of community organizations to be associated with the adoption of sexual health-enhancing behaviours such as consistent condom use (Crosby, DiClemente, Wingood, et al. 2002a, 2002b). In a recent Canadian study, youth who volunteered in their communities were less likely to have had multiple sex partners (DeVries, Free, Morison, & Saewyc, 2008). Still other studies suggest that the nature of the effect of community organizations or involvement in organized social activity within the broader community on youths' sexual behaviour, depends heavily on the type of organization (Campbell, Williams, & Gilgen, 2002). For example, religious groups provide followers with a specific set of values and norms with respect to acceptable and unacceptable behaviours, many of which characterize sexual activity outside of a marital relationship as sinful. Not surprisingly, research suggests that youths' involvement in religious groups is associated with a delay in sexual activity beyond the teen years (Merrill, Salazar, & Gardner, 2001; Rosenthal, Smith & deVisser, 1999). Similarly, research suggests that involvement in team sports is correlated with a delay in first sexual intercourse (Anteghini, Fonseca, Ireland, & Blum, 2001; Kulig, Brener, & McManus, 2003) and involvement in social clubs within the community is associated with more consistent condom use among youth (Magnani, Seiber, Gutierrez & Vereau, 2001). The mechanisms through which this community involvement has been theorized to influence sexual behaviour is filling youths' time, instilling sexual health-promoting values and norms, and giving youth increased self-esteem and self-confidence.

* * *
Although this review of the literature creates an impressive corpus of research into the impact varied social contexts have on youths' sexuality, which has allowed for a better understanding of how social forces work to place youth on pathways to diverse transitions to sexual adulthood, there is little research considering these contexts as a whole. Instead, the trend in this literature is to treat family, peer group, school and community contexts individually. By examining each context in isolation, these studies have limited their sociological approach to adolescent sexual behaviour. These social contexts are, in reality, interconnected and require a conceptual and theoretical approach that articulates them as such. Theoretical and conceptual frameworks that consider the interdependence and interconnections between these contexts, are required to fully understand youths' transitions to sexual adulthood.

Recognizing this need, several scholars have relied upon a more fully elaborated conceptual framework, 'social capital', to articulate the ways in which varied social contexts collectively impact youths' sexuality (Crosby, Holtgrave, DiClemente, Wingood, & Gayle, 2003; Crosby, DiClemente, Wingood, Salazar, Rose, & Sales, 2007; Denner, Kirby, Coyle & Brindis, 2001; Furstenberg & Hughes, 1995; Gold, Kennedy, Connell & Kawachi, 2002; Morrison, Howard, Hardy, & Stinson, 2005; Smylie, Medaglia, & Maticka-Tyndale, 2006; Weitzman & Chen, 2005). Social capital generally refers to features of social relationships that facilitate both individual and group action and outcomes. Social capital represents a resource embedded within the structure of social relationships, across various contexts, which can contribute to minimizing, preventing and/or solving problems for individuals and for communities (Coleman, 1988, 1990; Putnam, 2000). Social capital is measured by the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance and recognition (Bourdieu
It is these resources that can influence individual and community outcomes, including sexual health outcomes. These resources might include information channels, networks of reciprocity, and/or norms of behaviour.

At the most general level, this dissertation carries forward this work and serves to examine adolescent sexual behaviour within a framework of social capital. Beyond this general purpose, however, it addresses some of the shortcomings and gaps in the adolescent sexuality literature that has employed this framework. Several aspects of this dissertation are directed to this task. First, the emerging youth-specific model of social capital is employed to examine the influence of social contexts on one aspect of adolescent sexuality - the timing of first sexual intercourse. To date, research has employed a conceptualization of social capital developed by Pierre Bourdieu (1986), James Coleman (1988, 1990) and Robert Putnam (2000). This conceptualization only considered the role that adults play in the development and mobilization of social capital. The use of this conceptualization in relation to young people has been criticized for its failure to recognize young people's own social capital insofar as youth are not considered active participants in the generation and mobilization of this resource within familial, peer group, school and broader community contexts (Morrow, 1999; Schaefer-McDaniel, 2004). By employing the youth-specific conceptualization developed through qualitative research with youth themselves, this dissertation will move the adolescent sexuality literature forward in its understanding of the influence of social context.

Second, this dissertation employs qualitative research methods to explore both the nature of social capital for youth and the ways in which social capital developed in various contexts work together to influence youths' sexual behaviour. To date, the bulk of research employing a social capital framework in relation to adolescent sexual behaviour has been quantitative in nature, and none has examined qualitatively, from the perspective of youth themselves, the
mechanisms through which social capital is generated and mobilized in interrelated contexts to influence youths' sexual behaviour.

Finally, though this dissertation examines the influence of the social context on an aspect of adolescent sexuality that has had much attention in the adolescent sexuality literature - the timing of first sexual intercourse - it departs from the existing literature by adopting a sociological developmental, rather than 'risk' approach. The strength of this developmental approach lies in its avoidance of labeling earlier first sexual intercourse as 'bad', 'immoral', and/or 'high risk' sexual behaviour for adolescents, as is very often the case in this literature. As Shoveller and Johnson (2006) point out, the 'at risk' labels that result from such approaches serve to pathologize certain youth and ignore the social significance attached to and the social contexts surrounding youths' sexual behaviour. The approach to youth sexual behaviour taken in this dissertation recognizes that engaging in sexual behaviour during adolescence has complex social significance and meaning, and is embedded within specific social contexts. Such an approach acknowledges that the problematic features of adolescence are structurally, socially, and culturally constructed and maintained vis-à-vis the social contexts within which they are embedded and the social institutions that isolate youth from adulthood.

Drawing on social capital theory, this dissertation analyzes the ways in which family, peers, the school environment and experiences in the community and leisure activities play a role in the timing of first sexual intercourse among Canadian youth. Employing a social capital framework, it implies that, while sexual behaviour appears to be an individual matter, it is embedded within a broader social context. Young people are embedded within a web of relationships including family, peers, teachers, coaches, leaders and community members that have an impact on their sexual behaviour. Within these relationships, norms of behaviour are established, including those pertaining to sex. Individuals within
these networks communicate these norms along with sanctions for deviating from the expected behaviour. Through these relationships youth gain access to information about sex as well as to potential sexual partners.

In employing a social capital framework to analyze the timing of first sexual intercourse among young people, this dissertation seeks to address the following questions: 1) What sources of social capital impact the timing of first sexual intercourse among Canadian youth, 2) Does the impact of social capital on timing of first sexual intercourse differ between males and females, 3) What are the processes by which and circumstances in which this social capital is generated and mobilized by youth, 4) How do youths' sources of social capital influence their sexual behaviour, 5) How does the meaning of, access to, and mobilization of social capital in relation to sexual behaviour differ between girls and boys, and 6) How do other social variables factor into the generation, access and mobilization of social capital?

**Overview**

The approach used in writing this dissertation is an article format. Following this introductory chapter and a brief chapter outlining the methodological approach taken in this research, the remaining chapters are written as self-standing papers, each exploring a different aspect of the influence of social context on the sexual health and sexual health-related behaviours of Canadian youth. The third chapter focuses on answering questions about what sources of social capital impact the timing of first intercourse, and whether the patterns of influence differ for males and females. Drawing on social capital theory, in the third chapter I use longitudinal data to analyze the relative influences that social context at various sites, including family, school, peers, leisure activities and community groups, has on the timing of first sexual intercourse among Canadian youth. Specifically, I
explore whether and to what extent measures of an emerging youth-specific conceptualization of social capital are associated with the likelihood that Canadian youth postpone first sexual intercourse experience beyond the national average between the 16th and 18th birthdays, typically referred to as at ages 16 and 17 years. The findings point to a need for a better understanding of the mechanisms and process through which social capital is generated and mobilized, particularly within the context of sexual behaviour. Therefore, this third chapter provides the background and point of flight for the subsequent chapter, which is based on a qualitative study of the nature of youths' social capital in Canada in an effort to clarify its impact on young people's sexual behaviour.

The fourth chapter expands on the recently developed theoretical framework for understanding social capital in relation to young people. This chapter focuses on answering questions related to the processes and circumstances in and through which social capital is mobilized, the mechanisms through which this social capital influences youths' sexual behaviour, whether the meanings and sources of social capital differ for males and females, as well as whether it differs based on other social characteristics. I draw on data from in-depth interviews with youth to tease apart the various sources and forms youths' social capital takes, and to argue for the fluid and contextual nature of youths' social capital. The chapter highlights the processes through which youths' social capital is generated and mobilized specifically in the context of their sexual behaviour, and points to the interconnections between various contexts.

In the concluding chapter, I tie together findings from the third and fourth chapters. This analysis allows for a re-reading of the quantitative findings relative to the findings from the qualitative study, and ultimately allows for a better understanding of how social capital influences sexual behaviour among youth. In light of this, I provide some commentary on how existing strategies and
interventions aimed at improving youths' sexual health might be elaborated on or revised, and what new policies and programs might develop from my work.
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Chapter Two

METHODOLOGY

Introduction

Chapter Two introduces the methodology used in this study. This chapter outlines (a) the research perspective, (b) the research design, (c) the appropriateness of the methodology to the study, (d) rationale for the selection of secondary quantitative data, (e) description of the survey methodology, (f) data preparation and analytic techniques, (g) the research setting of the qualitative phase, (h) participant selection and sampling, (i) steps taken in establishing rapport with participants, (j) the steps taken in collecting qualitative data from participants, and (k) the treatment of qualitative data.

Research Perspective and Design

Research Perspective

The current study had two goals: (a) to examine whether specific aspects of youths' social capital are related to the timing of first sexual intercourse, and (b) to explore how these relationships come about. The framework for this study operated on the philosophical and methodological assumptions of mixed methods research. Mixed methods research incorporates quantitative and qualitative data collection and analysis techniques in either parallel or sequential phases (Tashakkori & Teddlie, 2003).

Mixed methods research, or "Mixed methodology", which some have coined the "third methodological movement" (Tashakkori & Teddlie, 2003: ix), evolved
out of the debates and controversies surrounding the two traditional methodologies: quantitative and qualitative. Though an exegesis of the debates between researchers operating within these two frameworks is beyond the scope of this chapter (see Denzin & Lincoln, 2004 for extended review), the controversy focused on paradigms, or the philosophical assumptions underlying each method, including worldview, the nature of reality, and the relationship of the researcher to the subject. The realization that our ability to understand, describe and explain complex social issues is limited by the weaknesses of either of the traditional methodologies, led to a shift toward mixing qualitative and quantitative methods.

Mixed methods research has produced a distinct body of literature and is premised upon specific beliefs about knowledge and the conduct of research. Mixed methodology acknowledges the merits and limitations of both quantitative and qualitative methods. Mixed methodology is premised upon the belief that mixing quantitative and qualitative methods can answer unique combinations of research questions, and provide a more comprehensive understanding of social phenomena by forming complementary parts of a whole - as in a jigsaw puzzle. Researchers working within a mixed methods framework maintain that our understanding of reality is constructed and that these understandings are influenced by the theories researchers use (Tashakkori & Teddlie, 2003). The framework is founded on the premise that research is influenced by the values of the researcher. The framework asserts that each research method has its strengths and limitations, and that each approach (quantitative and qualitative) is better suited to answer specific research questions.

Research Design

Guided by the philosophical and methodological assumptions of mixed methodology, the current study adopted a two-phase, sequential mixed method design in which quantitative and qualitative methods were combined in different
phases of the research process (Tashakkori & Teddlie, 2003). In particular, the current study began with a secondary analysis of longitudinal quantitative data from the National Longitudinal Survey of Children and Youth (NLSCY) to examine those aspects of youths' social capital that are related to their timing of first intercourse. Following the results of the quantitative analyses, in-depth interviews with youth were used to explore how these aspects of youths' social context influence their sexual behaviour. In this way the study adhered to the principles of the explanatory mixed method design which seeks to utilize “qualitative data to help explain or build upon initial quantitative results” (Creswell, 2007: 71).

**Appropriateness of the methodology to the study**

The methodological approach for the current study was guided by the research questions. This research study is premised on the belief that both quantitative and qualitative methods are suited to answering specific types of research questions. It follows then, that combining the quantitative analysis of the NLSCY with the qualitative in-depth interviews with youth into a single study, created a synergy of data that answered more aspects of the research problem than would have been possible with either method alone. This mixed methodological approach simultaneously answers what aspects of youths' social context influence their timing of first sexual intercourse, and how these aspects influence their sexual behaviour.

The analysis of quantitative data were an appropriate first phase in the research design. The secondary analyses of a national longitudinal survey of the development of youth (the NLSCY) allowed for the examination of general patterns in the longitudinal influence of social contextual factors - namely family, peers, school and community - on the timing of first sexual intercourse among youth. In this way, this initial quantitative phase to the research was akin to
discovering 'signposts' (Leedy & Ormrod, 2001). These signposts point to the fact that two things are related and reveal the general nature of this relationship (p. 272).

Following the quantitative analyses of the NLSCY, qualitative in-depth interviews with youth, aged 16 to 19 years, were conducted. This qualitative phase was an appropriate second phase of the research as the qualitative data from the interviews allowed for probing more deeply into the context of youths' sexual behaviour and into relationships arising from the quantitative analyses. The experiences and perceptions of youth sought after in the qualitative phase were integral in understanding the ways in which their contexts affected their sexual behaviour. The in-depth interviews allowed for the teasing out of more descriptive information on how and why certain aspects of their social context influence their sexual behaviour. In this way, the research questions answered in the qualitative phase of the research derived their foundation from the first (quantitative) phase.

The main findings from the quantitative phase, that different aspects of social capital influence the timing of first sexual intercourse for males and females, that only certain aspects of social capital influence the timing of first sexual intercourse among males and females, and that various other social and demographic characteristics mediate and are mediated by the relationship between social capital and the timing of first sexual intercourse, led to the development of critical questions to be answered in the qualitative phase of the research. In particular, four critical questions from the quantitative phase warranted exploration in the qualitative phase of the research: (1) What are the processes by which and circumstances in which social capital is generated and mobilized by youth, 2) How do youths' sources of social capital influence their sexual behaviour, 3) How does the meaning of, access to, and mobilization of social capital in relation to sexual
behaviour differ between girls and boys, and 4) How do other social variables factor into the generation, access and mobilization of social capital?

Phase I: Secondary analyses of the NLSCY

Selection of the quantitative data

The main goal of the first (quantitative) phase of the research was to discover what aspects of youths' social context (social capital) were related to their sexual behaviour. The National Longitudinal Survey of Children and Youth (NLSCY) is a longitudinal study of Canadian youth that follows numerous aspects of youths' well-being into adulthood. It is designed to collect data on contextual (family, peers, school, and community) influences on youths' social, emotional, and behavioural development, including sexual behaviour, and to monitor the impact of these on development over time. Therefore, the NLSCY data fit the purposes of the first phase of the research. In addition, the advantages of using this readily available data were that (a) data had been gathered on a sample from which generalizations could be made and (b) that it provided well-checked data with a carefully gathered sample with little to no cost.

Survey Methodology

The NLSCY began its data collection in 1994 and has been conducted every two years thereafter by Statistics Canada, sponsored by Human Resources and Social Development Canada. The target population of the survey is non-institutionalized Canadian youth (aged 0 to 11 years when the survey began in 1994), living in any of the 10 provinces. This sampling frame excludes on-reserve First Nations youth, those living in the three northern territories (Yukon, Northwest Territory, and Nunavut), and youth living in extremely remote areas of Ontario or Québec. It likewise excludes those living on military bases, and those
living in institutions. In total, this sampling frame excludes 2% of the population aged 15 years or older (Statistics Canada, 2008).

Data collection with the NLSCY has several components. For the purposes of this study, the main component is a self-completed youth component in which youth aged 12 to 17 years were the respondents. Additional components included a “Person Most Knowledgeable” (PMK) component, in which a parent or guardian who is most knowledgeable of the youth provided information on the youth, and in select cycles, a teacher component in which the children’s teacher provided relevant information on the child.

Estimates in the self-completed youth component can be produced for respondents based on two-year age groupings beginning in cycle two: 12 to 13 years, 14 to 15 years, 16 to 17 years and so on. Owing to expert advice on language ability, level of comprehension and age-appropriateness, questions were framed slightly differently for each age group, and specific questions were added to or deleted from the survey administered to each age group (Statistics Canada, 2008).

Sampling
The NLSCY is a longitudinal survey with youth selected from households. Longitudinally, there are five cohorts in the NLSCY. One is the original longitudinal cohort for which data collection began in 1994, in which respondents were aged 0 to 11 years. Each of the other longitudinal cohorts were established in cycles two through five to top up the original longitudinal cohort in effort to reflect changes in the population over time as a result of immigration. In addition

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1 Such institutions include psychiatric facilities, long-term care facilities, hospitals, and/or juvenile detention centres.

2 Since all youth were aged 11 years or younger in the first cycle of the survey, there was no self-completed youth component in this cycle. All subsequent cycles included this self-completed component.

3 At the time the analyses were conducted for this study, cycle five was the most recent completed cycle. Since that time, the NLSCY data are complete up to cycle 7 and the processes of adding longitudinal cohorts has continued in these more recent two cycles.
to this longitudinal sample, each cycle of the NLSCY collected data from a cross-sectional sample.

The initial cycle of the survey included a national sample of over 52,000 households based on the stratified, multi-stage design of the Labour Force Survey, using probability sampling at all stages of the design. To form the "primary strata", each of the 10 provinces was divided into "economic regions" and "employment insurance economic regions". According to Statistics Canada, economic regions (ERs) are "geographical regions which have a virtually homogeneous economic structure as based on federal, provincial/territorial agreements" (Statistics Canada, 2008). These regions are relatively stable over time. Employment insurance economic regions (EIERs) are geographical areas of roughly the same size and number as ERs, though they differ in definition. The intersection of these two types of regions formed the primary strata (Statistics Canada, 2008).

Each of the primary strata was divided into clusters. A sample of clusters was selected from each stratum, always six or a multiple of six, and households were selected from these clusters. Within each household, a maximum of four children was sampled.

Data Preparation
Creating the Master File

The NLSCY files are stored in separate SPSS data files by cycle at the remote data centre (RDC) in Ottawa, Ontario, where the data analysis for the current study took place. Within each cycle file, self-completed youth data are stored separately from the data provided by the "Person Most Knowledgeable" (PMK) of the youth. Demographic information on the youth and the household in which they reside is located only in the PMK data file. Therefore, the data from the youth file and the PMK file had to be merged prior to analysis.
Prior to merging these files, an initial step of selecting only those respondents who are part of the longitudinal sample was done using a 'sample type' identifying variable. The "longitudinal flag" variable appears in each of the youth and PMK data files and is one in which respondents in the longitudinal sample are given a code of 1 and all cross-sectional respondents a code of 0. Therefore, respondents with a code of 1 on this variable were selected to remain in the study sample, and all others deleted from the data file.

Each respondent in the NLSCY was also given a unique "person identifier" number in the first cycle of data collection. This unique identifier also appears in the PMK file to identify the youth for whom the PMK is providing data. For longitudinal respondents, the unique identifier is constant across cycles. Therefore, within each cycle the PMK and youth files could be merged easily using the unique person identifier variable as the key variable. Following the merging of the youth and PMK files within the three cycles into three complete 'cycle files', the three cycle files were merged into a single longitudinal file containing both youth and PMK data from cycles two through four inclusive. This truly longitudinal file became the "master file" for the analyses undertaken in the first phase of the current study.

**Defining sample requirements**

Several idiosyncrasies of the NLSCY survey methodology contributed to missing data, and thus, a very detailed process of defining the sample for the current study was undertaken. Since the NLSCY longitudinal sample included not only youth among whom data collection began in cycle one in 1994, but also four other "longitudinal" cohorts added in each subsequent cycle, complete longitudinal data only exists for the first cohort. Thus, the first step in the preparation of data was to select only those respondents who were selected in the first cycle of data collection. This selection was accomplished using an 'initial cycle' identifier contained in the
data set. A numeric code of 1 through 4 was assigned to respondents to indicate the cycle in which they first appeared in the longitudinal sample. Those respondents with a code of 1 were selected to remain in the study sample, and all others were deleted from the data set.

Several administrative decisions made in the NLSCY methodology, outlined in the documentation to the NLSCY (Statistics Canada, 2008), contributed to missing data among this original longitudinal cohort and inevitably, to respondents being omitted from the current study sample. A proportion of the original longitudinal cohort was dropped after the first cycle for budgetary reasons.4 In cycle two, all of the households in the original cohort, from which individual respondents were selected, which were also included in the National Population Health Survey (NPHS) sample, were dropped from the NLSCY.5 Also beginning in cycle two, the maximum number of children from each household that could be included in the sample was reduced to two from four.6 This means that some respondents in households of three or more children included in the original cohort were dropped after the initial phase of data collection.7

In the third cycle of data collection, definitions pertaining to “out of scope” youth resulted in the termination of data collection from 185 respondents. Of these, 71 had died, permanently left Canada, or moved to a First Nations Indian reserves. The remaining 114 were dropped as a result of a protocol surrounding cycle non-response. In particular, the protocol for the NLSCY data collection was

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4 The NLSCY documentation does not report what proportion this represents. They would have been omitted from the current study, however, given that only data from cycles two through four were analyzed, and these respondents would have valid data in none of these three cycles.

5 The NLSCY documentation does not report the proportion of respondents this represents, however, they would have been omitted from the current study given that they would not have data in cycles two through four being analyzed.

6 For all of the reasons cited, a total of 3.7% of the original longitudinal cohort targeted for this study, were dropped after cycle 2.

7 The NLSCY documentation does not report the proportion of respondents this represents, however, they would have been omitted from the current study given that they would not have data in cycles two through four being analyzed.
such that a respondent was considered "out of scope" and was permanently terminated after two consecutive cycles of non-response. Thus, these 114 youth were terminated in the third cycle after having refused to respond to both cycles two and three. As a result of this same protocol for two consecutive cycles of non-response, 980 youth were additionally dropped in cycle four. An additional 106 youth were dropped because of death, a permanent move outside of Canada, or a move to First Nations Indian reserves. Given that it would be both undesirable to conduct longitudinal analyses with entire cycles of data missing, such respondents were omitted from the current study's sample.

The final sample for the current study includes respondents from the original longitudinal cohort for whom valid data was collected in all three cycles: two through four inclusive. These respondents ranged in age from 12 or 13 years in cycle two, to 17 or 18 years in cycle four.

**Editing the Master File**

Once the master file containing data for only longitudinal respondents, sampled initially in cycle one, for whom data were present in all three cycles (two through four) was created, editing the data began. The initial step involved a check of the consistency across cycles of variables that are not expected to change over time. Gender was the only variable in the data set of this nature. Therefore, crosstabulations of the gender variables from each of the three cycles was run. The data from the variables were consistent across cycles as was expected, except in the case of one respondent whose gender differed in one of the cycles. Though it is

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8 This accounts for 12.1% of the longitudinal sample targeted for this study.

9 This accounts for 21.1% of the longitudinal sample targeted for this study.

10 An analysis of the demographic characteristics of these cycle non-respondents was made possible by the fact that PMK data existed for these youth in the cycles in which they didn't respond, in cases where the PMK themselves agreed to the data collection. For a description of these non-respondents, please see the methodological appendix in this dissertation.
conceivable that this single respondent may have undergone gender reassignment surgery between cycles of data collection and thus the change in gender in the data set a true reflection of their transitioning gender, it is impossible to confirm this and thus this single respondent was deleted from the data set. The consistency in the age of respondents was likewise checked using crosstabulations of the variable indicating the respondents' age in years. All respondents demonstrated an increase across cycles of approximately two years as would be expected from the timing of data collection.11

Editing the data based on the dependent variable was a logical next step. The final dependent variable was a dichotomous variable that distinguished between respondents who delayed first sexual intercourse12 beyond the Canadian median age of between 16 and 17 years (coded as 1) (Boyce, Doherty-Poirer, MacKinnon, Fortin, Saab, King & Gallupe, 2006; Maticka-Tyndale, 2001; McKay, 2004), and those who had initiated sex by the time they were age 16 or 17 years (coded as 0). This measure, however, did not appear in the original data set. Instead, it was derived from the item presented to youth in each of the three cycles that asked: “How old were you when you first had sexual intercourse?”. The responses to the item ranged from 10 years to the maximum age of respondents in the cycle (13 for cycle 2, 15 for cycle 3 and 17 for cycle 4). It is a consistent strategy to deal with recall or reporting error to use data from all three of the cycles to develop the final outcome measure. First, a series of three dummy-coded variables was constructed identifying respondents who had reported in cycle two that they had initiated sex within the period by the second cycle (at 12 to 13 years of age) ([0] no, [1] yes); those who indicated in cycle three that they had initiated sex by the third cycle (at

11 The NLSCY contains two age variables: one to reflect this two year expected increase in age, and another to reflect the actual age of the respondent at the time of data collection. This latter variable accounts for the fact that data collection may have been conducted earlier or later in the calendar year than previous cycles and/or subsequent cycles.

12 The act of “sexual intercourse” was not defined for the respondents in the survey and therefore, was left open to the interpretation of the respondent.
14 to 15 years of age) ([0] no, [1] yes); and those who had indicated in cycle four that they had initiated sex by the fourth cycle (at 16 to 17 years of age) ([0] no, [1] yes). The final outcome measure was constructed by assigning a code of [0] to respondents who had a code of 1 for any of the three dummy variables and a [1] to all other respondents (those who had a code of 0 for all three dummy variables). Thus, respondents who have a code of 0 are those who, at some point in the data collection process (either in cycle 2 at 12 or 13 years old, in cycle 3 at 14 or 15 years old, or in cycle 4 at 16 or 17 years old) indicated they had initiated sexual intercourse. Respondents with a code of 1 are those that never had.

Since three variables across the three cycles were to be used to derive the final dependent variable, it was necessary to first examine the consistency of responses across the three cycles. Using cross-tabulations with the three variables, reliability of responses was established by ensuring that a 'yes' response in one cycle, indicating the initiation of sex by that cycle, was not followed by a 'no' response in later cycles. There were no such cases found. In addition, it was necessary to examine the patterns of missing data across these three derived dichotomous variables through frequency distributions. As might be expected with sensitive topics (Laumann, Gagnon, Michael, & Michaels, 1994), the proportion of data missing on these variables was relatively high within any individual cycle (for cycle 2 n =256 or 11.8%; for cycle 3 n=224 or 10.3%; for cycle 4 n=184 or 8.4%). The advantage of using data from all three variables, however, meant that it was possible in some cases to use data from other cycles to impute for missing cases in any given cycle. Table I below demonstrates how this was accomplished.
### Table I.

**Conditions for imputing missing data on the dependent variable**

<table>
<thead>
<tr>
<th>Cycle 2</th>
<th>Cycle 3</th>
<th>Cycle 4</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent has a valid response (either 'yes' or 'no')</td>
<td>Respondent has a valid 'yes' response</td>
<td>Data are missing</td>
<td>Final variable is created from the first two cycles only</td>
</tr>
<tr>
<td>Respondent has a valid 'no' response</td>
<td>Respondent has a valid 'no' response</td>
<td>Data are missing</td>
<td>Imputation is impossible and the respondent is removed from the data set</td>
</tr>
<tr>
<td>Respondent has a valid 'yes' response</td>
<td>Data are missing</td>
<td>Data are missing</td>
<td>Final variable is created from cycle two only</td>
</tr>
<tr>
<td>Respondent has a valid 'no' response</td>
<td>Data are missing</td>
<td>Data are missing</td>
<td>Imputation is impossible and the respondent is removed from the data set</td>
</tr>
<tr>
<td>Respondent has a valid 'no' response</td>
<td>Data are missing</td>
<td>Respondent has a valid 'yes' response</td>
<td>Final variable is created from cycles two and four only.</td>
</tr>
<tr>
<td>Data are missing</td>
<td>Respondent has a valid response (either 'yes' or 'no')</td>
<td>Respondent has a valid response (either 'yes' or 'no')</td>
<td>Final variable is created from cycles three and four only.</td>
</tr>
<tr>
<td>Data are missing</td>
<td>Respondent has a valid 'no' response</td>
<td>Data are missing</td>
<td>Imputation is impossible and the respondent is removed from the data set.</td>
</tr>
</tbody>
</table>

Following the deletion of missing cases on the three variables used to construct the dependent variable where imputation from previous cycles was impossible and the construction of the final dependent variable, diagnostic analyses on the
independent variables were conducted. These began first with frequency distributions of all independent variables to assess the variation on the variables of interest, as well as to assess the proportion of missing cases on each of the independent variables.\textsuperscript{13} In total, there were 97 independent variables in the model for males, and 98 independent variables in the model for females. Descriptive statistics on the proportion of missing values across these variables is presented in Table II. The average percentage of missing values in any given variable for males was approximately 3.5 (\( \bar{X} = 3.597 \), Median = 3.5). The average percentage of missing values in any given variable for females was approximately equal to that of males (\( \bar{X} = 3.482 \), Median = 3.3).

Subsequently, cross-tabulations of all independent variables with the dependent variable were run, in addition to cross-tabulations of the same independent variable measured across the three time points. In the case where variables were to be used to construct scales, reliability analysis (Cronbach’s alpha) and factor analyses were run prior to the construction of the scales. Since the planned analytic technique was logistic regression, each of the independent variables, including newly constructed scales, was plotted against the logit of timing of first sexual intercourse (the dependent variable in logistic regression) in order to determine the extent to which assumptions of linearity were being violated. Where variables did violate the assumption of linearity, were highly correlated with other independent variables, and/or demonstrated a lack of desired variation across response categories, appropriate modifications were made. These modifications were chosen from among those widely used in sociology, including dummy-coding, truncating and splines. The most difficult of

\textsuperscript{13} There were but a few concerns with the proportion of missing cases on independent variables. For cycle 2, this proportion was as high as 7% on any given variable. For cycle 3, this proportion was as high as 6% on any given variable. For cycle 4, this proportion was as high as 3.8% on any given variable. Exceptions to these ranges are the number of girlfriends reported by males over the three cycles for which 14.9% of cases were missing and the number of boyfriends reported by females over the three cycles for which 13.9% of cases were missing. For each of these two variables, missing value indicators were included in the models.
these modifications was among those variables that exhibited slopes that changed
directions. In such cases, splines were created to account for the different slopes
and were included in the analysis along with the original variable.

[Table II about here]

Analytic Techniques

All analyses were performed using STATA (version 9) (Stata Corp, 2001). Since
the outcome variable was a binary measure, logistic regression was used to
estimate its relationship to the explanatory social capital variables and to the
control variables.

Owing to the complex multi-stage probability sampling procedures of the
NLSCY, several notes on the analytic techniques are worth mentioning. In
particular, respondents in the NLSCY were sampled from a well-defined
population such that everyone had a non-zero probability of selection that could
be calculated. Based on these calculations, two types of variables were constructed
by Statistics Canada to 'weight' cases in order to adjust the sample to be more
representative of the Canadian population. For all diagnostic analyses including
frequency distributions, cross-tabulations, reliability, factor analyses and graphical
techniques, "longitudinal sampling weights" were applied. These weights were
calculated by Statistics Canada for each respondent in the longitudinal sample at
each phase of data collection. Consequently three sets of longitudinal sampling
weights were used in various steps of the analyses taken from the three cycles of
data collection. For diagnostic analyses where only cycle two variables were being
considered\textsuperscript{14}, the longitudinal sampling weights from the second cycle were
applied. For diagnostic analyses where only cycle three variables were being

\textsuperscript{14} Some examples of such analyses include frequency distributions with individual cycle two variables, reliability analyses or
factor analyses with only cycle two variables.
considered\textsuperscript{15}, the longitudinal sampling weights from the third cycle were applied. For diagnostic analyses where only cycle four variables were being considered\textsuperscript{16}, the longitudinal sampling weights from the fourth cycle were applied. For diagnostic techniques in which variables from across more than one cycle were being considered together\textsuperscript{17}, the longitudinal sampling weights from the most recent cycle were applied as per Statistics Canada instructions. Finally, for all logistic regression analyses, "bootstrap weights" were employed to properly estimate the variance for the model. These weights "weight" each of the cases using a series of over 1000 "bootstrap weights", supplied directly by Statistics Canada, that are calculated based on the clustering of cases in the sampling frame. This method was necessary for accurately estimating the variance of coefficients obtained from complex survey designs, such as that used with the NLSCY, because Primary Sampling Units (PSUs) and Strata were not provided by Statistics Canada in the data set.

**Phase II: Qualitative in-depth interviews with youth**

*Research Setting*

The goal in the second phase of the research study was to explore youths' perceptions and experiences of social capital, how it is mobilized, and how it influences their sexual behaviour and to, in turn, shed light on the findings from the first phase of the study. Through qualitative methods, the second phase

\textsuperscript{15} Some examples of such analyses include frequency distributions with individual cycle three variables, reliability analyses or factor analyses with only cycle three variables.

\textsuperscript{16} Some examples of such analyses include frequency distributions with individual cycle four variables, reliability analyses or factor analyses with only cycle four variables.

\textsuperscript{17} Such analyses include cross-tabulations between the independent variables of various cycles, between independent variables and the dependent variable, and/or graphical techniques using the dependent variable and each independent variable.
sought to examine the processes through which social capital is generated and mobilized to influence youths' sexual behaviour.

The research was conducted in the winter of 2007 in Windsor/Essex County located in southwestern Ontario. This location was selected for feasibility, as well as for access to a diverse sample of youth among its population. The region covers about 685 square miles (1,775 square kilometers) and is made up of eight municipalities. Among these is an urban core, as well as several surrounding towns and rural counties, all totalling a population of just over 400,000 at the last Census (Windsor Essex County Development Commission, 2006). The region is a peninsula with water on three sides, that, at the time of this study, was growing more rapidly than the Ontario provincial and the Canadian national population (Ibid). The region has a high-technology manufacturing base and is one of the country's leading technology and manufacturing centres (Ibid).

Approximately 7% of the region's population is between 15 and 19 years of age (Windsor Essex County Development Commission, 2006). The region's population is quite diverse with over one-quarter of inhabitants able to conduct a conversation in a language other than the two official languages (English and French) (Ibid). With the exception that the region does not include as many Francophones, the educational, occupational, ethnic and household compositional profiles of the region's population approximate the national average (Windsor-Essex County Development Commission, 2006; Statistics Canada Census of the Population 2004a, 2004c, 2004d, 2005). It should be noted however, that the average household income in the region is slightly higher than the national average (Statistics Canada Census of the Population, 2004b). These characteristics made the region desirable for conducting exploratory research since it provides access to a diverse sample of youth.
Participant Selection and Sampling

Given the goal of this phase of the research to explore and understand as completely as possible how social contexts influence youths’ sexual behaviour, a sampling technique was adopted that would try to obtain diverse experiences. Non-probability, purposive sampling of youth aged 16 to 19 years was used to capture differing perspectives or “multiple realities” by attempting to obtain a diverse sample (Berger & Luckmann, 1967; Strauss & Corbin, 1990: 177-193). The purpose of this sampling strategy was to increase the diversity of experiences tapped into during the in-depth interviews. The lines of diversity along which youth were recruited were informed by the social capital literature as dimensions of difference in young people's social capital, including gender, ethnicity, race, rural or urban residence, and age.

After gaining approval from the Research Ethics Board at the University of Windsor, three recruitment techniques were simultaneously used to contact participants to participate in the study. I contacted by email public health nurses and administrators from the local health unit, school boards, youth centres and other health centres, with whom I had an established professional relationship. I informed them of the study I was undertaking, provided them with an information sheet on the project including my contact information (see Appendix B), and invited them to pass the information along to youth to whom they provided services to on a regular basis. In addition, I created both MySpace and Facebook accounts and distributed mass invitations to members whose public profiles indicated they were between the target age ranges of 16 to 19 years and who listed they were in the Windsor/Essex County area. These invitations were a condensed version of the full information sheet given to participants during data collection (see Appendix B). They were typically 25 lines long and provided information on the project and my contact information should they be interested in hearing more about the study and/or participating in it. Finally, I relied on
youth who had already participated in the research to recruit their peers by word-of-mouth. This technique is widely known in qualitative research as "snowball sampling".

Data collection occurred in January 2007. Once contacted by participants, either by phone or by email, I arranged to hold the individual in-depth interviews in a location of their choice. Though I asked them where they felt most comfortable to conduct the interview, I also offered a private office at the University. Many participants felt this location would make them most comfortable, though some opted to be interviewed in coffee shops or their own homes. All interviews were conducted in English.

In this study, I was concerned about the influence of the interviewers' gender on the comfort of participants given the sensitive nature of the topic. Participants were interviewed by a same-gender interviewer since previous research demonstrated that people are more comfortable speaking to someone of the same gender in sensitive research (Laumann, Gagnon, Michael, & Michaels, 1994). At the beginning of the interview, each participant was offered the option to be interviewed by the opposite gender interviewer, though all declined this offer, opting for a same gender interviewer. The interviews did not vary by the interviewer's gender in terms of the length of the interview, the participants' willingness to share their experiences, or conversational patterns.

Sample Description

In this qualitative portion of the study, data collection reached closure when saturation was reached. Saturation is achieved when either no new categories, concepts, dimensions or incidents emerge, when themes and concepts are strongly developed in the data, and/or when relationships among categories are well established (Strauss & Corbin, 1990: 212).
After having interviewed 18 participants, saturation was reached and the recruitment efforts ceased. The sample was split relatively evenly among males (8) and females (10). The ages ranged from 16 to 19 years with five 16 year-olds, four 17 year-olds, five 18 year-olds and four 19 year olds. The majority of participants were living in the urban core (9), with fewer in the peri-urban (6) and rural (3) outskirts. Despite attempts to recruit more youth from racial minorities by contacting participants from a previous study on ethnic minority youth who agreed to future participation in a research study, the sample consisted predominantly of youth identifying either as white/Caucasian or from European backgrounds (13). There was some representation from the Black (1), East Asian (2) and South Asian (2) communities as well and three of these youth were born outside of Canada. Although diversity in family form, school status and sexual orientation were not specific sampling goals, there was some diversity on these dimensions in the sample. The majority of the participants (10) lived in two-parent families with siblings, however the sample did have representation of an only child with two parents (1), youth living in a single parent home with siblings (5), and those living independent of their parents either alone or with friends (2). The majority of participants were in school full-time and many had part-time jobs as well. Only one participant was out of school and in the labour force full-time. Finally, the sample included 2 youth who identified as gay males, 1 as lesbian and 1 as bisexual, with the remainder identifying as heterosexual.

Researcher Positioning

The interview guide was created by the author of this dissertation, who also conducted the in-depth interviews with the female participants. At the time of conducting these interviews, I was a young (29 year-old), female doctoral student in sociology. I had experience in the subject matter having completed my master’s thesis with a focus on social capital, and having been a Doctoral Fellow in Social
Justice and Sexual Health for five years. This ensured that I brought a very good understanding of both social capital and the sexual behaviour of youth to the interviews. It also made me extremely comfortable in conducting interviews on what is otherwise a sensitive subject. Important to note is that this position and my subjectivity influenced the research questions for this study, the interview guide for the qualitative phase of the study, as well as the analysis of data.

I approached this project with critical knowledge of social capital as it relates to the sexual behaviour of young people. I likewise approached the study with a concern for the scarcity of qualitative studies on the subject and thus, the opportunity for young people to share their experiences and perceptions on what social capital means to them, and how it has influenced their sexual behaviour. In conducting the qualitative phase of this study, I positioned myself as a researcher whose role was to listen and document the experiences of the youth participating in this study, and to disseminate findings that better reflect their perceptions of the ways in which their social contexts influence their sexual behaviour.

Throughout the research process, I checked in with the interviewer who interviewed the male participants in this study. Prior to initiating any interviews with male participants, I conducted a mock interview with this second interviewer and gave him the opportunity to comment on his comfort in conducting the interviews. This interviewer had a wealth of experience in conducting interviews with teenagers and indicated that he felt very comfortable with the content. I reviewed the interview recordings immediately following the first several interviews conducted with male participants and provided him with constructive feedback for interviews that followed. He confirmed at that time that he was comfortable and had no concerns or hesitations in conducting further interviews. Finally, I consulted with this male interviewer as I coded data to be sure my coding resonated with the experiences he heard from male participants.
Establishing a rapport with the participants

Given the fact that youth are a vulnerable population who are not often valued for their experiential knowledge, and that the content of the interview was extremely sensitive, I made gestures at the start and end of each interview to demonstrate my respect for their knowledge and my appreciation for their participation. For interviews held in an office at the University or a local coffee shop, I asked the participants if they would like a coffee, tea, water, juice, pop or snack prior to beginning the interview. Most participants accepted this offer. This afforded participant and interviewer time to engage in more informal conversation while they got settled with their beverage and/or snack, and to build a rapport with the participants. During these conversations, participants would discuss a range of topics from friends with whom they frequently have coffee to television shows or movies they had recently viewed.

In appreciation for their time, each of the participants was given an honorarium of 20 (Canadian) dollars. Further, in the interest of reciprocity and an attempt to disseminate their collective knowledge back to participants, participants were given my contact information should they like to review any of the research material created from the qualitative data and/or to hear the results of the study. To date, none of the participants has accepted this offer. Finally, at the end of each interview, I gave each participant the opportunity to choose the pseudonym by which they would be referred in any written research materials. Many of the participants expressed excitement and appreciation from the gesture. One participant indicated “...that [choosing their own pseudonym] is so cool...like when I read something from this research, I will know ‘hey! that’s me!’”.

Data collection: In-depth interviews

In depth interviews began with a description of the project, the expectations for the interview, the voluntary nature of the study, their ability to withdraw at any
time, and the subject matter that would be discussed. At this time, I also offered to answer any questions the participants had. Next, I asked permission to audio-record the interview, ensured them that their name would not be attached to the recording, and that it would be destroyed after its content was transcribed. All participants agreed to being audio-recorded. Following the verbal description of the study and the participants' rights, I gave each participant the consent form to review and sign (see Appendix C) which contained all of the information verbally conveyed, followed by a one-page information sheet for them to take away with them (see Appendix C).

Following these administrative requirements, each interview began with an informal conversation about the participants including their age, their school and/or work experiences, and their family life. Using the interview guide (see Appendix D) the interview proceeded through discussions of the people most important in their life, the groups and/or club to which they belong, and the connection between these people/groups and the decisions they have made with respect to sex. The interview guide presented semi-structured questions that allowed for probing and follow-up on points of interest raised by participants. While the interview guide was designed to guide a 45 minute interview, interview times ranged from 30 minutes to two hours and 20 minutes in length.

During the interviews I jotted notes on the content of the interview in the event the recording was inaudible or faulty. I also wrote memos to myself on general impressions about the participant and the conduct of the interview; body language associated with specific topics, people or places raised during the interview including those which the participant had obvious extreme positive reactions to, and those for which they had extreme negative reaction; topics on which the participant appeared hesitant or uncomfortable, as well as those which they avoided; and conditions with the setting including distracting noise, people, and/or interruptions.
Treatment of the Qualitative data

Data Storage and Management
Following each interview, I uploaded the digital recording to my personal laptop and saved the file under the pseudonym chosen by the participant, each file password protected. I transcribed interviews throughout the data collection process in Microsoft Word, and transcripts were checked for accuracy. Once an interview was transcribed, I printed the transcript and kept it with the others in a locked filing cabinet in my home. Consent forms were kept in a locked filing cabinet in an office at the University and were later moved to a safe in my home following data collection.

Data Analysis
Once transcribed, I reviewed the hard copy of each of the transcripts making notes in the margins on common themes or concepts emerging. In addition, each of the Microsoft Word documents was uploaded into NVivo (QSR International, 2001). Though I found it easier to identify and highlight common themes initially with the hard copies of the transcripts, NVivo was simultaneously used to manage the data coding processes.

The first stage of the analysis entailed identifying all of the material from the transcripts that fit under the broad notion of 'social capital'. The second stage involved a process of discovery in which the text was read for themes and concepts related to the nature of youths' social relationships and to the forms and sources of social capital. This stage is often referred to among qualitative researchers as 'open coding'. Open coding entails a process of conceptualizing the data. In this second stage, I identified concepts related to social capital that I identified as significant. Analytic memos and notes were kept on themes and concepts as they emerged. In the final stage of data analysis, I undertook an
analysis of connections between the concepts and themes identified and began to develop theories of how youths’ social capital develops and how it impacts youths’ sexual behaviour.

Given the mixed method nature of the research design, the qualitative data analysis involved a phase in which memos and notes were created as I compared the concepts, themes and patterns emerging in the qualitative data to the results of the quantitative phase. This final coding of qualitative data involved highlighting the concepts, themes and patterns that related to the findings of the quantitative study. In this way, the research fulfilled its methodological design of a multi-phase, exploratory, mixed method study in which the qualitative research expanded upon and attempted to explain findings from an initial quantitative phase.
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FOCUSING ON YOUTH: EMPLOYING A YOUTH-CENTRED CONCEPTUALIZATION OF SOCIAL CAPITAL TO INVESTIGATE THE ROLE OF SOCIAL CONTEXT IN THE TIMING OF FIRST SEXUAL INTERCOURSE AMONG CANADIAN YOUTH

Introduction

Increasingly, professionals, policy-makers and scholars involved in improving the sexual health of youth recognize social context as a viable resource and mediator of sexual health insofar as sexual health-related behaviour takes place amidst constraints of everyday socio-cultural contexts. Sexual behaviours, whether conducive or detrimental to sexual health, are influenced by both the routine organizations of everyday settings and activities and the personal decisions of individuals. The influence of experiences and relationships within social settings such as *inter alia*, communities, neighbourhoods, schools, workplaces, families and peer groups, on the sexual behaviour of young people, has been well documented in the literature (for reviews see South & Baumer, 2000; Kirby, 2001; Smylie, Medaglia & Maticka-Tyndale, 2006). In an effort to provide theoretical clarity and conceptual synthesis to the effects of these contextual factors on the sexual lives of young people, researchers have begun to employ the concept of “social capital” (Crosby, Holtgrave, DiClemente, Wingood & Gayle, 2003; Denner, Kirby, Coyle & Brindis, 2001; Furstenburg & Hughes, 1995; Gold, Kennedy, Connell, & Kawachi, 2002; Holtgrave & Crosby, 2003; Morrison, Howard, Hardy, & Stinson, 2005; Smylie, Medaglia, & Maticka-Tyndale, 2006; Weitzman & Chen, 2005). While “social capital” has been conceived of in different ways by different scholars, in its essence, it refers to resources which can be used to achieve certain ends not otherwise possible and which are derived from social networks.
Though studies employing the concept of social capital represent an important step in theorizing the role of social context in youths' sexual behaviour, our understanding has been limited because the existing research has traditionally employed an adult-focused conceptualization. As other authors have pointed out (Bassani, 2007; Morrow, 1999; Schaefer-McDaniel, 2004), empirical studies on youths' well-being have not yet moved beyond the adult-centred perspectives of Bourdieu (1986), Coleman (1988, 1990), and Putnam (2000). Consequently, these studies have done little to meaningfully address the ways in which young people have been shown to actively negotiate their social contexts in relation to their own well-being (Gillies & Lucey, 2006; Holland, Reynolds & Weller, 2007; Leonard, 2005; Morrow 1999; 2000; 2001a; 2001b; 2002; 2003; 2005; Weller, 2006). There has been no research, to date, employing the more agentic conceptualization offered by the emerging youth-centred social capital framework. In addition, the existing quantitative studies on social capital and youths' sexual behaviour have measured social capital at only one time point. Not only does cross-sectional data present problems of causal ordering, but it also ignores the dynamic networks of youths' social capital discovered in the recent literature. None of the existing research has used longitudinal data to both account for the dynamic nature of youths' social relationships and to examine potential "critical" time points in which social capital exerts its influence.

This paper contributes to an understanding of the nature of the relationship between social capital and youths' sexual behaviour by: (a) assessing the extent to which measures of social capital, informed by the youth-centred framework, are related to the timing of first sexual intercourse among youth, (b) examining how social capital experienced at different times in youths' lives, influences the timing of first sexual intercourse among youth, and (c) clarifying whether there are critical time points in which particular forms of social capital are most influential on the timing of first sexual intercourse among youth.
The transition in status from 'virgin' to 'sexually experienced' that is signified in first sexual intercourse is a change that is made only once during the lifetime of an individual (Udry & Billy, 1987). This change has considerable significance for the individual insofar as it alters one's self-concept and has social, as well as biological, significance. This 'rite of passage' from 'child' to sexual adult has been contextualized against the backdrop of a changing socio-cultural climate. Both Giddens (1992) and Seidman (1992) point to a sexual revolution in contemporary Western cultures that began after World War II. Amidst claims of women to gender equality, the rise of feminist discourses, the proliferation of contraception and new reproductive technologies (Giddens, 1992), the family and marriage became decentred as sex was freed from its association with reproduction. A "culture of eroticism" (Seidman, 1992) developed in which the body was constructed as a site of sexual pleasure and self-expression, accompanied by elaborate languages of 'adult' erotogenic zones, sexual techniques, sex acts, and pleasures. Sex became legitimated for its pleasurable, expressive and communicative qualities, separated from its symbolism of marriage and reproduction.

Amidst a more sexually open, expressive and eroticized society, the alignment of sex with pleasure, and the decentring of the family with respect to sex, arose a more sexually liberal youth culture. A review of data by Maticka-Tyndale, Barrett and McKay (2000) suggests that the age of first intercourse for the majority of Canadians has been prior to marriage, between the ages of 16 and 18 years, since at least the cohort born in the early 1940s. At this age when most young people are transitioning into adulthood sexually, they are likewise transitioning socially and culturally as they are completing their high school education and approaching the political and social 'age of majority'. An exploration of the factors that influence the timing of first sexual intercourse, contributes to our understanding of the important transition to sexual adulthood.
Theoretical Framework

While a myriad of conceptualizations of social capital have been forwarded by various scholars, they originate largely in the conceptual and theoretical works of three principal authors, referred to in the literature as the “theoretical fathers” of the concept (Schaefer-McDaniel, 2004). Though Pierre Bourdieu (1986), James Coleman (1988, 1990) and Robert Putnam (2000) each offer different understandings of the definition and value of social capital, they have in common the notion that, in its essence, “social capital” refers to resources which can be used to achieve certain ends not otherwise possible and which are derived from social networks.

The concept of social capital in relation to young people was most notably developed by James Coleman (1988, 1990) in the United States. Coleman developed the concept to refer to a resource derived from people’s social ties that:

“...is productive, making possible the achievement of certain ends that in its absence would not be possible...social capital inheres in the structure of relations between actors and among actors.” (1988: S98)

The family was the central feature in Coleman’s early developments of his social capital framework. He suggested that social capital within the family depended on the attention given to a child, especially by adults in the family. To Coleman, the traditional two-parent, two-child family is preferable for the generation of social capital. He theorized that single-parent families disrupted children’s social development, and he argued that social capital was “diluted” with additional children in the home as claimants competing for parents fixed resources and attention (Coleman, 1988). Coleman does not explore the social capital in single-child family structures, nor does he comment about the nature of the parent child relationship, whether biological, adoptive, step-parent or otherwise.
Despite the fact that his early work focused on social capital within the family, Coleman later noted that social capital was also generated outside of the family through parents' interactions with other adults in the community, most notably within educational institutions, where children spend considerable time (Coleman, 1990). Coleman believed that through the school system, children's social capital within the family could be strengthened by strengthening the relationship among parents and teachers (Coleman, 1990). Coleman’s conception of ‘intergenerational closure’ was meant to highlight the presence or absence of links between parents in such settings. The presence of intergenerational closure is indicated by the fact that parents “...discuss their children’s activities and come to some consensus about standards and about sanctions.” (1988: S107). He suggested that in families with two-parents and intergenerational closure present, children will abide by these shared rules.

In his seminal work *Bowling Alone*, together with a number of influential papers, another American scholar, Robert Putnam, conceptualized the notion of social capital as a key characteristic of communities, rather than individuals. Putnam viewed social capital as a “common good” that is developed in social networks which foster reciprocity, trustworthiness and generate “civic virtue” (Putnam, 2000: 19). These networks form trusting communities in which residents are actively involved in each other’s lives and maintain helpful relationships. He proposed that people form a sense of belonging to the civic community and a sense of solidarity with its other members. According to Putnam, social capital then refers to the “...features of social organizations, such as networks, norms, and trust, that facilitate action and cooperation for mutual benefit” (Putnam, 2000: 35-36).

It was European social theorist Pierre Bourdieu (1986), however, who offered one of the earliest definitions of social capital. Influenced by European sociology, Bourdieu’s theory stands in marked contrast to those of his American
counterparts. Bourdieu conceived of social capital as one of four interrelated forms of capital, namely economic, cultural, symbolic and social. He proposed that social capital consists of social networks and connections, "...contacts and group membership which, through the accumulation of exchanges, obligations and shared identitites, provide actual or potential support and access to valued resources." (1993: 143). He maintained that skill and disposition were necessary to maintain these social networks. Unlike Coleman and Putnam, Bourdieu did not see the value in social capital isolated from the other forms of capital. Instead, he suggested that economic capital was "...at the root of all other forms of capital" (1986: 252) and was concerned with how different forms of capital are converted into economic capital and how they interacted with wider structures to reproduce inequalities.

Bourdieu shares with Coleman a focus on generational socialization of youth within the family in his conceptualization of social capital. He suggested that people derive their social capital from membership in a group, such as a family or kinship group. Material and symbolic exchanges produce obligations and mutual recognition of group membership over time, which can be transmitted over generations (1986). Bourdieu likewise shares with Coleman an identification of parents', particularly mothers', free time as a feature of intergenerational social capital transmission (ibid).

The proliferation of interest in social capital has resulted in new, critical stances on the original conceptualizations forwarded by these three theorists. Propelled by the "new sociology of childhood", outlined by James and Prout (1997), that emphasizes youths' agency and the ways through which their interactions with adults and with each other transform the nature of childhood and society, scholars working in the area of childhood have advanced several critiques of the "theoretical fathers'" conceptualization of social capital, that have centred on the neglect of young people's own social capital (Morrow, 1999).
Specifically, the original conceptualization of social capital did not include youth as active participants in the generation and mobilization of this resource, effectively ignoring the social capital that inheres in youths' own social relationships (Morrow, 1999). Where young people were explicitly mentioned in the conceptualizations by Coleman, Putnam and Bourdieu, a top-down view of the effects of adults on children was created, thereby downplaying children's agency. Youth did not meaningfully figure in any of the three conceptualizations as active agents in the generation of their own social capital and the social capital of adults around them. Therefore, implicit in the conceptualizations of Coleman, Putnam and Bourdieu was an adult-centredness that ignored youths' own strategic use of their social networks, their own stocks of social capital, and their mutual impact on adults' social capital (Leonard, 2005; Morrow 1999, 2001a, 2001b, 2002). For example, Coleman maintained that children compete for and receive social capital from their parents. When he considered the contribution to family social capital made by persons outside of the family, he gave attention only to the networks of relationships that parents belong to (Coleman, 1990). Coleman did not theorize the contribution to their social capital made by young people in their own social networks. Putnam (2000) echoed this in so far as he only afforded young people agency in the form of "negative" social capital, such as that formed in gangs. Further, some forms of "civic participation" that he articulated as the central feature in the generation of social capital, including voting, exclude youth who are not considered full citizens until reaching the age of majority. Finally, while Bourdieu did not negate youth as bearers of class advantage, he suggested that this was only available to them in the future as adults, rather than as young people (Edwards, 2003). Leonard (2005) further argued that youths' weaker position vis-à-vis adults in society precludes or constrains their ability to convert between forms of capital, and they have particular difficulty in converting various forms of capital into economic capital.
A related critique has centred on the focus on the quantity, rather than on the quality, of relationships in the original conceptualizations. For example, Coleman focused on the importance of the number of parents and number of children in the home, making the argument that a two-parent and two-child structure is ideal since greater numbers of children and/or a single-parent structure dilute the resources and attention available to each child. This focus ignored the importance of quality in social relationships, and the potential for siblings to provide each other with social capital (Gillies & Lucey, 2006; Leonard, 2005; Morrow, 1999; Seaman & Sweeting, 2004).

In light of these critiques, several authors have advanced the reconceptualization of young people’s social capital based on their own experiences. Qualitative research methods have been used to include young people’s experiences in the broader social capital debate and in a reconceptualization of social capital grounded in youths’ experiences and relationships within their social contexts (Gillies & Lucey, 2006; Holland, Reynolds & Weller, 2007; Leonard, 2005; Morrow 1999; 2000; 2001a; 2001b; 2002; 2003; 2005; Weller, 2006). In general this framework views youth as resourceful, active producers in developing networks with each other and with adults within and outside of the family. The centrality of family and peer group networks is clear in this literature. In qualitative research where youth talked about their networks, they indicated the importance of parents, particularly mothers (Morrow, 1999) and siblings (Gillies & Lucey, 2006; Leonard, 2005; Morrow, 1999; Seaman & Sweeting, 2004). The most significant features of both familial and peer relationships were the intensity and quality. Youth recognized the importance of these relationships for providing someone to talk to and to share things with, for emotional support, information, guidance, and trust. In addition, youth value having someone to hang out with and do things with.
Contrary to the assumption of the adult-centred model that participation in the community is key to building social capital, membership in formal community activities had mixed salience in youths' own articulation of their social capital. Many of the youth reported limited participation in leisure and community activities owing to feelings of limited efficacy or not being able to meaningfully contribute to their community, and of being de-valued by adults in the community. Others reported that community groups, programs and facilities did not meet their needs (Morrow, 1999). Nevertheless, some youth in these studies reported that various leisure activities and community organizations were important sources of information, expanding peer networks, and emotional support (Dworkin, Larsen, & Hansen, 2003; Eccles & Barber, 1999; Holland et al., 2007; Jarrett, Sullivan & Watkins, 2005; Leonard, 2005; Morrow, 2003; Weller, 2006). These studies highlight the diverse forms of participation among youth from art groups to sports teams, school council, leadership groups, and ethnic clubs. Youth articulated that these activities fostered networks that provided access to vital information, encouragement, motivation, support, and a sense of identity and belonging.

In a similar vein, youths' own accounts of social capital in this literature provide a challenge to Putnam’s (2000) notion of civic participation and formal volunteering. Rather than the formal modes of volunteering articulated in Putnam’s work, the youth-centred conceptualization suggests that informal forms of volunteering were more important for youth in establishing neighbourhood-based networks of support, assistance, advice and information. Youth spoke of helping neighbours and community members with chores without being paid, adopting a cause such as building a skate park in the community (Weller, 2006) and fundraising (Weller, 2006).

Finally, school was mentioned by youth in the literature as an important site
for the generation of social capital, though with mixed salience. Some youth suggested that school was a place where they developed close bonds with friends, received support and help from teachers and other mentors (Morrow, 1999). Still others spoke of school as a potential site of bullying and feeling left out, as well as not being respected by authority figures like teachers (Morrow 2000, 2005). What is clear in the literature with respect to the context of relationships within schools, as is the case with other relationships, is that it is the quality of the relationships and experiences within the setting that is most important when considering youths' social capital.

Employing a social capital framework represents an important intermediate level of analysis between the micro-social individual and the macro-social level (Campbell, 1997). The advantages to using a youth-centred social capital framework to drive research on youths' sexual behaviour include a focus on young people's experiences of their social worlds, offering a perspective which differs from more adult-oriented preoccupation with this age group. A youth-centred social capital framework further allows for a focus on the social context of sexual behaviour, conceptualized in terms of resources derived from four main sources identified by youth themselves, namely family, peer groups, school, and activities. The youth-centred social capital literature suggests that the quality of relationships with parents, siblings, teachers, coaches and leaders, participation in leisure activities and informal forms of volunteering, the quality of experiences with peers within the school environment, and the quality and intensity of relationships with peers contribute to the development of social capital among youth. This paper seeks to test the applicability of this framework in understanding the social and community contexts that shape and constrain the timing of first sexual behaviour among young people in Canada.
Data and Method

The data for this paper came from the National Longitudinal Survey of Children and Youth (NLSCY). The NLSCY was developed jointly by Statistics Canada and Human Resources Development Canada as a comprehensive, longitudinal survey of the development, health and well-being of Canadian children from birth to adulthood (Statistics Canada, 2008). The data collected were also designed to determine the prevalence of various biological, social, economic and other contextual risk and protective factors related to the development and well-being of young people in Canada.

The content of the NLSCY makes it useful for examining social capital's ability to predict the timing of first sexual intercourse over and above the influence of demographic and select lifestyle factors. The only national survey of its kind in Canada, it contains data on various dimensions of youth sexual behaviour, in addition to measures of the various aspects of youths' social capital outlined in the burgeoning literature. The NLSCY also contains a rich battery of information pertaining to family socioeconomic and sociodemographic background, which is critical for establishing the effects of social capital on timing of first sexual intercourse over and above these established determinants.

Procedurally, the NLSCY fits with the youth-centred social capital literature insofar as the youth themselves were the primary source of information on their family, school, community and peer group experiences. A declared "person most knowledgeable" (PMK) of the youth did, however, complete a questionnaire on family characteristics, demographic characteristics, and socioeconomic indicators, during each wave of data collection. Additionally, because the NLSCY is a population-based study, rather than the common school-based method of recruitment, it does not by design exclude youth who have dropped out of school. This allows for a more representative sample of Canadian youth generally, rather than simply Canadian youth in school.
The longitudinal nature of the NLSCY provides a resource for testing the influence of social capital over time on timing of first sexual intercourse. The three cycles of the NLSCY allow for a history of social capital for each respondent across three cycles (6 years). It is important to note that, while this feature of the survey likewise improves the issue of causal ordering, which plagues much of the social capital literature, it is far from remedying the issues. For the 5.2% of females and 2.9% of males in the sample that experienced first sexual intercourse before the second cycle (12 or 13 years of age) (see Table III), data from cycles three and four are not temporally prior to initiation, and data from cycle two may not be temporally prior to this initiation. For the 10.1% of females and 7.8% of males in the sample who experienced first sexual intercourse between the second and third cycles, data from cycle two and possibly data from cycle three are temporally prior to initiation. For the 22.6% of females and 13.8% of males in the sample who experienced first sexual intercourse between the third and fourth cycles, data from cycles two and three, and possibly data from cycle four are temporally prior to initiation. For the 59.5% of females and 71.5% of males in the sample that had not experience first sexual intercourse by cycle four, data from all three cycles are temporally prior to initiation of sex.

Data collection for the NLSCY began in 1994 and continued biennially thereafter until the most recent collection period of 2007.\textsuperscript{18} Based on a multi-stage stratified probability sampling design developed by Statistics Canada (Statistics Canada, 2008), the final longitudinal sample for the first wave of the study included 13, 439 households and a total of 16,903 youth, with a response rate of 86.3%. The final sample is representative of the non-institutionalized civilian

\textsuperscript{18} Although data were collected biennially for the subsample of longitudinal respondents from cycle 1, there was also new longitudinal samples added at each subsequent cycle, in addition to a subsample of cross-sectional respondents at each wave who were sampled and surveyed.
population living in Canada's 10 provinces. The eldest participants recruited into the survey in the first cycle were 11 years old in 1994, making them 23 years old in the most recent wave of the survey.

Sample

The participants for this study belonged to a cohort born in 1984 or 1985, enrolled in the longitudinal sub-sample of the NLSCY, at age 10 or 11 years when the original sample of 16,903 youth was surveyed. Subsequent data were collected for these participants every two years thereafter, to 22 or 23 years in 2006-2007. Owing to the nature of the outcome variable (timing of first sexual intercourse) and the limited cycles in which it was included in the survey, only data collected from these youth at ages 12-13 years (cycle two), 14-15 years (cycle three) and 16-17 years (cycle four) were used in this analysis.

Sample retention was high at cycle two, though less so over the other two periods of data collection. At ages 12-13 years, 91.5% (n=1562) of the original longitudinal sample completed the survey. Data collection at ages 14-15 years had a lower retention rate with 88.7% (n=1530) of the original sample completing the third cycle. The subsequent data collection at cycle four (16-17 years) had the lowest retention rate with 78.7% (n=1290) of the original sample participating. While there were some missing values for particular measures beyond those represented by this attrition, missing values were infrequent enough (less than

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19 This sampling design and target population excluded children living on Indian reserves or Crown lands, residents of institutions, children of full-time members of the Canadian Armed Forces living on bases, and residents in some remote regions.

20 Questions on sexual behavior were omitted altogether in cycle 5 when the sample used for this analysis was between 18 and 19 years of age. Though cycle 6 is now available and includes questions on sexual behavior, it was not available at the time this analysis was conducted. Cycle 7 data, though collected, has not yet been released by Statistics Canada.

21 It should be noted that all frequencies reported are weighted using the cycle-specific sampling weights provided by Statistics Canada.

22 The attrition rate over the three cycles is not evenly distributed by province. Ontario had the highest attrition rate over the three cycles. On the other hand, the Atlantic region and Manitoba had the highest retention rate.
8%\textsuperscript{23} to be of only limited concern. Notable exceptions include the number of
girlfriends over the three cycles among male respondents\textsuperscript{24} and the number of
same sex, as well as opposite sex friends for both genders in the third cycle\textsuperscript{25}.

Measures
Dependent variable

This analysis examines the influence of social capital on the timing of first
sexual intercourse\textsuperscript{26}. Specifically, the final outcome measure was a dichotomous
variable that distinguished between respondents that delayed beyond the third
interview. The timing of this third interview corresponds roughly to the Canadian
median age of between the 16\textsuperscript{th} and 18\textsuperscript{th} birthday (coded as 1) (Boyce, Doherty-
Poirer, MacKinnon, Fortin, Saab, King & Gallupe, 2006; Maticka-Tyndale, 2001;
McKay, 2004). All other respondents, who had initiated sex by the time they were
age 16 or 17 years, were given a code of 0. This measure was derived from the
item presented to youth in each of the three cycles that asked: “How old were you
when you first had sexual intercourse?”. The responses to the item ranged from 10
years to the maximum age of respondents in the cycle (13 for cycle 2, 15 for cycle 3
and 17 for cycle 4). Data from all three of the cycles was used to develop the final
outcome measure, thereby minimizing the recall period. First, a series of three
dummy-coded variables was constructed identifying respondents who had

\textsuperscript{23} For those variables that did have a proportion of missing values exceeding 8%, a combination of techniques was used to
account for these. For example, among both males and females for the number of boyfriends and girlfriends, a missing
value indicator for each gender was included in the models. For only one variable, the number of same and opposite sex
friends, mean imputation was used. Though mean imputation is not widely recommended, it was used in this case because,
it does not result in incorrect standard errors, owing to the use of Bootstrapping in all analyses. While it may result in a
slight bias of coefficients toward zero, this results in a more conservative coefficient.

\textsuperscript{24} To account for these missing values, a missing value indicator was included in the model for this variable.

\textsuperscript{25} For these variables, mean imputation was conducted by assigning the mean score to respondents who had missing data on
these variables.

\textsuperscript{26} The act of “sexual intercourse” was not defined for the respondents in the survey and therefore, was left open to the
interpretation of the respondent. Given this lack of detail, it is likewise impossible to distinguish between heterosexual and
homosexual youth within the NLSCY sample. The sex of partners was not asked in the survey.
reported they had initiated sex within the period by the second cycle (at 12 to 13 years of age) ([0] no, [1] yes); those who had initiated sex by the third cycle (at 14 to 15 years of age) ([0] no, [1] yes); and those who had initiated sex by the fourth cycle (at 16 to 17 years of age) ([0] no, [1] yes). The final outcome measure was constructed by assigning a code of [0] to respondents who had a code of 1 for any of the three dummy variables and a [1] to all other respondents (those who had a code of 0 for all three dummy variables). Thus, respondents who have a code of 0 are those who, at some point in the data collection process (either in cycle 2 at 12 or 13 years old, in cycle 3 at 14 or 15 years old, or in cycle 4 at 16 or 17 years old) indicated they had initiated sexual intercourse. Respondents with a code of 1 are those that never had. It should be noted that there is some overlap in the categories of the variable insofar as there are some 16 year-old respondents coded as not having initiated sex by the median age who still might initiate prior to age 17 years.

Social Capital Indicators

Though still in its nascent state, the youth-centred social capital literature provides a conceptual template for operationalizing the concept in a way that is more relevant to the experiences of youth. It should be noted that the indicators extracted from the NLSCY and intended to represent elements of the youth-centred conceptualization, are in some cases, such as informal volunteering, replications of what was found in the literature, but in other cases, only roughly representative of what was theoretically proposed in the literature. Since the NLSCY was not designed to reflect youths' social capital, not all of the elements of youths' social capital described in the literature could be represented herein, even as rough representations.
Family-based Measures

Family featured prominently in the youth-centred social capital literature as an important source of social capital for youth. Most importantly, a clear distinction was made by youth between their parents. Mothers were key figures in the generation of social capital by youth within the family, and fathers to a lesser degree (Morrow 1999, 2003). Respondents' were asked how well (from 0=not at all well/constant problems to 4=very well, no problems) they got along with their mother, stepmother or foster mother during the previous six months. A parallel measure was included for fathers. The strength of this measure is that it accounts for the quality of parent-child relationships, particularly in non-traditional family forms (Gillies & Lucey, 2006). In the subsequent two waves of data collection, however, several items representing the quality of relationship with each parent were included. At ages 14 to 15 years and 16 to 17 years responses to items, scored 1=very little to 3=a great deal, were combined separately for the mother and father they spend the most time with (biological, adoptive, step-, foster-, or another person): (a) How well does this mother (father) understand you?; (b) How much fairness do you receive from this mother (father)?; and (c) How much affection do you receive from this mother (father)? In addition to these, a fourth item was included in the scale in which respondents indicated the overall quality of their relationship with each of their mother and their father separately with scores ranging from 1=not very/very little to 3=very close. The Cronbach’s alphas were well above 0.75 for both males and females for these scales.

The emotional support and ability to talk to parents that youth in the social capital literature discussed as being salient forms of social capital (Holland, Reynolds, & Weller, 2007; Leonard, 2005; Morrow 1999, 2000, 2002, 2005) was tapped by single dichotomous measures in each of the cycles, one each for mothers and for fathers. The item distinguished between youth who could talk to the
identified parent about themselves and their problems (coded as 1) and those that stated they could not (coded as 0)²⁷.

Unlike the original conceptualization of social capital, siblings featured prominently in the youth-centred social capital literature as sources of social capital for youth (Gillies & Lucey, 2006; Holland, Reynolds, & Weller, 2007; Morrow 1999, 2000, 2003; Seaman & Sweeting, 2004). Following the literature that indicates that being able to talk to and get emotional support from siblings was important to youth, a dichotomous measure distinguishing between youth that could talk to their brothers about themselves and/or their problems (coded as 1) and those that could not (coded as 0) was included in all cycles. A parallel measure was included for sisters at each of the three cycles. At ages 12 to 13 years and 16 to 17 years, the respondents were asked how well (from 0=not well at all/constant problems to 4=very well, no problems at all) they got along with their siblings in general.

**Peer Group Measures**

In addition to family, peers were cited by youth as a key source of social capital. Following Morrow’s (1999; 2001a; 2001b) suggestion that peers are important owing to the amount of time they spend together, an indicator of the average number of days per week spent with friends outside of school was included in the analysis. Values ranged from 0 to 6.5 days per week.

Much of the youths' experiences of social capital outlined in the literature focused on the quality and intensity of relationships with peers (Holland et al., 2007; Leonard, 2005; Morrow 1999, 2000, 2001a, 2001b 2002, 2003). Emotional support from friends, such as the ability to share secrets, to discuss feelings and problems, and the trust that is concomitant with this emotional support, were cited.

²⁷ Those who did not have the indicated parent or siblings were likewise coded as 0 since it meant that they did not have this form of social capital.
as particularly important forms of social capital (Morrow, 1999). Respondents were asked in all three cycles how often (from 0=never to 3=all the time) they shared secrets and private feelings with their close friends. In addition to this, in the latter two waves of data collection, respondents were asked how frequently: (a) My close friends push me to do stupid things, (b) my close friends know who I am, (c) my close friends push me to succeed, and (d) I consider my close friends’ opinions. Each of these items was included individually in the analysis with responses coded on a five-point Likert type scale from true to false. The coding of the individual items was such that higher values represented a more positive relationship with friends.

In her discussion with youth, Morrow (1999) found that social capital among peer groups was most often generated within same-gender friendships. Respondents were asked: (a) How many of your close friends are girls, and (b) How many of your close friends are boys? Female respondents were given a valid interval-level score for the former item, and males given a valid interval-level score for the latter item. In some instances, however, Morrow (1999) found that opposite-sex friendships were discussed as a salient source of social capital. Following this, a measure of the number of opposite-sex friendships was similarly derived from the above two items and included in the analysis.

Finally, as Morrow (1999) points out, not only are peer groups sources of social capital that can promote healthy behaviour, but they are also a potential group in which health-inhibiting behaviours are fostered including cigarette smoking, alcohol consumption, and drug use. In each of the three cycles, respondents were asked to indicate how many (from 0=none/a few to 2=all) of their close friends: (a) smoke cigarettes, (b) drink alcohol, and (c) have tried marijuana? These items had

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28 Categories were: True, somewhat true, neither true nor false, somewhat false, false. These individual measures were not combined in a scale measure since the Cronbach’s alpha level did not meet the minimum requirement of 0.599 used in this study.
Cronbach’s alphas of no less than .707 for any of the cycles, and were summed to form a friends’ substance use scale for each cycle.

**School-based measures**

Following Morrow (1999; 2000; 2005) indicators of the nature and quality of respondents’ experiences at school with classmates and with teacher(s) were included in the analyses. At the age of 12 to 13 years, respondents were asked how frequently (from 0= all the time to 4=never): (a) children say nasty and unpleasant things to me at school; (b) I am bullied in school; and (c) I feel like an outsider (or am left out of things) at my school. Scores to these three items were averaged to create a scale representing the quality of school experience with a score of 4 indicating the most positive and 0 the most negative experience. The scale had coefficient alphas of 0.782 for males and 0.744 for females. For the remaining two cycles however, (ages 14-15 and 16-17) only the last of the scales’ three items (feeling left out at school) was included in the survey. The item was entered as a single item for these cycles and the coding mirrored that from cycle two such that lower scores indicated a greater frequency of feeling left out (more negative school experience).

The measures of the quality of youths’ relationships with their teachers included in the analysis closely approximated Morrow’s (2005) finding that fairness, support, and assistance represented social capital youth derived in this type of relationship. Response to two items scored as 0=never to 4=all the time, were combined: (a) When I need help, my teacher gives it to me; and (b) My teacher treats me fairly. Items had alpha coefficients of 0.645 and 0.718 for males in cycles 2 and 3 respectively, and 0.599 and 0.661 for females in cycles 2 and 3 respectively. Each formed a scale representing the quality of relationships with teachers ranging from 0, indicating the poorest relationship to 8 indicating the most positive relationship. In addition to this scale, a single dichotomous measure
from all three cycles indicating respondents' ability to talk to their teacher about themselves and/or their personal problems (coded [1] for yes and [0] for no) was used.

Social capital in activities

Involvement in leisure and community activities had mixed salience for youth in the youth-centred social capital studies (Dworkin, Larson & Hanson, 2003; Eccles & Barber, 1999; Holland, Reynolds, & Weller, 2007; Jarrett, Sullivan & Watkins, 2005; Larson, 2000; Leonard, 2005; Morrow 1999, 2003, 2005; Weller, 2006). Since the amount of time spent engaging in these activities reflects youths' dedication to the group (Morrow, 1999), an indicator of the frequency of time spent involved in activities outside of school hours was included in the analysis from the first two waves of data collection only. At ages 12 to 13 years and 14 to 15 years, respondents were asked to indicate their frequency (from 0=never to 3=4 times per week or greater) of involvement in the past year in (a) sports with a coach or instructor other than in gym class; (b) sports without a coach or instructor, other than in gym class; (c) dance, gymnastics, karate, cheerleading or other groups or lessons, other than in gym class; (d) art, drama, or music groups, clubs or lessons outside of class; and (e) clubs or groups such as Guides or Scouts, 4-H club, community, church or other religious groups.

In addition to these formal leisure activities, youth have indicated that "volunteering" was also an important source of social capital; however, they articulated it in the form of informal charitable events as opposed to participation in more formal, organized volunteer activities (Leonard, 2005; Weller, 2006; Whiting & Harper, 2003). Respondents were asked to indicate whether (coded 1)
or not (coded 0) they had, in the past year, helped out without pay by: (a) doing activities at school (yearbook, council, school patrol, etc.); (b) adopting a cause (food bank, environment cause etc.); (c) fundraising (a charity, school trips etc.); (d) in the community (hospital volunteering etc.); and (e) helping neighbours or relatives (cutting grass, babysitting, shovelling snow etc.)?

Deriving support from adults in these activity settings, for example by being able to talk to a coach or leader about problems, was also presented as an important form of social capital for youth within the literature (Holland, Reynolds, & Weller, 2007; Weller 2006). In each wave of data collection, the participants in this study were asked to indicate whether (coded 1) or not (coded 0) they felt they could talk to their coach or leader about themselves or their problems.

Finally, the young people participating in Leonard’s (2005) study indicated that paid work was a particularly salient site for the generation of social capital. Only at ages 14 to 15 years were respondents asked whether (coded 1) or not (coded 0) they had a job (paid work) in the past year.

Control Variables

Given the aim of the study, to explore the influences of social capital on the timing of sexual intercourse among youth, it is important to be able to examine the influence of social capital over and above factors that have been cited as influences in previous literature. The most common strategy for doing so is to include known extraneous factors as control variables in the model. As demographic, biological, lifestyle, and family socioeconomic factors have been known to influence sexual activity among youth, by controlling for them the model gives a better indication of what youths’ social capital contributes to the prediction of

\( ^{68} \text{The corresponding variable in cycle 2 for females was entered into the model as a series of dummy variables using ‘never’ as the reference category owing to the variable’s violation of linearity with the dependent variable. All other variables listed were entered as continuous variables given their approximate linear relationship with the dependent variable.} \)
timing of first sexual intercourse among youth exclusive of the effects of these other variables. Data on each of these control variables was extracted at only one time point (in the fourth cycle).  

**Demographic characteristics**

Several measures indicating demographic characteristics such as region of residence in Canada, age, and the size of area of residence were included in the model. Two dummy indicators were included to identify those living in rural areas and those in urban areas with populations less than 99,999. The reference group for these variables was those living in urban areas with populations greater than or equal to 100,000. A series of four dummy-coded indicators were incorporated into the model to identify youth living in British Columbia, the Prairie provinces, the Atlantic provinces and in Quebec. The reference for these indicators was youth living in the province of Ontario. Finally, a dummy-coded variable distinguishing between those who were 16 years old in cycle four (coded as 0) and those who were 17 or just 18 years (coded as 1).

**Family Socioeconomic characteristics**

The model included four measures of the family’s socioeconomic status taken from data collected from the PMK (person most knowledgeable) of the youth participants. These indicators included family income adequacy as calculated by Statistics Canada (measured with a four-point scale ranging from “lowest/lower middle adequacy” to “highest income adequacy”), completed years of schooling of

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31 These measures were present across all cycles, however, they were highly correlated across cycles suggesting they did not vary a great deal. Therefore, data from only the most recent cycle was used.

32 Although race or ethnicity has been demonstrated in the literature to be correlated with sexual activity, it could not be included in these analyses given the lack of variability on the variable and the high proportion of non-response.

33 This indicator was derived by Statistics Canada on the basis of annual household income compared to household size. For example, the lowest income adequacy category consists of households with an income of less than $10,000 per year and one to four people living in the home or an income of less than $15,000 per year and five or more persons living in the home.
both the PMK and the PMK's partner/spouse (measured in years ranging from 0 to 20), an indicator of the occupation of the PMK and that of their spouse (distinguishing those who are farmers or work in the farm industry from all other occupations).^{34}

*Individual and lifestyle characteristics*

Since cigarette smoking, alcohol consumption and drug use have been correlated with sexual behaviour in adolescence (Galambos & Tilton-Weaver, 1998; Smylie, Medaglia & Maticka-Tyndale, 2006), a measure of participants' involvement in these was included in the model. Respondents were asked at each cycle to indicate whether (coded 1) or not (coded 0) they had ever: (a) smoked cigarettes; (b) been drunk; and (c) tried marijuana. The responses from each cycle were combined to create a substance use scale across the three cycles since the items demonstrated a Cronbach alpha of .722 for males and .734 for females. Scale scores ranged from 0 to 9.

A measure of the number of boyfriends or girlfriends respondents had over the three cycles was included in the model. This measure was derived from a sum of responses to a single item over the three cycles. Respondents were asked to indicate how many different boyfriends (for girls) or girlfriends (for boys) they had in the past 12 months. Response categories were ranges: none, one, two or three, four or five, six or more. The first two categories remained in their original form, however, the mid-points of the remaining categories were used to form an interval level measure. This measure was summed over the two cycles to arrive at the final measure of the number of boyfriends or girlfriends over the time covered in this study.

^{34} The original occupation variables indicated several other categories ranging in prestige from profession to unskilled labourer. The effect of these variables was non-significant and in the same direction in the model. Therefore, they have been used here as the reference group for farmers/farm labourers which demonstrated a different and significant relationship to the dependent variable.
Finally, a measure of pubertal development or a respondents' progress through biological changes of puberty, was included in the model. Females' pubertal development was assessed by three questions asked in each cycle: (a) Have your breasts begun to grow?; (b) Have you begun to menstruate; and (c) have you begun to grow body hair?. Male's pubertal development was similarly assessed by the following questions: (a) Have you noticed a deepening in your voice?; (b) Have you begun to grow hair on your face?; and (c) Have you begun to grow body hair? Response choices to each of these questions were as follows: has not yet started (coded 1), has barely started (coded 2), has seen definite changes (coded 3), or the change seems complete (coded 4). Following the measurement of pubertal development in previous research (Dick, Rose, Pulkkinen & Kaprio, 2001; Gillis, 2005) the scores on these items from each cycle were summed among females and among males to form two pubertal development scales, one for each gender. The scales for both males and females demonstrated excellent construct validity insofar as they correlated highly with age (Pearson's r coefficients were significant at the .001 level and were all above a magnitude of 0.7 for all cycles among both males and females).

Figure I below depicts factors that contribute to the stock of resources that youth can draw on in making decisions about the timing of first sexual intercourse.

This scale was not adjusted to reflect the original coding of the constituent variables (with a range from 0 to 4) because doing so led to the violation of linearity of this variable with the dependent variable.
Demographic Characteristics:
- household income
- parent(s)' occupation
- parent(s)' years of education
- size of area of residence
- region of residence
- age

Lifestyle Variables:
- extent of substance use
- number of boyfriends/girlfriends
- progression through pubertal development

Family Social Capital
- quality of relationship with mother
- quality of relationship with father
- ability to talk to mother
- ability to talk to father
- quality of relationship with siblings
- ability to talk to brother
- ability to talk to sister

Peer-Based Social Capital
- friends' substance use
- sharing secrets with friends
- number of opposite sex friends
- number of same sex friends
- amount of time spent with friends
- friends push to do stupid things
- friends know who they are
- friends push to succeed
- considers close friends' opinions

School-based social capital
- quality of school experience
- quality of relationship(s) with teacher(s)
- ability to talk to teacher(s)
- feeling left out at school

Activity-based social capital
- frequency of involvement in leisure activities
- informal volunteering (helping without pay)
- labour force participation (paid work)
- ability to talk to coach/leader

Figure 1. Conceptual model
Figure 1 implies that while sexual behaviour appears to be an individual matter, it is embedded within a broader social context. Young people are embedded within a web of relationships including family, peers, teachers, coaches, leaders and community members. Within these relationships, norms of behaviour are established, including those pertaining to sex. Individuals within these networks communicate these norms along with sanctions for deviating from the expected behaviour. Through these relationships youth gain access to information about sex as well as to potential sexual partners. It is in these ways that social capital is thought to exert its influence on the timing of first sexual intercourse.

Data Analysis Method

All analyses were performed using STATA (version 9) (Stata Corp, 2001). Since the outcome variable was a binary measure, logistic regression was used to estimate its relationship to the explanatory social capital variables and to the control variables. Owing to the large number of independent variables and to the exploratory nature of the analysis, a combination of two model-building procedures was used. The two model-building procedures used to build the final model were forced entry block modelling and backward and forward stepwise procedures. Stepwise regression is a semi-automated process of building a model in which variables are successively added and/or deleted using either some stipulated statistical criterion or theoretical justifications. This approach is preferable both to merely entering all variables at once and to using only hierarchical block models since it provides greater power for sifting through a large number of explanatory variables. Using two separate model-building procedures enables the identification of statistical associations which might otherwise have been missed by one or the other statistical approach.

In the first model-building procedure, the independent variables were entered in blocks beginning with the control variables, followed by family social capital,
peer group social capital, school-based social capital, and activity-based social
capital measures in that order. With the exception of the group of extraneous
variables, this ordering of blocks was based on the relative importance of each
group of variables within the social capital literature. Following the entry of the
full block of extraneous variables, within each block of social capital indicators,
variables were eliminated (backward stepwise) individually, beginning with the
least significant. Once only significant variables from the block remained, the next
block was added. When only significant social capital variables remained the
extraneous variables were trimmed using the same backward stepwise procedure,
beginning with the least significant. When a trimmed block entry model was
derived, the second model-building procedure began. In this case, the analysis was
done in reverse, adding individual variables back into the model. The youth-
centred social capital literature was drawn on to theoretically guide the order of
variables to be entered within each block, as it had been drawn upon to guide the
order of entry of blocks of variables. Variables were entered into the model
beginning with those with the greatest relevance to the social capital of youth as
presented in the youth-centred social capital studies, followed by those less
significant in the narratives of the youth participating in those studies. If a
variable was not shown to be significant, it was removed before adding the next
variable into the model. If it was a significant predictor, it remained in the model
and the next variable was added. Each of the significant variables in the model
were re-evaluated at each step of the model building process and any variables
that lost significance following the addition of a variable to the model were
removed individually. The final product was a trimmed model containing only
those predictors that were significant in either the backward, statistically-driven,

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36 In order to determine the contribution of social capital variables to the prediction of timing of first sexual behavior over and
above known extraneous variables, these extraneous variables must have been left in the model until all social capital blocks
had been entered.
and/or the forward, theoretically-driven, stepwise procedures. Given the exploratory nature of this research, a significance level of .05 was used to determine the significance of all independent variables.

Three final points with respect to the statistical procedures used in this study warrant mention. First, each of the independent variables was plotted against the logit of timing of first sexual intercourse (the dependent variable in logistic regression) in order to determine the extent to which assumptions of linearity were being violated. Where variables did violate the assumption of linearity, appropriate modifications were made. These modifications were chosen from among those widely used in sociology, including dummy-coding, truncating and scaling. The most difficult of these modifications was among those variables that exhibited slopes that changed directions. In such cases, splines were created to account for the different slopes and were included in the analysis along with the original variable. Second, throughout the analysis, the bootstrap method was employed to properly estimate the variance for the model. This method "weights" each of the cases using numerous "bootstrap weights", supplied directly by Statistics Canada, that are calculated based on the clustering of cases in the sampling frame. This method was necessary for accurately estimating the variance of coefficients obtained from complex survey designs, such as that used with the NLSCY, because Primary Sampling Units (PSUs) and Strata were not provided by Statistics Canada in the data set. Finally, owing to the complex relationship between gender and social capital found in the youth-centred social capital literature (Morrow 1999, 2002; Weller, 2006), and between gender and sexual behaviours (Tolman, Striepe & Harmon, 2003), the model was run separately for males and females. This allowed for the different experiences of social capital and sexual behaviour among males and females to be accounted for.
Results

Sample Profile

Data from a sample of 1600 youth (780 males and 820 females) were used in the analysis. Tables III through VI show the proportional weighted distribution of the sample on various demographic and lifestyle characteristics, as well as the distribution of scores on the outcome measure of timing of first sexual intercourse experience beyond the third interview (cycle 4) for males and females. Weighting created an overall distribution of respondents across regions that paralleled the distribution of the Canadian population with the largest proportions from Ontario and Quebec, and the smallest proportion from the Atlantic region. The distribution by size of area of residence also paralleled that of the general Canadian population with the smallest proportion of respondents residing in rural areas and larger proportions residing in urban areas with populations less than 99,999 and urban areas with a population of 100,000 or greater. The age of respondents at the time of the most recent data collection was evenly distributed among males and females (48.1% were 16 years and 51.9% were 17 or 18 years of age among both genders).

With respect to household income adequacy, the upper middle and highest income adequacy categories included the vast majority of households. The median score for both PMK and their partner/spouses' completed years of education was 12 years among both males and females. This is the equivalent to having a high school diploma in most provinces in Canada. Finally, only a very small proportion of the households could be described as "farm families" having either PMK or their partner/spouse working as a farmer or farm labourer.

The median number of boyfriends or girlfriends reported over the course of the three cycles of data collection was one for both males and females. There were

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\textsuperscript{7} For a complete discussion of attrition across samples see Chapter 2 and Appendix A.
no significant differences found in the number of substances (cigarettes, alcohol, drugs) used by respondents over the three cycles. The majority of both male and female respondents reported using four or more, out of a possible nine substances, over the three cycles. The most common of the substances used was cigarettes with just under one quarter having ever had a cigarette by age 12 or 13. Finally, with respect to the outcome measure, just slightly more than half of both males and females reported not having had their first sexual intercourse experience by cycle four, that is by age 16 or 17 years. This finding is consistent with the youth sexuality literature which suggests a consistent median of between the 16th and 17th birthdays.

[Tables III through VI about here]

Social capital and the timing of first sexual intercourse among youth

Tables VII and VIII present the results of the bivariate analyses for males and females respectively. The complex sampling method makes it awkward to obtain significance values (p-values) for coefficients. Consequently, in these analyses bivariate statistics were produced through bootstrapped, bivariate logistic regression procedures. For the sake of space, only those variables that are prominent in the youth social capital literature, and/or that demonstrated unexpected relationships in the multivariate analyses are presented. For the sake of brevity, the bivariate logistic regression results are discussed alongside the multivariate logistic regression results below.

Tables IX and X present the results from the final trimmed logistic regression models examining the impact of a youth-centred conceptualization of social capital on the timing of first sexual intercourse among males and females respectively.
Males' social capital and timing of first sexual intercourse

The model summary statistic for the full final multivariate model reported in Table IX provides an indication for the overall fit of the model. The significance of the F statistic ($p \leq 0.001$) suggests that all variables taken together as a set significantly predict the timing of first sexual intercourse among males. As indicated, the first variables entered into the model were demographic characteristics, biological markers, lifestyle measures and family socioeconomic indicators. Among these, only the number of girlfriends between age 12 and 17 years retained a statistically significant impact on the timing of first sexual intercourse. In particular, with each additional girlfriend reported by the male respondents, the odds on delaying first sexual intercourse beyond age 16 or 17 years decreased by a factor of 0.619 (AOR = 0.619, $p = 0.000$). This suggests that first sexual behaviour among males is experienced within the context of a relationship. Note that males who had missing data on the number of girlfriends between age 12 and 17 years had almost 48 times higher odds on postponing than males who had valid data for this variable (AOR = 47.75, $p = 0.004$). This result suggests that it may largely be males who have had no girlfriends that are represented in this indicator.

The significant social capital variables in the model represent a range of sources of social capital including family, friends, school, and community or leisure activities. Among the family-related variables, only the ability to talk to a brother about oneself and/or one’s problems at the age of 16 or 17 years was a significant predictor. Males who reported being able to talk to their brothers had 0.315 lower odds on postponing first sexual intercourse than males who reported not being able to talk to their brothers. This is equivalent to a 3.2 times higher odds on first sexual intercourse at or younger than 16 to 17 years of age for those able to talk to their brothers.
Friends’ substance use both at 12 to 13 years of age and 14 to 15 years of age was a significant predictor of delaying first intercourse experience beyond 16 or 17 years among males. The influence of friends’ substance use at the age of 12 to 13 years is more complicated than that of friends’ substance use at the next data collection cycle. At 12 to 13 years, with each unit increase on the friends’ substance use scale up to a score of 4 on the scale, the odds on male respondents delaying sexual intercourse decrease by a factor of 0.496 (AOR = 0.496, p=.000). Beyond a score of four, that is as the frequency of substance use moves from four to six, the odds on postponing increase among males. In fact, with each additional score on the friend substance use scale beyond a score of four, the odds on male respondents delaying first sex increase by a factor of 6.323 (AOR = 6.323, p=.017). This finding challenges and complicates much of the youth sexuality literature that forwards the simplistic view that friends’ involvement in risk behaviour pushes adolescents towards involvement in risky behaviours themselves, including sexual behaviour. At age 14 to 15 the relationship between friends’ substance use and the delay of first sex among males is more straightforward, and supports previous findings in the literature. At this age, the odds on male respondents delaying first sexual intercourse decrease by a factor of 0.726 with each unit increase on the friends’ substance use scale (AOR = 0.726, p=.012). This suggests that at ages 14 to 15, the greater the use of substances among friends, such as drinking, smoking and drugs, the lower the odds on a male postponing first sexual intercourse beyond the average age of 16 to 17 years. It is worth noting that while friends’ substance use at age 16 or 17 years (cycle 4) demonstrated a significant bivariate relationship with timing of first sexual intercourse (Table V: b = -0.570, p<.001), once other variables are controlled for, its effect disappears.

The significance of the contribution of the spline of this variable to the overall model was tested by examining the difference of the L-squared for a model without the original variable and the spline, to one with both the original variable and its spline with two degrees of freedom. The L-squared difference of 57.33 is significant at the .001 level under two degrees of freedom (p=.0000).
Only one school-based social capital measure was a significant predictor of the delay of first sexual intercourse among males. The measure indicating the extent to which respondents felt left out at school at age 14 to 15 years was negatively related to the odds on postponement. Given the direction in which this measure was scored, this means that males who less frequently felt left out at school had lower odds on delaying first sex than those who felt left out with greater frequency (AOR = 0.314, p=.008). This finding is not surprising since it may be that males are gaining access to partners through schoolmates. In a similar vein, this effect can be conceived of in terms of popularity with peers at school. That is, those who are not left out at school, who are more popular with peers and are building social capital within the school atmosphere, are more likely to have access to partners and thus the opportunity to engage in sexual intercourse.

Finally, two measures of involvement in community and leisure activities were significant predictors of postponement of first sex among males. As would be predicted from the youth social capital literature, more frequent involvement in activities like scouts, 4H clubs and the like, at age 14 to 15 years, had a positive effect on the delay of first sex. With each unit increase on this scale towards greater involvement in these activities, the odds on males delaying first sex increase by a factor of 2.296 (AOR = 2.296, p=.015). Interestingly, volunteering by helping out in the community at age 12 to 13 years had an opposite effect to what would be expected in the literature. Males who volunteered by helping in their communities had 0.188 times lower odds on delaying first sexual intercourse than males who did not engage in this activity (AOR = 0.188, p=.013).

[Tables VII and IX about here]
Females' social capital and timing of first sexual intercourse

Table X presents the corresponding stepwise logistic regression results for females. The significance of the model summary statistic for females indicates that all variables taken together as a set significantly predict timing of first intercourse among the female sub-sample ($p \leq .001$). Similar to the findings for males, the number of boyfriends female respondents reported negatively impacted the odds on delaying first sexual intercourse ($AOR = 0.533, p = .000$). The extent of involvement in the use of substances, like drinking, smoking and marijuana use ($AOR = 0.583, p = .000$), years of education completed by the PMK of the respondents ($AOR = 5.839, p = .032$), and the age of the respondent ($AOR = 0.474, p = .027$) had significant effects on the timing of first sexual intercourse by females that were consistent with past research on adolescent sexual behaviour. In particular, females who engaged in substance use with greater frequency and females who were 17 or 18 years of age had lower odds on postponing first sexual intercourse beyond the age of 16 or 17 years. The significance of the indicator of age among females accounts, in part, for the somewhat unclear split on the dependent variable. This finding suggests that 16 year-old females were more likely to be included in the 'postpone' category. Finally, as the number of years of education of the person most knowledgeable of the female respondent increased, so too did the odds on postponing first sexual intercourse beyond the age of 16 or 17 years.

Contrary to the patterns noted among males, none of the family-based social capital variables remained significant in the multivariate model for females. The quality of females' relationships with their fathers, both at age 14 or 15 and age 16 or 17 were initially significant predictors of timing of first sexual intercourse when only family social capital variables were present in the model. When measures of peer-based social capital were added to the model, however, the effect of relationships with their fathers at both of these ages drops out. This suggests that measures of females' relationship with their father shares variance with peer-
based social capital measures, and that peer-based social capital measures exert a stronger influence on the timing of first sexual intercourse among females. Peer group, school and activity-based social capital did appear to significantly impact the delay of first sexual intercourse among females in the final model. In particular, both the amount of time spent with friends, as well as the nature and intensity of friendships were significant predictors of the delay of first intercourse among females. The measure of the average number of days per week spent with friends at age 16 to 17 years demonstrates a somewhat complex relationship to the postponement of first sexual intercourse among females. Up to 2.5 days per week, increased time spent with friends at this age increased the odds on delaying first sexual intercourse (AOR = 2.011, p=.037). Beyond 2.5 days per week, however, increased time spent with friends decreased the odds on postponing first sexual intercourse (AOR = 0.403, p=.020). This finding suggests that what females do when together with their friends and/or the quality of the relationships they have with friends may be significant factors in the timing of first sexual intercourse, though further research is needed to further explore this possibility. Females who consider their friends’ opinions at age 16 or 17 years all or most of the time had higher odds on postponing first sexual intercourse than females who never or rarely considered their friends’ opinions (AOR = 3.668, p=.001). This finding is consistent with previous research on adolescent sexuality that suggests that female peer groups encourage more conservative norms of sexual behaviour.

The frequency with which respondents reported sharing secrets and/or personal feelings with friends at age 12 to 13 years demonstrated a significant effect on females’ timing of first sexual intercourse. With each unit increase in the frequency with which females report sharing secrets and/or private feelings with

\[9^9\] The significant contribution of the spline of this variable to the overall model was tested by examining the difference in L-squared between a model without the original variable and its spline, to one with both the original variable and its spline under two degrees of freedom. The difference in L-squared of 11.85 is significant at the .005 level under two degrees of freedom (p = .0027)
their close friends, the odds on delaying first sexual intercourse decrease by a factor of 0.578 (AOR = 0.578, p=.013). This may point to an early break from family and a closer relationship with friends at this early age.

The overall measure of school experience at age 12 to 13 years was the only school-based social capital measure significantly related to postponement of first sexual intercourse among females. As the social capital literature supports, more positive experiences at school increased the odds of delaying first sexual intercourse (AOR = 1.905, p=.050). Interestingly, this finding is somewhat contradictory to that for males. Among males, those who felt left out at school had increased odds on postponing, whereas with females, those who have more positive experiences at school had increased odds on postponing. This contradiction points to the need for allowing for a gendered analysis of social capital among youth. It is worth noting that the only school indicators remaining in the models for both males and females were those related to peers. It is questionable as to whether these indicators are measuring social capital within the school environment in particular, or rather are indicators of social capital among peers more generally.

Finally, two measures of participation in community and leisure activities at age 14 to 15 years were significant predictors of the odds of delaying first sexual intercourse among females, namely frequency of involvement in sports without a coach and volunteering by adopting a cause. For each of the series of dummy variables representing frequency of involvement in sports without a coach or leader\(^40\) "less than once per week" (AOR = 0.145, p=.019), "between one and three times per week" (AOR = 0.233, p=.036), and "four times per week or more" (AOR = 0.192, p=.015), the odds on postponing first sexual intercourse were lower than

\(^{40}\) Since the direction of the relationship for each of these dummy variables was the same, the contribution of the dummy variables to the model was compared to a model using the original variable, using a test in the difference in L-squared between the model under two degrees of freedom. The difference in L-squared between the models of 11.05 is significant at the .005 level under two degrees of freedom (p=.004).
those who did not participate in this form of leisure activity at all. Volunteering by adopting a cause raised the odds on postponing first sexual intercourse among females by a factor of almost four, compared to those who did not engage in this form of volunteering (AOR = 3.944, p=.001).

[Tables VIII and X about here]

Discussion and Conclusion

Although recent research in the field of youth sexuality has begun to employ the conceptual framework of social capital to highlight and explain the impact of social context on youths' sexual behaviour (Crosby, Holtgrave, DiClemente, Wingood & Gayle, 2003; Denner, Kirby, Coyle & Brindis, 2001; Furstenburg & Hughes, 1995; Gold, Kennedy, Connell, & Kawachi, 2002; Holtgrave & Crosby, 2003; Morrison, Howard, Hardy, & Stinson, 2005; Smylie, Medaglia, & Maticka-Tyndale, 2006; Weitzman & Chen, 2005), none of the existing research has attempted to examine the utility of a more relevant youth-centred conceptualization of social capital to this end. In addition, none of the studies to date account for the changing nature of youths' social relationships over time, nor do they examine what implications this has for the relationship between social capital and sexual behaviour-related outcomes longitudinally. This analysis of a nationally representative panel survey of youth sheds light on these issues. Guided by the recent youth-centred conceptualization, this paper examined the relationship between indicators of youths' own social capital and the timing of first sexual intercourse either at or below the Canadian median age of between the 16th and 17th birthdays years or later.

To begin, within the multivariate analyses few of the demographic characteristics and lifestyle variables had a statistically significant impact on the odds of postponing first sexual intercourse beyond the Canadian median. While it
appears that this finding may diverge from the existing literature on social capital and youths' sexual behaviour (c.f. Smylie et al, 2006), this is not necessarily the case. Several of the demographic and lifestyle variables did exert statistically significant bivariate effects on the timing of first intercourse among males (substance use, number of girlfriends, income adequacy, progression through pubertal development, number of years of education completed by both parents, region of residence and age) and females (substance use, number of boyfriends, income adequacy, progression through pubertal development, years of education completed by the PMK, size of area of residence, region of residence and age). The fact that these effects disappear when social capital variables are introduced into the model points to the ways in which these effects are exerted. This analysis included more social capital indicators than previous studies have, providing the opportunity to elaborate on the ways in which demographic and lifestyle characteristics exert an influence. Therefore, the difference in findings may be due to the inclusion of a greater variety of social capital measures than has been included in previous research. Secondly, the difference between the findings of this paper and previous research may, in part be due to the measurement of timing of first sexual intercourse. None of the previous studies have dichotomized the timing of first sexual intercourse as was the approach taken in this research. To date, most research has predicted timing of first sexual intercourse as a continuous variable. The approach taken in this paper to the measurement of timing of first sexual intercourse has the advantage of examining predictors of phases of timing, early/average versus late, as opposed to merely age itself. That is, by dichotomizing timing of first sex, this paper was able to examine predictors of initiating at or before the median age in Canada (at 16 or 17 years) and delaying beyond this median age. Studies employing a continuous indicator of timing of first sexual intercourse are unable to distinguish between these two groups of youth.
The analysis suggests that indicators of family-based social capital have limited predictive power for the timing of first sexual intercourse among youth when other social capital indicators are included in the multivariate model. For example, none of the variables measuring relationships with parents were statistically significant in the multivariate analyses. It is worthy to note, however, that several of these variables demonstrated statistically significant bivariate relationships (see Tables III and IV) with the timing of first sexual intercourse. In particular, among males, the quality of their relationship with both their father and their mother at ages 14 to 15 years and at 16 to 17 years were statistically significant predictors of timing of first sexual intercourse. Among females, getting along with their father at age 12 to 13 years, getting along with siblings at this same age, the ability to talk to their father and their mother at age 12 to 13 years, the quality of their relationships with their father and their mother at age 14 to 15 years, the ability to talk to their mother at ages 14 to 15 years, and the quality of their relationship with their father at age 16 to 17 years all demonstrated statistically significant coefficients in the bivariate analyses. Their influence on timing of first sexual intercourse disappears, however, when indicators of other sources of social capital are introduced. That is, once indicators of social capital among peers, school, and within activities are introduced, the effects of parents falls away. The findings presented in this paper appear to elaborate on the pathways through which parent-child relationships and communication with parents have been found in previous research to be significant predictors of early sexual debut among youth (Karofsky, Zeng, & Kosorok, 2000; Whitaker & Miller, 2000). This finding fits with previous literature that suggests that young people form identities away from the family during this period of life, and that relationships outside of the family exert a stronger influence on timing of first sexual intercourse. In partial support of this assertion, the ability to talk to brothers about their problems and about themselves, among males, was the only
family-based measure that had a significant effect on decreasing the odds of postponing first sexual intercourse beyond 16 to 17 years within the multivariate analysis. At this older age, turning to a brother is more like turning to a peer than to a parent. As Gillies & Lucey (2006) note, siblings can be very effective enforcers of norms and sanctions, many subjecting siblings to surveillance, moral pressure and coercion. In addition, they found that older, same-sex siblings were also relied on as role models, particularly during periods of transition in which they were turned to for advice. Therefore, brothers may wield considerable authority in defining appropriate sexual behaviour among male siblings. Though it was not possible to include an indicator of the age of siblings in this analysis, future research is warranted to elaborate on the nature of social capital built in certain sibling relationships.

The analysis also pointed to effects of peer group relationships on the timing of first sexual intercourse. Consistent with the existing literature that suggests female peers are enforcers of more conservative norms of sexual behaviour, considering close friends’ opinions had a positive effect on the odds of females delaying first sexual intercourse. Contrary to this literature however, the frequency of sharing secrets and feelings with close friends demonstrated a negative effect on females’ odds of postponing first sexual intercourse. Females who shared secrets and private feelings with their close friends at the earliest age (12 or 13) with greater frequency, had lower odds of delaying first sexual intercourse experience. This suggests that girls who are embedded more within a peer group at this early age are less likely to postpone first sexual intercourse beyond the age of 16 or 17 years. Future research is needed, however, to explore what it is about these peer groups that influences timing of first sexual intercourse in this way.

Characteristics of the nature of friendships that future research could explore might include time spent with friends. In this analysis, time spent with friends among females showed a curvilinear pattern in relation to the timing of first sexual
intercourse. Less frequent time spent with friends outside of school increased the odds of postponing first sexual intercourse among females, however, at high frequencies of interaction the odds of postponing first sexual intercourse are decreased. There is an optimal frequency of contact with friends with respect to postponing first sexual intercourse at 2.5 days per week. It is not altogether clear how these factors exert their effect on timing of first sexual intercourse among youth, however, it might perhaps be attributed to the types of activities engaged in at the different levels of contact with friends. Further research into these mechanisms is warranted.

The remaining indicators of peer group relationships had a more complex relationship to sexual behaviour than is typically noted in the literature. The extant literature would suggest that friends’ involvement in substance use would have a consistent negative effect on the odds of postponing first sexual intercourse among youth (see Kirby 2001 for review). The findings from this study suggest that the effect of peers’ own substance use is not as straight-forward. At a very early age when males are barely out of elementary school and long before they reach the legal age of alcohol and tobacco use, low levels of peer use of substances decreased the odds of postponing first sexual intercourse decrease among males. However, high levels of peers’ use of substances at this age, increased the odds of delaying first intercourse among males. The implication then is that at a very early age, males who have a group of friends who all engage in cigarette smoking, alcohol use, and drug use, are the most likely to postpone first sexual behaviour beyond the Canadian median of between the 16th and 17th birthdays. Interestingly, a significant effect of friends’ substance use was found among males only. Among females, friends’ substance use measured at all three time points demonstrated highly significant bivariate relationships with the timing of first sexual intercourse (p≤.001). These relationships disappear, however, once the other variables are entered into the model.
The effect of school experiences on the timing of first sexual intercourse differed among males and females. For males, more frequently feeling left out at school was associated with higher odds of postponing first sexual intercourse. The nature of this relationship is not surprising given that males who are more attached to schoolmates have greater opportunities to engage in sexual behaviour than males who are left out at school. Males who are left out do not have ready access to partners among individuals with whom they spend the most time, schoolmates. Among females, however, a more positive school experience, measured by various indicators of the quality of relationships with school peers, was associated with higher odds of postponing first sexual intercourse. It is worth mentioning that the only school-based indicators that remained significant throughout the multivariate analyses were those that pertain to relationships with peers. Therefore, it appears that the aspect of school that is most relevant to the timing of first sexual intercourse is the relationship with school peers.

The analysis showed that certain leisure and community-based activities were associated with the timing of first sexual intercourse among both males and females, with the types of activities and the nature of the relationships differing by gender. These findings suggest that Putnam's (2000) theoretical focus on participation within the community, 'volunteering' and involvement in team sports, might have purchase here. With respect to leisure activities, only involvement in scouts, 4H clubs and the like was a significant predictor of the timing of first sexual intercourse among males, whereas only involvement in sports without a coach was significant among the female subsample. Among males, more frequent involvement in activities like Scouts or 4H clubs increased the odds of postponing sexual intercourse. Among females, involvement in sports without a coach or leader, regardless of the frequency, was related to lower odds of postponing first sexual intercourse. Both of these are consistent with Putnam's explanation of the role of different types of leisure activities in building social
capital. Scouts, Guides and 4H clubs are activities that are adult-supervised activities with a focus on values and activities that are designed to purposefully draw youth away from activities such as substance use and sexual activity or to focus their attention on building specific skills. This is consistent with building social capital that would keep youth away from early sexual activity. Eccles and Barber (1999) further suggest possible mechanisms through which sports activities may exert their influence on sexual behaviour among both males and females. In particular, they suggest that to the extent to which one participates in these activity settings, it is likely peers will be drawn from among other participants. Behavioural differences associated with such activities may be in part due to the behavioural differences of peers within these activity settings. The negative impact of sport participation on odds of postponing first sex among females fits with a similar explanation to the extent that the existing literature suggests that involvement in sports promotes engagement in substance use and sexual activity owing to behaviours condoned by other participants in these activities (Eccles & Barber, 1999).

Finally, the findings point to the significant effects of only two forms of volunteering among males and females on the delay of first sexual intercourse. Again, the type of involvement differed by gender. For males, volunteering by helping out in the community had a negative effect on the odds of postponing first sexual intercourse. Among females, volunteering by adopting a cause exerted the opposite effect, increasing the odds of delaying first sexual intercourse experience. Keeping with the suggestion of Eccles and Barber (1999), in order to understand the mechanisms underlying these different effects, research would have to explore the nature of the specific activity being undertaken and the participants encountered in these settings.

It is clear from the above discussion that social capital, experienced at different times in youths' lives, differentially influences the timing of first sexual intercourse.
among youth. Given that this period of life involves several transitions, including the onset of puberty, movement from elementary to high school, graduation from high school, and entry into the labour force, this finding is not surprising. For males, important factors earlier in adolescence, at age 12 or 13 years are the extent of friends’ substance use and helping in the community. For females, important factors at this early stage of adolescence include sharing secrets with friends, the quality of their experience at school, and participating in sports without a coach. At age 14 or 15 years among males, the extent of friends’ substance use is again a significant factor in the timing of first sexual intercourse, along with the degree to which they feel left out at school and the extent to which they participate in groups such as Scouts and 4H club. For females, at this age only volunteering by adopting a cause is an important factor in the timing of first sexual intercourse. In later adolescence, being able to talk to their brother about themselves and/or problems is an important predictor of timing of first intercourse among males. Among females, important factors at this age include whether or not they consider their close friends’ opinions, and the amount of time spent with friends. What is evident from these findings is that peer relationships exert considerable influence on both males’ and females’ timing of first sexual intercourse. It is also clear that building foundations of social capital among youth at an early age is important in the context of youths’ sexual behaviour.

Though this paper has made a contribution to our understanding of the social context of youths’ sexual behaviour, it is not without its limitations. First, in dichotomizing the dependent variable such that respondents who, at some point in the data collection process (either in cycle 2 at 12 or 13 years old, in cycle 3 at 14 or 15 years old, or in cycle 4 at 16 or 17 years old) indicated they had initiated

\footnote{Although given the number of predictors tested in the models, one might expect that this differential influence across time might be due to chance, a more conservative criteria, namely a p-value of no greater than .01, was used to address this possibility.}
sexual intercourse are given a score of 0, and respondents who never indicated they had initiated sex in any of the cycle were given a code of 1, there is some overlap in the categories of the variable. There is not a clear distinction in the categories of the variable since there are some 16 year-old respondents coded as not having initiated by the median age who still might initiate prior to age 17 years. This is seen in the significance of the age variable for females. It also follows from the nature of the derived dependent variable, that not all independent variables were measured prior to the timing of first sexual intercourse. This particularly affects those youth who did not postpone first sexual intercourse beyond the age of 16 or 17 years. For this youth, some or all of the measures of social capital were taken at the same time or following the timing of first sexual intercourse. As presented in Table II the distribution of the sample that initiated during or prior to each data collection cycle, this affects approximately 37.9% of females and 24.5% of males in the study’s sample.

Finally, in an attempt to ensure that the wording of survey items was age appropriate, some of the items in the NLSCY used in this paper lacked consistency across cycles, and some were omitted at certain ages. Therefore, it is conceivable that changes in coefficients and their significance across cycles may be an artefact of question wording and not a reflection of the experiences of youth. Given the limited national level data in Canada on both sexual behaviour and social capital among youth, the measures used herein were the best possible.

Four conclusions emerge from the findings of this paper. First, the significance of the global tests of the models provide partial evidence that social capital, as measured by indicators made relevant in youths’ own narratives, is a useful theoretical framework for understanding the influence of social relationships and social context on the timing of sexual behaviour among youth. Consistent with the youth-centred social capital theory, the findings suggest that
youths' peer groups both outside and within school, sibling relationships and participation in certain leisure and volunteer activities are related to the timing of sexual behaviour among youth. However, many social capital indicators demonstrated unexpected and complex relationships to the odds of postponing sexual behaviour among youth. These relationships were further confounded by the age or time at which the measure of social capital was taken. Further, one of the most important sources of social capital articulated by youth in the literature, namely mothers, had no significant effect on the timing of first sexual intercourse experience in the multivariate analyses.

This, however, leads to the second conclusion stemming from this analysis, namely that many of the youth-derived indicators of social capital demonstrated significant bivariate relationships with timing of first sexual intercourse which disappeared in the multivariate models. Both the value of the coefficient and the level of significance drop when other variables are included in the model suggest that these variables share variance with those remaining in the model which account for more of the variance. For example, the quality of relationship with one's mother, as well as the ability to talk to one's mother both demonstrated statistically significant impacts on timing of first sexual intercourse at the bivariate level, suggesting that the impact of mothers on youths' timing of sexual behavior is in part contributed by other family factors. That is, once other indicators of familial relationships were introduced into the model, the effect of mothers disappears among both males and females. Future research is needed to explore the interaction of these variables. It is also worth noting that since relationship with parents was demonstrated to be a significant predictor of other aspects of youths' well-being, including academic performance (Dotterer, Hoffman, Crouter, & McHale, 2008; Turner, Chandler & Heffner, 2009), it is conceivable that the effect of social capital derived from parents may be context-specific and contingent. That is, specific sources of social capital might be relevant and mobilized to reach
certain goals and not others. Further research into the conditions in which social
capital is and is not mobilized is needed in order to clarify this finding.

Third, the findings from this study support the claim made in youth-
centred social capital literature that social capital is gendered (Gillies & Lucey,
2006; Molyneux, 2002; Morrow, 2002). Different indicators of social capital
emerged as significant predictors of the timing of first sexual intercourse among
males and among females. Where similar predictors were found for both genders,
the nature of the impact of the variable differed for males and females. Future
research on social capital among youth must account for its gendered nature.

Finally, it is clear from the findings that social capital among youth is highly
dynamic. Indicators of social capital significant at earlier cycles were not
significant two years later at the next data collection cycle (with the exception of
friends' risk behaviour among males). While no discernable patterns of the
temporal importance of social capital in relation to postponement of first sexual
behaviour among youth emerged from the data, the finding of temporal specificity
of the effect of social capital on timing of first sexual intercourse among youth is
significant in itself. The dynamic nature of youths' relationships implies that it
would be inappropriate to assess the impact of social capital on youth outcomes at
only one time point, and thus that longitudinal research is required to adequately
capture the impact of social capital on youths' well-being.

This article makes a contribution to both the adolescent sexuality literature
and to the youth-centred social capital literature, in part due to the youth-centred
conceptualization of social capital tested, and to the examination of the impact of
youths' dynamic relationships on social capital over time. Studies to date on the
impact of social capital on youths' sexual behaviour have been limited to the
original adult-centred conceptualization put forth by the three "theoretical
fathers", Coleman, Putnam and Bourdieu. This paper was based on the more
agentic youth-centred conceptualization and found that youths' own social capital
has an impact on their sexual behaviour, though not always in the hypothesized ways. The findings suggest that the youth-centred social capital framework is useful in understanding the timing of first sexual intercourse among youth, though future research would do well to explore the relationships among indicators. Unlike most studies that measure social capital cross-sectionally, this paper used longitudinal data to show that social capital is temporally-specific, suggesting that youths' relationships and subsequently, their social capital is highly dynamic. Given the life changes and progressions through various stages of life experienced by youth during this time, this finding is not surprising. It suggests, however, that social capital studies with youth must engage with longitudinal measures of social capital in order to adequately understand its role and impact in the lives of young people.
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Table II. 
Descriptive statistics for percent of missing values on all variables across all cycles, by gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>$\bar{x}$</th>
<th>Median</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males (n = 97 variables)</td>
<td>3.597</td>
<td>3.5</td>
<td>0</td>
<td>14.9&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Females (n = 98 variables)</td>
<td>3.482</td>
<td>3.3</td>
<td>0</td>
<td>13.9&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Notes:  
<sup>a</sup>This value belongs to the variable representing the number of girlfriends over the three cycles, for which a missing value indicator was included in the model.  
<sup>b</sup>This value belongs to the variable representing number of boyfriends across the three cycles, for which a missing value indicator was included in the model.
Table III.
Distribution of the sample for demographic characteristics and sexual behaviour variables, by gender

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Female %</th>
<th>Male %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HH income adequacy(^1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lowest/lower middle income adequacy</td>
<td>7.2</td>
<td>5.2</td>
</tr>
<tr>
<td>middle income adequacy</td>
<td>25.0</td>
<td>23.4</td>
</tr>
<tr>
<td>upper middle income adequacy</td>
<td>35.2</td>
<td>71.4</td>
</tr>
<tr>
<td>highest income adequacy</td>
<td>31.8</td>
<td></td>
</tr>
<tr>
<td>Size of area of residence(^2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>15.7</td>
<td>14.8</td>
</tr>
<tr>
<td>Urban, pop LT 30,000</td>
<td>17.5</td>
<td>15.9</td>
</tr>
<tr>
<td>Urban, pop 30,000 to 99,999</td>
<td>10.0</td>
<td>8.2</td>
</tr>
<tr>
<td>Urban, pop 100,000 or more</td>
<td>56.8</td>
<td>61.1</td>
</tr>
<tr>
<td>Region of Residence(^3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>British Columbia</td>
<td>11.2</td>
<td>12.5</td>
</tr>
<tr>
<td>Prairie provinces</td>
<td>18.1</td>
<td>17.2</td>
</tr>
<tr>
<td>Atlantic provinces</td>
<td>8.2</td>
<td>7.6</td>
</tr>
<tr>
<td>Quebec</td>
<td>24.0</td>
<td>22.5</td>
</tr>
<tr>
<td>Ontario</td>
<td>38.5</td>
<td>40.2</td>
</tr>
<tr>
<td>Age(^4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 -18 years</td>
<td>51.9</td>
<td>51.9</td>
</tr>
<tr>
<td>16 years</td>
<td>48.1</td>
<td>48.1</td>
</tr>
<tr>
<td>Parent(s) is farmer or farm labourer</td>
<td>3.2</td>
<td>3.5</td>
</tr>
<tr>
<td><strong>Sexual Behaviour</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postponed beyond 16/17 years</td>
<td>59.5</td>
<td>71.5</td>
</tr>
<tr>
<td>Initiated sex at or before cycle 2 (12 or 13 years)</td>
<td>5.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Initiated sex at or before cycle 3 (14 or 15 years)</td>
<td>10.1</td>
<td>7.8</td>
</tr>
<tr>
<td>Initiated sex at or before cycle 4 (16 or 17 years)</td>
<td>22.6</td>
<td>13.8</td>
</tr>
</tbody>
</table>

**Notes:**
1 The range for females was 1 (lowest/lower middle) to 4 (highest income adequacy). For males the range was 1 (lowest/lower middle) to 3 (upper middle and highest).
2 For both males and females, 'urban, pop 100,000 or more' served as the reference category. For both males and females, 'urban, population 30,000 to 99,999' and 'urban pop LT 30,000' were collapsed to form a category representing urban areas with a population of less than 99,999.
3 For both males and females, Ontario served as the reference category.
4 For both males and females, age 16 years served as the reference category.
Table IV.
Sample distribution on key independent variables, by gender

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Female (n=820)</th>
<th>Male (n=790)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family-based social capital</strong></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>How well gets along, mother</strong></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Not well at all/not too well, frequent/constant problems</td>
<td>5.5</td>
<td>2.2</td>
</tr>
<tr>
<td>pretty well, occasional problems</td>
<td>20.3</td>
<td>16.1</td>
</tr>
<tr>
<td>quite well, hardly any problems</td>
<td>43.6</td>
<td>42.5</td>
</tr>
<tr>
<td>very well, no problems</td>
<td>26.8</td>
<td>34.2</td>
</tr>
<tr>
<td><strong>Can talk to mother about self/problems</strong></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Not well at all, constant problems</td>
<td>5.5</td>
<td>2.2</td>
</tr>
<tr>
<td>not too well, frequent problems</td>
<td>20.3</td>
<td>16.1</td>
</tr>
<tr>
<td>pretty well, occasional problems</td>
<td>43.6</td>
<td>42.5</td>
</tr>
<tr>
<td>quite well, hardly any problems</td>
<td>26.8</td>
<td>34.2</td>
</tr>
<tr>
<td>very well, no problems</td>
<td>70.9</td>
<td>59.0</td>
</tr>
<tr>
<td><strong>How well gets along, father</strong></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>not well at all, constant problems</td>
<td>1.7</td>
<td>2.5</td>
</tr>
<tr>
<td>not too well, frequent problems</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>pretty well, occasional problems</td>
<td>17.5</td>
<td></td>
</tr>
<tr>
<td>quite well, hardly any problems</td>
<td>38.3</td>
<td>88.1</td>
</tr>
<tr>
<td>very well, no problems</td>
<td>27.7</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1 For both males and females, the scores on this variable ranged from 1 (not too well, frequent/constant problems) to 4 (very well, no problems).
2 For females, the scores on this variable ranged from 0 (not well at all, constant problems) to 4 (very well, no problems). For males, this was a dichotomous variable coded 0 (not well at all/not too well, constant/frequent problems) and 1 (pretty well/quite well/very well, occasional/hardly any/no problems).
Table IV. continued  
Sample distribution on key independent variables, by gender

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Female (n=820)</th>
<th>Male (n=790)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family-based Social capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can talk to father about self/problems</td>
<td>44.6</td>
<td>33.5</td>
</tr>
<tr>
<td>How well gets along, siblings&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not well at all, constant problems</td>
<td>3.2</td>
<td>1.4</td>
</tr>
<tr>
<td>not too well, frequent problems</td>
<td>8.9</td>
<td>9.2</td>
</tr>
<tr>
<td>pretty well, occasional problems</td>
<td>30.5</td>
<td>29.6</td>
</tr>
<tr>
<td>quite well, hardly any problems</td>
<td>31.7</td>
<td>33.1</td>
</tr>
<tr>
<td>very well, no problems</td>
<td>13.0</td>
<td>16.1</td>
</tr>
<tr>
<td>How well gets along, siblings&lt;sup&gt;2&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>not very close/no contact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>somewhat close</td>
<td></td>
<td></td>
</tr>
<tr>
<td>very close</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can talk to brother about self/problems</td>
<td>19.2</td>
<td>22.5</td>
</tr>
<tr>
<td>Can talk to sister about self/problems</td>
<td>27.9</td>
<td>28.6</td>
</tr>
<tr>
<td><strong>Peer-based Social capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shares secrets with friends&lt;sup&gt;3&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>never/rarely</td>
<td>7.2</td>
<td>25.7</td>
</tr>
<tr>
<td>some of the time</td>
<td>27.0</td>
<td>35.5</td>
</tr>
<tr>
<td>most of the time</td>
<td>40.2</td>
<td>20.5</td>
</tr>
<tr>
<td>all the time</td>
<td>18.9</td>
<td>6.0</td>
</tr>
<tr>
<td>Friends push me to do stupid things&lt;sup&gt;4&lt;/sup&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>true/mostly true</td>
<td>13.1</td>
<td>60.1</td>
</tr>
<tr>
<td>mostly false</td>
<td>42.7</td>
<td>44.3</td>
</tr>
<tr>
<td>false</td>
<td>35.8</td>
<td>23.5</td>
</tr>
</tbody>
</table>

Notes:
1 For both males and females, scores on this variable range from 0 (not well at all, constant problems) to 4 (very well, no problems).
2 For females, scores on this variable ranged from 1 (never close/no contact) to 3 (very close). For males, this variable was dichotomous coded 0 (not very close, no contact) and 1 (somewhat or very close).
3 For males, this variable was coded the same across cycles 3 and 4 with scores ranging from 0 (never/rarely) to 3 (all the time). For females, in cycle 2 scores on this variable ranged from 0 (never/rarely) to 3 (all the time). For females, in cycle 3 scores on this variable ranged from 0 (never/rarely/some of the time) to 2 (all the time). For females in cycle 4 this variable was dichotomous coded 0 (never/rarely/some of the time) and 1 (most or all of the time).
4 For males across all cycles, scores on this variable ranged from 1 (true/mostly true) to 3 (false). For females, in cycle 3 scores on this variable ranged from 1 (true/mostly true) to 3 (false). For females in cycle 4, this variable was dichotomous coded 0 (true/mostly true/mostly false) and 1 (false).
<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Female (n=820)</th>
<th>Male (n=790)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Peer-based Social capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends know who I am¹</td>
<td></td>
<td></td>
</tr>
<tr>
<td>false/sometimes true</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mostly true</td>
<td></td>
<td></td>
</tr>
<tr>
<td>true</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends push me to succeed²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>false/sometimes true</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mostly true</td>
<td></td>
<td></td>
</tr>
<tr>
<td>true</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Considers close friends' opinion²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>false/sometimes true</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mostly true</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School-based Social capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feel left out at school³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>all the time or most of the time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>some of the time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rarely or never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can talk to teacher(s) about self/problems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acticity-based Social Capital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plays sports with a coach⁴</td>
<td></td>
<td></td>
</tr>
<tr>
<td>never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>less than once/week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 times/week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 or more times/week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plays sports without a coach⁵</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than once per week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-3 times per week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 or more times per week</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
1 For both males and females in cycles 3 and 4, scores on this variable ranged from 1 (false/sometimes true) to 3 (true).
2 For both males and females in cycles 3 and 4, this was a dichotomous variable coded 0 (never/rarely/some of the time) and 1 (most or all of the time).
3 For both males and females in cycles 3 and 4, scores on this variable ranged from 0 (all or most of the time) to 2 (rarely or never).
4 For both males in cycle 3 and females in cycles 2 and 3, scores on this variable ranged from 0 (never) to 3 (4 or more times per week). For males in cycle 4, this variable was dummy coded with 'never' as the reference category.
5 For females in cycle 2 and males in cycle 4, this variable was dummy coded with 'never' as the reference category. For males in cycle 2 and females in cycle 3, scores on this variable ranged from 0 (never) to 3 (4 or more times per week).
Table V.
Descriptive statistics for continuous independent variables, males (n=790)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>( \bar{x} )</th>
<th>Median</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic &amp; Lifestyle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondents' substance use</td>
<td>3.490</td>
<td>4.000</td>
<td>2.565</td>
<td>0.00</td>
<td>7.00</td>
</tr>
<tr>
<td>PMK spouse's years of education</td>
<td>13.090</td>
<td>12.000</td>
<td>2.865</td>
<td>3.00</td>
<td>20.00</td>
</tr>
<tr>
<td>PMK years of education</td>
<td>12.720</td>
<td>12.000</td>
<td>2.069</td>
<td>3.00</td>
<td>17.00</td>
</tr>
<tr>
<td>Number of lifetime boy/girlfriends</td>
<td>1.600</td>
<td>1.000</td>
<td>1.780</td>
<td>0.00</td>
<td>7.00</td>
</tr>
<tr>
<td>Pubertal development</td>
<td>16.148</td>
<td>16.000</td>
<td>4.033</td>
<td>4.16</td>
<td>27.00</td>
</tr>
<tr>
<td><strong>Family Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of relationship with father (cycle 3)</td>
<td>2.366</td>
<td>2.500</td>
<td>0.558</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Quality of relationship with mother (cycle 3)</td>
<td>2.460</td>
<td>2.500</td>
<td>0.518</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Quality of relationship with father (cycle 4)</td>
<td>2.375</td>
<td>2.500</td>
<td>0.561</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Quality of relationship with mother (cycle 4)</td>
<td>2.564</td>
<td>2.750</td>
<td>0.412</td>
<td>1.75</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>Peer Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends' substance use (cycle 2)</td>
<td>1.683</td>
<td>1.000</td>
<td>1.704</td>
<td>0.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Friends' substance use (cycle 3)</td>
<td>2.757</td>
<td>3.000</td>
<td>1.933</td>
<td>0.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Friends' substance use (cycle 4)</td>
<td>3.808</td>
<td>4.000</td>
<td>1.899</td>
<td>0.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Number of days spent with friends/wk (cycle 2)</td>
<td>2.868</td>
<td>2.500</td>
<td>1.549</td>
<td>0.00</td>
<td>4.50</td>
</tr>
<tr>
<td>Number of days spent with friends/wk (cycle 3)</td>
<td>3.531</td>
<td>2.500</td>
<td>1.980</td>
<td>0.00</td>
<td>6.50</td>
</tr>
<tr>
<td>Number of days spent with friends/wk (cycle 4)</td>
<td>3.574</td>
<td>2.500</td>
<td>1.930</td>
<td>0.50</td>
<td>6.50</td>
</tr>
<tr>
<td>No. of opposite sex friends (cycle 2)</td>
<td>4.686</td>
<td>4.000</td>
<td>4.215</td>
<td>0.00</td>
<td>14.00</td>
</tr>
<tr>
<td>No. of opposite sex friends (cycle 3)</td>
<td>7.710</td>
<td>7.130</td>
<td>3.835</td>
<td>5.00</td>
<td>25.00</td>
</tr>
<tr>
<td>No. of opposite sex friends (cycle 4)</td>
<td>7.380</td>
<td>6.000</td>
<td>4.963</td>
<td>0.00</td>
<td>25.00</td>
</tr>
<tr>
<td>No. of same sex friends (cycle 2)</td>
<td>9.470</td>
<td>8.000</td>
<td>6.042</td>
<td>0.00</td>
<td>25.00</td>
</tr>
<tr>
<td>No. of same sex friends (cycle 3)</td>
<td>9.650</td>
<td>9.620</td>
<td>5.604</td>
<td>1.00</td>
<td>25.00</td>
</tr>
<tr>
<td>No. of same sex friends (cycle 4)</td>
<td>5.430</td>
<td>4.000</td>
<td>4.438</td>
<td>0.00</td>
<td>25.00</td>
</tr>
<tr>
<td><strong>School Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of school experience (cycle 2)</td>
<td>3.290</td>
<td>3.667</td>
<td>0.746</td>
<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Quality of relationship with teacher (cycle 2)</td>
<td>6.416</td>
<td>7.000</td>
<td>1.584</td>
<td>0.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Quality of relationship with teacher (cycle 3)</td>
<td>6.330</td>
<td>7.000</td>
<td>1.516</td>
<td>0.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>

**Notes:** All variables are coded such that higher values represent greater social capital on the trait measured.
1 This variable has been truncated up to a value of 7 in order to account for non-linearity.
2 This variable has been truncated at a value of 7 in order to account for non-linearity.
3 This variable has been truncated up to a value of 1.75 in order to account for non-linearity.
4 This variable has been truncated at 4.5 days per week in order to account for non-linearity.
5 This variable has been truncated up to 0.5 days per week in order to account for non-linearity.
6 This variable has been truncated at a value of 14 in order to account for non-linearity.
7 This variable has been truncated up to a value of 5 in order to account for non-linearity.
Table VI.
Descriptive statistics for continuous independent variables, females (n=820)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>X</th>
<th>Median</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic &amp; Lifestyle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Respondents' substance use</td>
<td>3.820</td>
<td>4.000</td>
<td>2.504</td>
<td>0.00</td>
<td>7.00</td>
</tr>
<tr>
<td>PMK spouse's years of education</td>
<td>12.730</td>
<td>10.000</td>
<td>2.786</td>
<td>6.00</td>
<td>20.00</td>
</tr>
<tr>
<td>PMK years of education</td>
<td>2.510</td>
<td>2.400</td>
<td>0.499</td>
<td>1.10</td>
<td>3.00</td>
</tr>
<tr>
<td>Number of lifetime boy/girlfriends</td>
<td>2.009</td>
<td>1.000</td>
<td>2.126</td>
<td>0.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Pubertal development</td>
<td>16.732</td>
<td>17.000</td>
<td>2.497</td>
<td>6.00</td>
<td>21.00</td>
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<tr>
<td><strong>Family Social Capital</strong></td>
<td></td>
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<tr>
<td>Quality of relationship with father (cycle 3)</td>
<td>2.175</td>
<td>2.250</td>
<td>0.566</td>
<td>1.00</td>
<td>3.00</td>
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<tr>
<td>Quality of relationship with mother (cycle 3)</td>
<td>2.370</td>
<td>2.500</td>
<td>0.531</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Quality of relationship with father (cycle 4)</td>
<td>2.190</td>
<td>2.250</td>
<td>0.601</td>
<td>1.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Quality of relationship with mother (cycle 4)</td>
<td>2.500</td>
<td>2.500</td>
<td>0.466</td>
<td>1.25</td>
<td>3.00</td>
</tr>
<tr>
<td><strong>Peer Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends' substance use (cycle 2)</td>
<td>1.926</td>
<td>2.000</td>
<td>1.790</td>
<td>0.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Friends' substance use (cycle 3)</td>
<td>2.820</td>
<td>3.000</td>
<td>2.060</td>
<td>0.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Friends' substance use (cycle 4)</td>
<td>3.750</td>
<td>4.000</td>
<td>1.948</td>
<td>0.00</td>
<td>6.00</td>
</tr>
<tr>
<td>Number of days spent with friends/wk (cycle 2)</td>
<td>3.230</td>
<td>2.500</td>
<td>1.900</td>
<td>0.00</td>
<td>6.50</td>
</tr>
<tr>
<td>Number of days spent with friends/wk (cycle 3)</td>
<td>3.333</td>
<td>2.500</td>
<td>1.949</td>
<td>0.00</td>
<td>6.50</td>
</tr>
<tr>
<td>Number of days spent with friends/wk (cycle 4)</td>
<td>3.107</td>
<td>2.500</td>
<td>1.769</td>
<td>1.00</td>
<td>6.50</td>
</tr>
<tr>
<td>No. of opposite sex friends (cycle 2)</td>
<td>4.820</td>
<td>4.000</td>
<td>4.577</td>
<td>0.00</td>
<td>25.00</td>
</tr>
<tr>
<td>No. of opposite sex friends (cycle 3)</td>
<td>6.360</td>
<td>6.150</td>
<td>4.706</td>
<td>1.00</td>
<td>25.00</td>
</tr>
<tr>
<td>No. of opposite sex friends (cycle 4)</td>
<td>1.588</td>
<td>1.609</td>
<td>0.714</td>
<td>0.00</td>
<td>3.22</td>
</tr>
<tr>
<td>No. of same sex friends (cycle 2)</td>
<td>8.470</td>
<td>8.000</td>
<td>5.047</td>
<td>0.00</td>
<td>25.00</td>
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<tr>
<td>No. of same sex friends (cycle 3)</td>
<td>8.370</td>
<td>8.000</td>
<td>4.942</td>
<td>1.00</td>
<td>25.00</td>
</tr>
<tr>
<td>No. of same sex friends (cycle 4)</td>
<td>5.120</td>
<td>4.000</td>
<td>4.317</td>
<td>0.00</td>
<td>25.00</td>
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<tr>
<td><strong>School Social Capital</strong></td>
<td></td>
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<tr>
<td>Quality of school experience (cycle 2)</td>
<td>3.436</td>
<td>3.667</td>
<td>0.655</td>
<td>0.00</td>
<td>4.00</td>
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<tr>
<td>Quality of relationship with teacher (cycle 2)</td>
<td>6.589</td>
<td>7.000</td>
<td>1.587</td>
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<td>8.00</td>
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<tr>
<td>Quality of relationship with teacher (cycle 3)</td>
<td>6.511</td>
<td>7.000</td>
<td>1.435</td>
<td>0.00</td>
<td>8.00</td>
</tr>
</tbody>
</table>

Notes: All variables are coded such that higher values represent greater social capital on the trait measured.

1 The natural log of the original variable has been taken in order to account for non-linearity.
2 This variable has been truncated at a value of 10 in order to ensure functional form of the variable.
Table VII.
Bivariate coefficients for logistic regression of delay of first sexual intercourse beyond 16 or 17 years on selected independent variables, males (n=790)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>SE B</th>
<th>A. OR</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic &amp; Lifestyle</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own substance use</td>
<td>-0.420</td>
<td>0.061</td>
<td>0.657</td>
<td>0.000</td>
</tr>
<tr>
<td>Number of girlfriends across cycles</td>
<td>-0.475</td>
<td>0.092</td>
<td>0.622</td>
<td>0.000</td>
</tr>
<tr>
<td>Missing value indicator for num. of girlfriends</td>
<td>3.493</td>
<td>0.585</td>
<td>32.885</td>
<td>0.000</td>
</tr>
<tr>
<td>Progression through pubertal development</td>
<td>-0.150</td>
<td>0.063</td>
<td>0.861</td>
<td>0.000</td>
</tr>
<tr>
<td>Age (16 yrs=ref)</td>
<td>-0.946</td>
<td>0.287</td>
<td>0.388</td>
<td>0.001</td>
</tr>
<tr>
<td>Income adequacy</td>
<td>0.613</td>
<td>0.207</td>
<td>1.846</td>
<td>0.003</td>
</tr>
<tr>
<td>Farm Family (no=ref)</td>
<td>0.732</td>
<td>0.219</td>
<td>2.079</td>
<td>0.595</td>
</tr>
<tr>
<td>Size of Area of Residence (pop ≥100,000=ref)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Rural</td>
<td>-0.334</td>
<td>0.288</td>
<td>0.716</td>
<td>0.246</td>
</tr>
<tr>
<td>Urban, population less than/equal to 99,999</td>
<td>-0.289</td>
<td>0.286</td>
<td>0.749</td>
<td>0.313</td>
</tr>
<tr>
<td>Region of Residence (Ont=ref)</td>
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</tr>
<tr>
<td>British Columbia</td>
<td>0.558</td>
<td>0.483</td>
<td>1.747</td>
<td>0.248</td>
</tr>
<tr>
<td>Prairie Provinces</td>
<td>1.018</td>
<td>0.338</td>
<td>2.768</td>
<td>0.003</td>
</tr>
<tr>
<td>Quebec</td>
<td>-0.299</td>
<td>0.344</td>
<td>0.742</td>
<td>0.384</td>
</tr>
<tr>
<td>Atlantic Provinces</td>
<td>-0.118</td>
<td>0.312</td>
<td>0.889</td>
<td>0.706</td>
</tr>
<tr>
<td>PMK years of education</td>
<td>0.128</td>
<td>0.065</td>
<td>1.137</td>
<td>0.050</td>
</tr>
<tr>
<td>PMK's spouse's years of education</td>
<td>0.152</td>
<td>0.041</td>
<td>1.164</td>
<td>0.000</td>
</tr>
<tr>
<td>Family Social Capital</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How well gets along with mother (cycle 2)</td>
<td>0.315</td>
<td>0.252</td>
<td>1.370</td>
<td>0.211</td>
</tr>
<tr>
<td>Spline for getting along with mother (cycle 2)</td>
<td>-0.758</td>
<td>0.453</td>
<td>0.469</td>
<td>0.095</td>
</tr>
<tr>
<td>How well gets along with father (cycle 2)</td>
<td>0.763</td>
<td>0.661</td>
<td>2.145</td>
<td>0.249</td>
</tr>
<tr>
<td>Ability to talk to mother (cycle 2)</td>
<td>-0.167</td>
<td>0.300</td>
<td>0.846</td>
<td>0.577</td>
</tr>
<tr>
<td>Ability to talk to father (cycle 2)</td>
<td>0.374</td>
<td>0.241</td>
<td>1.454</td>
<td>0.121</td>
</tr>
<tr>
<td>How well gets along with siblings (cycle 2)</td>
<td>-0.285</td>
<td>0.153</td>
<td>0.752</td>
<td>0.063</td>
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<tr>
<td>Ability to talk to sister (cycle 2)</td>
<td>-0.155</td>
<td>0.295</td>
<td>0.856</td>
<td>0.598</td>
</tr>
<tr>
<td>Ability to talk to brother (cycle 2)</td>
<td>0.375</td>
<td>0.327</td>
<td>1.455</td>
<td>0.252</td>
</tr>
</tbody>
</table>

Notes: All variables are coded such that higher values represent greater social capital on the trait measured.
Table VII continued.
Bivariate coefficients for logistic regression of timing of first sexual intercourse on selected independent variables, males (n=790)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>SE</th>
<th>A. OR</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of relationship with mother (cycle 3)</td>
<td>0.719</td>
<td>0.273</td>
<td>2.052</td>
<td>0.009</td>
</tr>
<tr>
<td>Quality of relationship with father (cycle 3)</td>
<td>0.517</td>
<td>0.236</td>
<td>1.677</td>
<td>0.029</td>
</tr>
<tr>
<td>Ability to talk to mother (cycle 3)</td>
<td>0.164</td>
<td>0.246</td>
<td>1.178</td>
<td>0.504</td>
</tr>
<tr>
<td>Ability to talk to father (cycle 3)</td>
<td>0.374</td>
<td>0.241</td>
<td>1.454</td>
<td>0.121</td>
</tr>
<tr>
<td>Ability to talk to sister (cycle 3)</td>
<td>-0.146</td>
<td>0.291</td>
<td>0.864</td>
<td>0.613</td>
</tr>
<tr>
<td>Ability to talk to brother (cycle 3)</td>
<td>-0.259</td>
<td>0.298</td>
<td>0.772</td>
<td>0.385</td>
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<tr>
<td>Quality of relationship with mother (cycle 4)</td>
<td>0.739</td>
<td>0.307</td>
<td>2.094</td>
<td>0.016</td>
</tr>
<tr>
<td>Quality of relationship with father (cycle 4)</td>
<td>0.602</td>
<td>0.257</td>
<td>1.826</td>
<td>0.020</td>
</tr>
<tr>
<td>Ability to talk to mother (cycle 4)</td>
<td>-0.050</td>
<td>0.307</td>
<td>0.951</td>
<td>0.870</td>
</tr>
<tr>
<td>Ability to talk to father (cycle 4)</td>
<td>0.550</td>
<td>0.272</td>
<td>1.733</td>
<td>0.044</td>
</tr>
<tr>
<td>How well gets along with siblings (cycle 4)</td>
<td>-0.095</td>
<td>0.391</td>
<td>0.909</td>
<td>0.807</td>
</tr>
<tr>
<td>Ability to talk to sister (cycle 4)</td>
<td>-0.250</td>
<td>0.300</td>
<td>0.779</td>
<td>0.403</td>
</tr>
<tr>
<td>Ability to talk to brother (cycle 4)</td>
<td>-0.290</td>
<td>0.303</td>
<td>0.748</td>
<td>0.338</td>
</tr>
<tr>
<td><strong>Peer Social Capital</strong></td>
<td></td>
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</tr>
<tr>
<td>Friends' substance use (cycle 4)</td>
<td>-0.570</td>
<td>0.098</td>
<td>0.566</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>School Social Capital</strong></td>
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<tr>
<td>School experience scale (cycle 2)</td>
<td>-0.403</td>
<td>0.178</td>
<td>0.668</td>
<td>0.024</td>
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<tr>
<td>Feels left out at school (cycle 3)</td>
<td>-0.913</td>
<td>0.254</td>
<td>0.401</td>
<td>0.000</td>
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<tr>
<td>Feels left out at school (cycle 4)</td>
<td>-0.273</td>
<td>0.220</td>
<td>0.761</td>
<td>0.215</td>
</tr>
</tbody>
</table>

Notes: All variables are coded such that higher values represent greater social capital on the trait measured.
**Table VIII.**

**Bivariate coefficients for logistic regression of timing of first sexual intercourse on selected independent variables, females (n=820)**

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>SE B</th>
<th>A. OR</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic &amp; Lifestyle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own substance use</td>
<td>-0.454</td>
<td>0.070</td>
<td>0.635</td>
<td>0.000</td>
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<tr>
<td>Number of boyfriends across cycles</td>
<td>-0.524</td>
<td>0.087</td>
<td>0.592</td>
<td>0.000</td>
</tr>
<tr>
<td>Progression through pubertal development</td>
<td>-0.213</td>
<td>0.080</td>
<td>0.808</td>
<td>0.008</td>
</tr>
<tr>
<td><em>Spline for progression through pubertal Development</em></td>
<td></td>
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</tr>
<tr>
<td>Age (16 yrs=ref)</td>
<td>-0.619</td>
<td>0.204</td>
<td>0.539</td>
<td>0.003</td>
</tr>
<tr>
<td>Income adequacy</td>
<td>0.361</td>
<td>0.120</td>
<td>1.435</td>
<td>0.003</td>
</tr>
<tr>
<td>Farm Family (no=ref)</td>
<td>0.543</td>
<td>0.485</td>
<td>1.721</td>
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<tr>
<td>Size of Area of Residence (pop ≥100,000=ref)</td>
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</tr>
<tr>
<td><em>Rural</em></td>
<td>-0.256</td>
<td>0.250</td>
<td>0.774</td>
<td>0.307</td>
</tr>
<tr>
<td><em>Urban, population less than/equal to 99,999</em></td>
<td>-0.474</td>
<td>0.215</td>
<td>0.633</td>
<td>0.028</td>
</tr>
<tr>
<td>Region of Residence (Ont=ref)</td>
<td></td>
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</tr>
<tr>
<td>British Columbia</td>
<td>-0.424</td>
<td>0.428</td>
<td>0.654</td>
<td>0.324</td>
</tr>
<tr>
<td>Prairie Provinces</td>
<td>-0.408</td>
<td>0.263</td>
<td>0.665</td>
<td>0.121</td>
</tr>
<tr>
<td>Quebec</td>
<td>-1.292</td>
<td>0.289</td>
<td>0.275</td>
<td>0.000</td>
</tr>
<tr>
<td>Atlantic Provinces</td>
<td>-0.704</td>
<td>0.259</td>
<td>0.495</td>
<td>0.007</td>
</tr>
<tr>
<td>PMK years of education (ln)</td>
<td>2.021</td>
<td>0.506</td>
<td>7.546</td>
<td>0.000</td>
</tr>
<tr>
<td>PMK's spouse's years of education</td>
<td>0.066</td>
<td>0.047</td>
<td>1.068</td>
<td>0.164</td>
</tr>
<tr>
<td><strong>Family Social Capital</strong></td>
<td></td>
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<tr>
<td>How well gets along with mother (cycle 2)</td>
<td>0.202</td>
<td>0.121</td>
<td>1.224</td>
<td>0.095</td>
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<tr>
<td>How well gets along with father (cycle 2)</td>
<td>0.246</td>
<td>0.125</td>
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<tr>
<td>Ability to talk to mother (cycle 2)</td>
<td>0.810</td>
<td>0.240</td>
<td>2.248</td>
<td>0.001</td>
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<tr>
<td>Ability to talk to father (cycle 2)</td>
<td>0.659</td>
<td>0.230</td>
<td>1.933</td>
<td>0.004</td>
</tr>
<tr>
<td>How well gets along with siblings (cycle 2)</td>
<td>1.544</td>
<td>0.850</td>
<td>4.683</td>
<td>0.070</td>
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<tr>
<td><em>Spline for how well gets along with sibs (cycle2)</em></td>
<td>-1.768</td>
<td>0.900</td>
<td>0.171</td>
<td>0.050</td>
</tr>
<tr>
<td>Ability to talk to sister (cycle 2)</td>
<td>0.178</td>
<td>0.243</td>
<td>1.195</td>
<td>0.464</td>
</tr>
<tr>
<td>Ability to talk to brother (cycle 2)</td>
<td>-0.320</td>
<td>0.300</td>
<td>0.726</td>
<td>0.291</td>
</tr>
</tbody>
</table>

**Notes:** All variables are coded such that higher values represent greater social capital on the trait measured.
Table VIII. continued.

Bivariate coefficients for logistic regression of timing of first sexual intercourse on selected independent variables, females (n=820)

<table>
<thead>
<tr>
<th></th>
<th>( B )</th>
<th>( SE ) ( B )</th>
<th>( A. OR )</th>
<th>( p )</th>
</tr>
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<tbody>
<tr>
<td><strong>Family Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of relationship with mother (cycle 3)</td>
<td>0.683</td>
<td>0.211</td>
<td>1.980</td>
<td>0.001</td>
</tr>
<tr>
<td>Quality of relationship with father (cycle 3)</td>
<td>0.664</td>
<td>0.208</td>
<td>1.943</td>
<td>0.001</td>
</tr>
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<td>Ability to talk to mother (cycle 3)</td>
<td>0.579</td>
<td>0.232</td>
<td>1.784</td>
<td>0.013</td>
</tr>
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<td>Ability to talk to father (cycle 3)</td>
<td>0.408</td>
<td>0.226</td>
<td>1.504</td>
<td>0.072</td>
</tr>
<tr>
<td>Ability to talk to sister (cycle 3)</td>
<td>0.213</td>
<td>0.252</td>
<td>1.238</td>
<td>0.398</td>
</tr>
<tr>
<td>Ability to talk to brother (cycle 3)</td>
<td>0.502</td>
<td>0.257</td>
<td>3.177</td>
<td>0.051</td>
</tr>
<tr>
<td>Quality of relationship with mother (cycle 4)</td>
<td>-0.275</td>
<td>0.674</td>
<td>0.760</td>
<td>0.684</td>
</tr>
<tr>
<td>Spline for quality of relationship with mother (cycle 4)</td>
<td>1.568</td>
<td>1.034</td>
<td>4.797</td>
<td>0.130</td>
</tr>
<tr>
<td>Quality of relationship with father (cycle 4)</td>
<td>0.623</td>
<td>0.205</td>
<td>1.865</td>
<td>0.003</td>
</tr>
<tr>
<td>Ability to talk to mother (cycle 4)</td>
<td>0.262</td>
<td>0.242</td>
<td>1.300</td>
<td>0.280</td>
</tr>
<tr>
<td>Ability to talk to father (cycle 4)</td>
<td>0.389</td>
<td>0.241</td>
<td>1.476</td>
<td>0.108</td>
</tr>
<tr>
<td>How well gets along with siblings (cycle 4)</td>
<td>0.291</td>
<td>0.192</td>
<td>1.338</td>
<td>0.129</td>
</tr>
<tr>
<td>Ability to talk to sister (cycle 4)</td>
<td>0.404</td>
<td>0.259</td>
<td>1.498</td>
<td>0.120</td>
</tr>
<tr>
<td>Ability to talk to brother (cycle 4)</td>
<td>-0.126</td>
<td>0.277</td>
<td>0.748</td>
<td>0.650</td>
</tr>
<tr>
<td><strong>Peer Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends' substance use (cycle 2)</td>
<td>-0.339</td>
<td>0.071</td>
<td>0.712</td>
<td>0.000</td>
</tr>
<tr>
<td>Sharing secrets with friends (cycle 2)</td>
<td>-0.327</td>
<td>0.126</td>
<td>0.721</td>
<td>0.010</td>
</tr>
<tr>
<td>Friends' substance use (cycle 3)</td>
<td>-0.487</td>
<td>0.067</td>
<td>0.614</td>
<td>0.000</td>
</tr>
<tr>
<td>Sharing secrets with friends (cycle 3)</td>
<td>-0.099</td>
<td>0.146</td>
<td>0.906</td>
<td>0.492</td>
</tr>
<tr>
<td>Friends' substance use (cycle 4)</td>
<td>-0.465</td>
<td>0.083</td>
<td>0.628</td>
<td>0.000</td>
</tr>
<tr>
<td>Sharing secrets with friends (cycle 4)</td>
<td>0.428</td>
<td>0.228</td>
<td>1.534</td>
<td>0.061</td>
</tr>
<tr>
<td><strong>School Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School experience scale (cycle 2)</td>
<td>0.015</td>
<td>0.180</td>
<td>1.015</td>
<td>0.930</td>
</tr>
<tr>
<td>Feels left out at school (cycle 3)</td>
<td>-0.121</td>
<td>0.223</td>
<td>0.886</td>
<td>0.586</td>
</tr>
<tr>
<td>Feels left out at school (cycle 4)</td>
<td>-0.202</td>
<td>0.340</td>
<td>0.817</td>
<td>0.321</td>
</tr>
</tbody>
</table>

**Notes:** All variables are coded such that higher values represent greater social capital on the trait measured.
Table IX.
Coefficients for multivariate logistic regression of timing of first sexual intercourse on the independent variables remaining in the final trimmed model, males (n=790)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>SE B</th>
<th>A. OR</th>
<th>p</th>
<th>95% Conf. Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic &amp; Lifestyle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of lifetime girlfriends</td>
<td>-0.479</td>
<td>0.133</td>
<td>0.619</td>
<td>0.000</td>
<td>-0.739, -0.218</td>
</tr>
<tr>
<td>Number of lifetime girlfriends, missing</td>
<td>3.866</td>
<td>1.337</td>
<td>47.75</td>
<td>0.004</td>
<td>1.242, 6.489</td>
</tr>
<tr>
<td><strong>Family Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can talk to brother about self/problems (cycle 4)</td>
<td>-1.156</td>
<td>0.443</td>
<td>0.3149</td>
<td>0.009</td>
<td>-2.025, -0.286</td>
</tr>
<tr>
<td><strong>Peer Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends' substance use (cycle 2)</td>
<td>-0.700</td>
<td>0.151</td>
<td>0.496</td>
<td>0.000</td>
<td>-0.997, -0.404</td>
</tr>
<tr>
<td>Friends' substance use spline (cycle 2)</td>
<td>1.844</td>
<td>0.769</td>
<td>6.323</td>
<td>0.017</td>
<td>0.335, 3.353</td>
</tr>
<tr>
<td>Friends' substance use (cycle 3)</td>
<td>-0.321</td>
<td>0.127</td>
<td>0.726</td>
<td>0.012</td>
<td>-0.569, -0.072</td>
</tr>
<tr>
<td><strong>School-based Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feels left out at school (cycle 3)</td>
<td>-1.157</td>
<td>0.434</td>
<td>0.3143</td>
<td>0.008</td>
<td>-2.010, -0.305</td>
</tr>
<tr>
<td><strong>Activity-based Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of participation in Scouts, 4H club etc. (cycle 3)</td>
<td>0.831</td>
<td>0.340</td>
<td>2.296</td>
<td>0.015</td>
<td>0.163, 1.498</td>
</tr>
<tr>
<td>Helps without pay, helping in the community (cycle 2)</td>
<td>-1.673</td>
<td>0.675</td>
<td>0.188</td>
<td>0.013</td>
<td>-2.997, -0.349</td>
</tr>
</tbody>
</table>

**Model Summary:** F = 7.01, p<.001, Wald chi-square = 78.02 p<.0000
Pseudo R-square = 0.3754

**Notes:** All variables are coded such that higher values represent greater social capital on the trait measured.
Table X.
Coefficients for multivariate logistic regression of timing of first sexual intercourse on the
independent variables remaining in the final trimmed model, females (n=820)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>B</th>
<th>SE B</th>
<th>A. OR</th>
<th>p</th>
<th>95% Conf. Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Demographic &amp; Lifestyle</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Own substance use</td>
<td>-0.530</td>
<td>0.087</td>
<td>0.583</td>
<td>0.000</td>
<td>-0.710 -0.368</td>
</tr>
<tr>
<td>Number of lifetime boyfriends</td>
<td>-0.630</td>
<td>0.118</td>
<td>0.533</td>
<td>0.000</td>
<td>-0.861 -0.399</td>
</tr>
<tr>
<td>PMK years of education (ln)</td>
<td>1.765</td>
<td>0.821</td>
<td>5.839</td>
<td>0.032</td>
<td>0.153 3.376</td>
</tr>
<tr>
<td>Age (16 yrs=ref)</td>
<td>-0.747</td>
<td>0.338</td>
<td>0.474</td>
<td>0.027</td>
<td>-1.410 -0.084</td>
</tr>
<tr>
<td><strong>Peer Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Considers friends' opinions (cycle 4)</td>
<td>1.300</td>
<td>0.404</td>
<td>3.668</td>
<td>0.001</td>
<td>0.506 2.093</td>
</tr>
<tr>
<td>Time spent with friends/week (cycle 4)</td>
<td>0.699</td>
<td>0.335</td>
<td>2.011</td>
<td>0.037</td>
<td>0.042 1.355</td>
</tr>
<tr>
<td>spline for time spent w/friends (cycle 4)</td>
<td>-0.909</td>
<td>0.389</td>
<td>0.403</td>
<td>0.020</td>
<td>-1.673 -0.145</td>
</tr>
<tr>
<td>Shares secrets with friends (cycle 2)</td>
<td>-0.547</td>
<td>0.219</td>
<td>0.578</td>
<td>0.013</td>
<td>-0.977 -0.118</td>
</tr>
<tr>
<td><strong>School-based Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of school experience (cycle 2)</td>
<td>0.644</td>
<td>0.328</td>
<td>1.905</td>
<td>0.050</td>
<td>0.001 1.288</td>
</tr>
<tr>
<td><strong>Activity-based Social Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participates in sports without a coach (cycle 2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Less than once per week</em></td>
<td>-1.934</td>
<td>0.823</td>
<td>0.145</td>
<td>0.019</td>
<td>-3.549 -0.319</td>
</tr>
<tr>
<td><em>1 to 3 times per week</em></td>
<td>-1.457</td>
<td>0.693</td>
<td>0.233</td>
<td>0.036</td>
<td>-2.816 -0.097</td>
</tr>
<tr>
<td><em>4 or more times per week</em></td>
<td>-1.651</td>
<td>0.679</td>
<td>0.192</td>
<td>0.015</td>
<td>-2.983 -0.320</td>
</tr>
<tr>
<td>Helps without pay, adopting a cause (cycle 3)</td>
<td>1.372</td>
<td>0.394</td>
<td>3.944</td>
<td>0.001</td>
<td>0.600 2.144</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-2.639</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model Summary:  F = 6.36, p<.001, Wald chi-square = 106.59 p<.0000
Pseudo R-square = 0.4135

Notes: All variables are coded such that higher values represent greater social capital on the trait measured.
QUALITATIVE INSIGHTS INTO THE NATURE OF YOUNG PEOPLE'S SOCIAL CAPITAL AND ITS IMPACT ON SEXUAL BEHAVIOUR: TRANSITIONS, FLUIDITY AND CONTEXTUALITY

Introduction

Over the past several decades, social capital has firmly established itself in the social science lexicon. While different concepts of social capital have developed in disciplines such as political science, economics, sociology, education, and health sciences (Fine, 2001), the same foundational arguments are found across disciplines. Based on the work of Pierre Bourdieu (1986), James Coleman (1988, 1990), and Robert Putnam (2000), social capital is generally conceived of as a positive feature emanating from social interaction. Social actors are argued to find advantage from resources inherent in their social networks.

Social capital scholars have been interested predominantly in social capital and the benefits it accrues for adults. In recent years, however, social capital has gained popularity as an analytical framework with which to understand experiences, behavior, achievements and the well-being of young people. Nevertheless, the rapid application of the framework to young people has been met by much criticism and caution. Youth studies researchers have been quick to point out that social capital, as it was conceived by the "theoretical fathers", was not conceptualized from the perspective of youth; that indicators of social capital commonly used to assess civic participation (e.g. voting) are largely adult-oriented and necessarily exclude youth because of their age; that youth are assumed to be passive recipients of social capital vis-à-vis the family and assumed not to form social capital amongst themselves, independent of adults (Leonard, 2005; Morrow 1999a, 1999b; Shaefer-McDaniel, 2004). More generally, the existing social capital literature is criticized for neglecting the active contribution youth make to the
generation of their own social capital both within and outside of the family (Morrow 1999a, 1999b).

In light of these limitations, a large body of qualitative research with young people has been undertaken, mainly in the United Kingdom and the United States (Bassani, 2003; Gillies & Lucey, 2006; Holland, Reynolds & Weller, 2007; Jarett, Sullivan & Watkins, 2005; Leonard, 2005; Morrow 1999b, 2000, 2001a, 2001b, 2003; Seaman & Sweeting, 2004; Weller, 2006). This research has explored the sources and forms of young people's social capital from their own perspectives rather than imposing understandings from an adult viewpoint.

Though these youth studies scholars have elaborated the concept for youth, it remains under-defined. Lacking in the youth-centred social capital literature is a critical exploration of the complex and context-bound nature of resources accessed via social capital, and of the circumstances in which youth mobilize specific sources of social capital. This is a particularly worthwhile venture as social policy-makers and program-developers have been keen to integrate social capital into strategies to assist youth with successful transitions to adulthood, both in Canada (e.g., Legislative Assembly of British Columbia, 2004) and elsewhere (e.g., Organization for Economic Co-Operation and Development 2001; Winter, 2000). While much attention is given in the literature to exploring the link between social capital and significant transitions young people experience, such as emergent sexual behaviour (Crosby, Holtgrave, DiClemente, Wingood & Gayle, 2003; Denner, Kirby, Coyle & Brindis, 2001; Furstenburg & Hughes, 1995; Gold, Kennedy, Connell, & Kawachi, 2002; Holtgrave & Crosby, 2003; Morrison, Howard, Hardy, & Stinson, 2005; Smylie, Medaglia, & Maticka-Tyndale, 2006; Weitzman & Chen, 2005), existing research cannot adequately direct policy and programs given the gaps in our understanding of how youth generate and mobilize social capital during these transitions.
This paper continues the line of investigation into the nature of youths' social capital and its impact on transitions into adulthood, with a focus on sexual behaviour. It builds upon and further develops contributions made by authors who have already conceptualized and documented the nature of social capital for youth under the age of 16 years in other Western societies, in consultation with youth themselves (Bassani, 2003; Gillies & Lucey, 2006; Holland, Reynolds & Weller, 2007; Jarett, Sullivan & Watkins, 2005; Leonard, 2005; Morrow 1999b, 2000, 2001a, 2001b, 2003; Seaman & Sweeting, 2004; Weller, 2006) and is similarly grounded in young people's own perspectives of their relationships.

This paper reports on the qualitative component of a project that examined the association between youths' social capital and their sexual behaviours using data from both survey and in-depth, qualitative interviews. The focus here is on how youth themselves understand and describe their social networks and the formation and mobilization of social capital, with specific reference to how this influences and connects to their sexual activity. The analysis builds on the earlier quantitative results (see Chapter 3) and pays particular attention to the role exogenous variables, such as gender, area of residence and age, play in shaping social capital, and the contextual manner in which youth mobilize their social capital.

Conceptualizing Social Capital

Dominant conceptualizations of social capital

Although conceptualizations of social capital vary, they all draw on the foundations provided by three central figures identified with the original development of the concept. The three strands of social capital theory put forth by James Coleman (1988, 1990), Robert Putnam (1993, 2000) and Pierre Bourdieu (1986) share the view that social capital is developed through social interaction and
refers to the resources individuals and collectives derive from social networks. The three “theoretical fathers”, offer different understandings of the nature of social capital (Schaefer-McDaniel, 2004).

American contemporaries James Coleman (1988, 1990) and Robert Putnam (1993, 2000) both regard social capital as a positive feature of social interaction (Leonard, 2005). Coleman (1988, 1990) proposed that social capital is inherent in social networks and that it facilitates actions of individuals within these networks. Social networks were described by Coleman to be characterized by common norms, mutual trust, reciprocity and a sense of obligation. In general he presumed children benefitted from social interaction through access to various resources that assist them in achieving certain ends or improving their quality of life.

The family system formed the basis for Coleman’s (1988) model of social capital for children. Features of social capital, including obligations, expectations, norms and sanctions that inhere in familial relationships and between adults in the community, serve a normative function insofar as trust and reciprocity generate conformity (Coleman, 1990: 300; Gillies & Lucey, 2007). According to Coleman, children benefitted from the social capital gained from their parents, both directly from their parents, and indirectly through their parents’ interactions with others. The social capital possessed by parents and other adults with whom they are connected within the community, is passed on to children, improving their life chances (Coleman, 1988).

Coleman delineated ideal characteristics of families for the accumulation of social capital and suggested that, owing to a number of social and economic influences, the families in the latter 20th and early 21st century are lacking in these. For example, Coleman (1988) suggested that the ideal family structure for the formation of social capital is two parents and two children with, at most, one parent employed outside the home. This maximized the attention available to each child from parents as well as a sibling. He observed that the necessity in
modern society for both parents to work outside the home deprived children of parental time, detracting from the parent-child relationship and, in turn, the potential for social capital therein. It also detracted from the time available for parents to form, and pass on to their children, social capital in their community. An even more critical structural deficiency for social capital, he argued, is the increasingly prevalent single-parent family. He suggested that this not only further dilutes parental time among children, but also that the permanent absence of a second parent prevents social capital from being passed on to children from this figure (Coleman, 1988). A final structural factor that Coleman identified as determining the amount of familial social capital is the number of children. He conceived of the two-child family as ideal for the formation of social capital. Each child has a sibling and the two parents have attention and resources available for each child (Coleman, 1988).

Putnam (1993, 2000) offers a conceptualization of social capital akin to Coleman insofar as he views it as a positive “...feature of social organizations, such as networks, norms, and trust, that facilitate action and cooperation for mutual benefit” (2000: 35-36). He diverges from Coleman, however, in his conceptualization of social capital as embedded within and experienced by communities rather than individuals. A central feature of Putnam’s approach is the suggestion that social capital generates “civic virtue” (2000: 19) or a community in which residents know each other and are actively involved in each other's lives, thus creating trusting and helpful relationships. For Putnam, social capital consists of a sense of belonging to this civic community, a sense of solidarity and equality with community members. Norms of reciprocity, trust, obligation and cooperation govern social networks within the community (institutions, facilities, organizations and relationships). Finally, Putnam’s approach to social capital consists of positive attitudes towards institutions, facilities and networks constituting the community, in addition to civic
participation in such things as the voluntary sector, political networks and community organizations.

In stark contrast to his American counterparts who view social capital as a positive feature of social relationships, French theorist Pierre Bourdieu (1986) conceived of social capital much more negatively (Field, 2003). For Bourdieu, social capital is but one form of capital, inextricably linked to other forms (economic, cultural and symbolic). Taken together, these forms of capital reproduce social inequality insofar as they contribute to the production and reproduction of privilege and determine individuals’ standings as well as their life trajectories (Allat, 1993). Implicit in his theory is the location of the construction of social capital, along with all other forms of capital, in the processes of everyday life, acknowledging that it is the routines of everyday living that serve to reproduce inequality (Morrow, 1999a: 746).

The Formation of Social Capital

Building mainly on the work of Coleman (1988, 1990) and Putnam (1993, 2000), scholars have articulated two distinct approaches to understand the mechanisms through which social capital is generated. One focuses on the structural configuration of social networks (Bassani, 2007; Lin, 2001; Portes & Sensenbrenner, 1993; Putnam, 2000). The other emphasizes “relational embeddedness” (Bassani, 2007). Those who focus on the structural configuration of networks primarily emphasize who is in the network and how they are related (deSouza Briggs, 1998; Gittell & Vidal, 1998; Woolcock, 1998) to highlight the ways in which networks tend to ‘bridge’ individuals to resources within other networks, and/or bond individuals within a network in such a way as to allow for access to resources within the networks (Putnam, 2000: 22-23).

Those examining “relational embeddedness” focus on the quality of relationships stressing the importance of shared norms, values, trust, a sense of
belonging and a sense of solidarity (Bassani, 2007) to the creation and operation of social capital. Implicit in this approach is the idea that within close, emotionally intense, trusting associations, shared norms and values are established which facilitate the formation of social capital, and lead to constructive outcomes (Bankston & Zhou, 2002). Individuals who share values are likely to spend more time together during which they establish norms of behavior, mutual trust, a sense of belonging, and relationships of obligation and reciprocity (Lin, 2001).

**Critiquing Dominant Conceptualizations of Social Capital**

As the above review demonstrates, the form and relevance of social capital is debated and not consistently articulated. The proliferation of interest in social capital in both academia and policy circles has spawned critical stances on these original writings. While more general critiques have been launched against social capital (see for example Portes, 1998), specific ones centering on its applicability to young people have been advanced by various youth studies scholars. Firstly, authors have argued that the approaches of Coleman, Putnam and Bourdieu do not value youth as active agents in the formation of social capital. Instead, they have taken a “top down” view, conceiving of youths’ social capital as passed down from parent to child within the family structure, or as a result of parents’ relationships with individuals outside of the family unit (Morrow 1999a, 1999b).

Consistent with most sociological theorizing, the three original approaches are adult-focused and ignore youths’ ability to actively contribute to the generation of their own social capital both within and outside of the family, their own strategic use of their social networks, and their impact on the social capital of adults to whom they are connected (Leonard, 2005; Morrow 1999a, 1999b, 2001a, 2001b, 2003). Although Coleman does focus on children, they are conceptualized as mere recipients and beneficiaries of the social capital developed by parents (Coleman 1988, 1990). By treating social networks and resulting social capital as solely the
outcome of parents' investments, Coleman ignores the agency of youth in shaping their own social environments (Morrow 1999a, 1999b). Bourdieu is likewise vulnerable on this count insofar as he suggests that class advantage and social capital are only available to young people in their future adult life once they have accumulated their own cultural, symbolic and economic capital (Edwards, 2003). Their position in society relative to adults precludes or constrains their ability to convert forms of capital (e.g converting social capital to economic capital). Finally, Putnam's emphasis on particular forms of 'civic participation' as central to generating social capital, necessarily precludes youth who are too young to be engaged in the forms articulated in Putnam's approach, including electoral voting and labour union membership.

The Genesis of Youth-centred Social Capital

The neglect of young people's agency in the original social capital writings diverges from contemporary views in the social sciences that emphasize young people's active role in society and that portray youth as active agents in the creation of their own social worlds (James & Prout, 1997). Inspired by this more agentic view of youth, several scholars have undertaken research that explicitly explores the nature of social capital from a youth perspective. Not unlike the original approaches, family and peer groups are central in developing youth social capital, within this emergent youth-centred literature. Consistent with Coleman's conceptualization of youths' social capital, youth point to the key role that interaction with parents, particularly mothers (Morrow, 1999b) and siblings (Gillies & Lacey, 2007; Leonard, 2005; Morrow, 1999b; Seaman & Sweeting, 2004) plays in forming social capital. Youth stress that intensity and quality of relationships are the most significant conditions for the development of social capital. Within both the family and peer group network, youth articulate their
social capital to be in the form of social support (someone to talk to and to share things with), information, guidance, and companionship.

School has also been discussed in this literature as a key site for the formation of social capital, though with mixed salience. Some youth have suggested that school is a place where they develop close bonds with friends, receive support and help from teachers and other mentors (Morrow, 1999b). Others speak of school as a potential site for bullying and feeling left out, as well as not being respected by authority figures, such as teachers (Morrow 2001, 2006). This youth-centred literature thus contradicts Coleman’s approach to social capital in two important ways. First, while Coleman views parents’ relationships among themselves and with teachers as critical for the development of social capital for children, more recent research highlights the importance of the relationships that youth themselves develop. Second, contrary to Coleman’s implication that social relationships within the school are necessarily positive contributions to social capital, the more recent literature suggests that in some instances, social networks can be exclusionary and detrimental to youths’ development of social capital. This echoes Bourdieu’s skepticism that social capital is not always a positive feature of social relationships, but rather, reproduces social inequality. What is clear from the youth-centred social capital literature with respect to the context of relationships within schools is that it is the *quality* of the relationships and the experiences that youth *themselves* have within the setting that is key in considering youths’ social capital.

In partial support of Putnam’s focus on specific forms of civic participation that are key to building social capital, participation in formal community activities has had mixed salience in youths’ experiences of social capital. Morrow (1999b, 2006) found that many youth have reported limited participation in formally organized leisure and community activities, as a result of limited overall self-efficacy and being de-valued by adults in the community. This challenges
Putnam’s assertion that the lack of civic participation among contemporary youth signals the disengagement of youth from civil society (Putnam, 2000), instead suggesting that youth are excluded from full participation by the adults who establish and control these institutions (Morrow, 2006). That is, that their absence is the result of exclusion rather than of disengagement. Other youth have reported that facilities, community groups and programs do not meet their needs (Morrow, 1999b), begging the question as to whether they were ever “engaged” in the first place (Morrow, 2006). There are some studies within the youth-centred social capital literature which suggest that specific leisure activities and community organizations have been important sources of social capital for youth, including information, expansion of social networks, encouragement, motivation, a sense of identity and belonging, and emotional support (Dworkin et al., 2003; Eccles & Barber, 1999; Holland et al., 2007; Jarrett et al., 2005; Leonard, 2005; Morrow, 2003; Weller, 2006). These studies highlight the diverse forms that participation takes among youth including art clubs, sports teams, school council, leadership groups and ethnic clubs. This elaborates on Putnam’s (2000) argument that social capital is generated through civic participation by highlighting the alternative ways that youth are engaged within their broader social context. To date, these alternative modes of participation have been rendered invisible because they are not being incorporated into theoretical and/or statistical models by social capital researchers (Morrow, 2006; Weller, 2006).

In a similar vein, the youth-centred social capital literature challenges the emphasis Putnam (2000) places on formal volunteering as a form of civic participation. Instead, youth suggest that informal modes of volunteering are more important for fostering social capital by way of building social networks of support, assistance, advice, and information. Such informal modes of volunteering were described by youth as helping neighbours and/or community
members without pay (Morrow, 1999b), adopting a cause such as building a skate park in the community, and fundraising (Weller, 2006).

While several scholars have recently extended social capital theory to youth, emphasizing the need to understand young people’s active contribution to and their own experience of the development of their own social capital through research with youth, there is room for further elaboration and definition of the concept as it relates to young people.

First, work is needed in elaborating the nature of social capital for older youth, particularly as they approach the age at which they can be considered ‘full’ citizens and participate accordingly, and as they acquire more freedom and mobility. To date, youth social capital studies have focused on young people up to the age of 16 years and there has been little attention to the ways in which social phenomena, such as gender, age and ethnicity, shape the formation of social capital among youth (Bassani, 2007). Additionally, the existing youth-centred social capital literature falls short of shedding light on how social capital is formed. How do trust, a sense of belonging and solidarity develop? What are their connections to the generation of the more instrumental aspects of social capital, such as information channels, opportunities, support and material aid? Further, no attention has been given in the literature to the conditions under which youth mobilize their social capital and to the potentially context-bound nature of this resource. A contextual approach to understanding social capital for young people is needed to provide an understanding of whether and how social capital changes over time among young people. This is particularly salient given the fact that young people’s circumstances and surroundings change very quickly as they continually (re)form identities and networks (Cairns, Leung, Buchman & Cairns, 1995) as they move through this life stage.
This paper is concerned with moving the development of social capital theory, as well as the youth sexuality literature, forward by elaborating on the foundations of existing research in several ways. The paper takes from Bourdieu's (1986) conceptualization of social capital the idea that it is generated in the routines of everyday social interaction. Drawing upon primary data collected in interviews with Canadian youth aged 16 to 19 years, it uses the description of routine social interaction and the qualities of individuals and groups that flow from these interactions, to uncover the nature of youths' social capital, the ways in which social capital is generated and mobilized by youth, and the mechanisms through which social capital impacts youths' transitions to adulthood, particularly through its impact on youths' sexual behaviour.

The Research Framework

The aim of the research reported here is to get at young people's own descriptions of their social interactions, social relationships and social capital and how these influence their sexual behaviour. The objective is to capture what sources of social capital are salient for them, the circumstances under which they deploy this social capital, and the ways in which it influences their sexual behaviour. In order to capture young people's own perspectives and understandings, a qualitative methodology using semi-structured in-depth interviews with youth was employed. Interviews were conducted in the winter of 2007 in Windsor/Essex County in southwestern Ontario. The region includes an urban core, as well as several surrounding towns and rural county. The population is quite diverse with over one-quarter of inhabitants able to conduct a conversation in a language other than the two official languages (English and French) (Windsor Essex County Development Commission, 2006). The educational, occupational, ethnic and household compositional profiles of the region's population approximate the national average (Windsor-Essex County Development Commission, 2006;
Statistics Canada Census of the Population 2004a, 2004c, 2004d, 2005). Though the region has a slightly lower than average proportion of Francophones in Canada, these characteristics make the region desirable for conducting exploratory research since it provides access to a diverse sample of youth.

The difficulties involved in recruiting youth for participation in research on sensitive topics such as sexuality are well-established; however, as McCormick and colleagues (1999) note, the use of multiple strategies can be adopted to combat this difficulty. Consequently, a range of recruitment techniques was adopted. The eventual sample included young people recruited through their connection with community agencies, their enrollment in undergraduate postsecondary education, their use of virtual networking sites such as Facebook and MySpace, and finally 'snowball sampling'.

Non-probability, purposive sampling of youth aged 16 to 19 years was used to capture differing perspectives or 'multiple realities' by increasing the diversity of the sample (Berger & Luckmann, 1967; Strauss & Corbin, 1990: 177-193). The lines of diversity along which youth were recruited were informed by the youth-centred social capital literature as dimensions of difference in youths' social capital. These included gender (Morrow 1999b, 2003), ethnicity and race (Morrow, 1999b), rural or urban residence (Farrell, Taylor & Tennant, 2004), and age (Morrow, 1999b). Sampling was continued until saturation was reached.

Eighteen young people comprising the final sample were interviewed by a same-gender interviewer since previous research demonstrated that people are more comfortable speaking to someone of the same gender in sensitive research (Laumann, Gagnon, Michael, & Michaels, 1994). The sample was split relatively evenly among males (8) and females (10). The ages ranged from 16 to 19 years with five 16 year-olds, four 17 year-olds, five 18 year-olds and four 19 year olds. The majority of participants were living in the urban core (9), with fewer in the peri-urban (6) and rural (3) outskirts. Despite attempts to recruit more youth from
racial minorities by contacting participants from a previous study on ethnic minority youth who agreed to future participation in a research study, the sample consisted predominantly of youth identifying either as white/Caucasian or from European backgrounds (13). There was some representation from the Black (1), East Asian (2) and South Asian (2) communities as well. Three youth were born outside of Canada. Although diversity in family form, school status and sexual orientation were not specific sampling goals, there was some diversity on these dimensions in the sample. The majority of the participants (10) lived in two-parent families with siblings, however the sample did have representation of an only child with two parents (1), youth living in a single parent home with siblings (5), and those living independent of their parents either alone or with friends (2). The majority of participants were in school full-time and many had part-time jobs as well. Only one participant was out of school and in the labour force full-time. Finally, the sample included two youth who identified as gay males, one as lesbian and one as bisexual, with the remainder identifying as heterosexual.

The semi-structured interview protocol (see Appendix D) was guided by the existing youth-centred social capital literature, though it also included questions directed at the variety of circumstances in which social capital is deployed, and questions informed by preliminary findings from the quantitative analyses for this research (see Chapter 3). Youth were asked to identify key relationships and groups in their lives, and to describe the nature of those interactions, how the relationships developed and changed over time, and the tangible benefits of the relationships and of group memberships. Participants were also presented with a series of scenarios related to personal problems, seeking information and needing instrumental aid in which they might choose to mobilize their social capital, and were asked to describe the sources of social capital they would mobilize in each circumstance, how they would go about doing so, and why they would choose that specific source over all others available to them.
The analysis was carried out solely by the author. It should be noted, however, that the second interviewer reviewed the coding and constructs to ensure that it resonated with their own interpretation of the experiences of the youth they interviewed. NVivo, a qualitative software package (QSR International, 2001) was used to assist the analysis and to manage the verbatim interview transcripts and emergent themes. The first stage of the analysis entailed sorting and coding all of the material from the transcripts that fit under the broad notion of social capital. The second stage involved a process of discovery in which the text was read for themes and concepts related to the nature of youths' social relationships and to the forms and sources of social capital. Analytic memos and notes were kept on themes and concepts as they emerged, including any text that contradicted the patterns and/or those that provided alternative interpretations.

The data used to support arguments presented below reflect the themes found across the corpus of text. Excerpts presented are verbatim from the interview transcripts in order to preserve the language of the youth, with only the names of people and places altered to maintain anonymity. The pseudonyms used for participants were chosen by the youth themselves.

**Defining Social Capital for Older Youth**

*Social Networks*

Similar to what has been expressed elsewhere in the youth-centred social capital literature (Gillies & Lucey, 2006; Holland, Reynolds & Weller, 2007; Leonard, 2005; Morrow, 1999b; 2000; 2001a; 2001b; 2003; Seaman & Sweeting, 2004), two forms of interpersonal networks were described by youth as the central sites for developing their social capital, namely those based on family and friendship.
Parents

Parents were very important to all youth and all accounts were positive. Contrary to Morrow's (1999b) findings that mothers were discussed more frequently as important sources of social capital, among these older teens, both parents were discussed as important with fairly equal frequency. Some youth did identify a closer relationship with one or another parent, however there were no discernible patterns as to which was more important. In some instances, the identified parent was one with whom they spent more time, though this was not always the case.

The importance of parents for developing social capital appeared to hold regardless of family structure. In fact, some of the youth expressed closer relationships with parents who were living in separate homes. For example, Ashley expressed that her dad, who was living in a different country, was more important to her and closer to her than her mother, with whom she was living:

Ashley: We get along really well. Like we are on the phone for like hours a night, just talking about like stupid things... He actually...his job like he transfers his job will move him all the time and he’s in Georgia right now. So I don’t know it’s just that he calls all the time. He’ll email and like we talk like on the phone like maybe like an hour or two a night. Just like...and he’s like...he...like if we need anything, we’d call him and he’ll send us whatever we need kind of thing. So he’s always there...even though he’s not here physically here...like anything we need he’s always there.

Similarly, Jessica expressed that her dad was most important to her, but only because they were not living in the same house:

Jessica: Well, my relationship with my parents...my mom isn’t that great. Um, but my dad is...actually...our relationship has gotten really better since I moved out and that’s part of the reason we were fighting a lot...the root of our problems came from was just disagreeing about living together.

She explains, later in our discussion:
Jessica: I lived with my mom from...like I lived with both when they were together until I was about 2 or 3. Then they got divorced and then I lived with my mom from then on 'till I think I was about 12 or so. Um, and then after that I moved in with my dad 'till...well I moved out when I was in grade 8. That's when I moved out to BC to live with my aunt and uncle...But I'm more happy that I did because it made our relationship better.

I: So, moving out brought you [Jessica and her father] closer together?

Jessica: Ya, and that's the most important thing.

It is worth noting that, while having two parents present in the home was important for children in Coleman's (1988) research, for older youth in this research, this is not the case. In fact, an absent parent, so long as contact was maintained, was the one with stronger ties for some of the youth here. All of the youth expressed that their parents were important to them, regardless of whether a parent resided in the same home. According to the youth in this study, it is the quality of relationships that matters more for the development of social capital with parents, more than the structure of the household.

One of the youth, who had indicated that her mother was the most important person to her, suggested that their relationship had only gotten that close and strong after her only sibling had left the house:

I: Were you always this close to your mom...as you are now?

Britney: No! Not when my brother lived at home.

I: So what do you think brought you closer to your mom?

Britney: She only had me (laughing). I didn't have to share her with any of us. I didn't have to share her (laughing).
It appears that Britney's experience supports Coleman's (1988) "resource dilution model" in which siblings vie for parental attention and social capital resources. Her narrative suggests that the presence of her brother in the home diluted parental attention and social capital resources.

Parents were viewed as important for a range of reasons. Parental relationships appeared to be the main source of material aid, such as money, food, shelter, or assistance, and an important source of unconditional emotional support:

Ashley: Just like sometimes like money-wise like...right now like I don't have a...well I have a job but it's not like a high-paying job. So if like me or my sister need anything money-wise we can call him [father] and he'll send us money. Um. like sometimes me and mom will get in like little stupid arguments and I'll call him right away. And like he's always there to talk and calm us down.

Jason: Um, they're really good supporters for everything I do and they're understanding people...My parents are great they're...no matter what I do they're always going to be there to bail me out. No matter what happens...whenever I need them they're always there. They're like really good support...Like they're paying for my school...So it's really caring sort of relationship with them.

Steven: Besides the fact that he's my father, he's always the person I can go to if I have a problem or if there's something wrong. He can help with homework cause my mom doesn't have a clue...Usually if I need like a...like if I need like 50 bucks and I didn't have it I would go to my parents...

Isaac: Um, just safety and security and of course the love you always feel from a parent....ah...well the typical what a mom does. Just get dinner or sometimes...I'm not too great with the laundry so she'll do that...she always helped me with my homework...So...and...there's always like, I always go ask her about relationship stuff or girl stuff and she tries to answer me...

Phoebe: They would do anything for me. Like I'm not spoiled but if I need something, they will do their best for me...It's too a lot of what coming over here [referring to Canada]...I come to the realization what of they were doin', cause it was better for us here. And that made me really appreciate them, so. And then we've had to like really stick together cause like when we got here we didn't have the house.
Youth also expressed that their parents were an important source of both guidance and motivation:

Ashley: Um, just like sometimes when I’m feeling really bad, like he’ll [dad] come on the phone and tell me like you know I’m a great person like don’t let it...stupid things happen...he’s like you know he’s like “you’re brilliant, you can do what you want”.

Isaac: Um, basically she [mom] pushed me academically to ah, get here...she was always there pushing me to achieve more.

Phoebe: ...they say they know what I’m trying to do so sometimes when I slack, they keep me going and motivate me to keep going.

Jessica: Um, just small things...mostly with schooling and my future...he’s [dad] helped me make some decisions.

Jason: You know they’re [parents] always offering advice and help...

Steven: I’d go to my parents...Like an important educational er...decision that would affect my life...I guess it’s just because they’re my parents so I know that they care for me and that they’re not going to screw around and go with it just to mess me up. They would want me to get the best thing out of life.

A few of the older youth in the sample expressed that they looked up to their parents and respected them as role models, evidenced in 18 year-old Issac’s discussion below:

Issac: Like I look at the decisions that they made in their life and where they are. And I know that if I follow their example then...and their reasoning then I’ll end up in the same situation or in the same good situation that they earned.
Finally, one of the youth very clearly expressed the concept of social capital in his articulation of his father as an important figure in expanding his social networks:

Isaac: You know it's basically...the premise that the more people you know the higher up those people are, the better your life will be. It's like...my dad takes care of ah this one lady...And I help out also but because of that relationship that my dad had, I've met a lot of prominent people that, would only associate with the higher class...Like because of her I've met ah “Greg Gregory” who's the owner of [large international real estate firm] and I've fixed his computer for him. So it's always good to have that contact I guess.

Siblings
Fifteen of the participants had at least one sibling. Contrary to the findings within the youth-centred social capital literature, however, very few of the youth expressed that their siblings were important figures in their life. Among the few who did indicate that their siblings were important to them, profound meaning was attached to the relationship. Contrary to Coleman’s assertions (1988), siblings were not described as passive recipients of social capital. Instead, as has been demonstrated in the youth-centred social capital literature (Edwards, Hadfield, Lucey & Mauthner, 2006; Edwards, Hadfield & Mauthner, 2005; Gillies & Lucey, 2007; Seaman & Sweeting, 2004) those who did discuss sibling relationships, appeared to actively generate social capital for each other within the family as well as outside the family among peers. Most prominently, siblings were perceived by participants as a source of emotional support. Siblings were also, however, acknowledged as an important source of knowledge and experience. Older siblings provided knowledge about such things as homework and schooling.

Brock: ...My sisters...I just basically let them know what’s going on in my life and ah...they really understand and make me feel a bit better...our
family is close and so we help each other out through ups and downs. I can count on them to never turn their back on me if I need anything…my sister who’s about a year older than me helps me out with homework sometimes because we went through pretty much the same stuff…

Ashley: I just like…it’s like we’re there for each other kind of thing…cause our parents are divorced so like, through the divorce and stuff like, we’ve always had each other. So, just kind of like, no matter what, we’re always there for each other and I know that no matter what, like we have each other’s back.

The notion of ‘looking after and looking out for’ siblings has been articulated elsewhere in the youth-centred social capital literature (Gillies & Lucey, 2007). While it was apparent that the support within a sibling relationship was mutual and reciprocal, it was also clear that birth order played a significant role in shaping the content and nature of sibling relationships. Many of the youth actively cared for younger siblings and were responsible for them on a daily basis, as articulated by Ashley in a discussion about her daily routine:

Ashley: Um, well…cause my sister has soccer still, like I’ll wake up at 8:30, 8 in the morning to drive her to soccer. And I’ll come home, hang out with my mom while I have breakfast. Then I’ll have to go back out to pick her up.

For Ashley, caring for her younger sister was a source of pride and made her feel important and needed:

Ashley: It’s just like I feel good because like when she told me like I was like one of the most important people in her life like that she…she didn’t know what she would do without me. That just made me feel like important to her.
Finally, youth suggested that siblings often act as bridges to friendship networks. It was common that youth shared friendship networks with their siblings despite age differences:

Ashley: Like we have...it’s weird because our best friends, they’re like ...my best friend, um she has a younger sister who’d be my sister’s best friend. So like we’ve always had that where like we’ll all go to the same house...

Brock: I have two sisters, one’s older and one’s just 11 months older than me and ah, me and the closer one have always been really close because we went through a lot of the same stuff. In school we hung out with the same friends...

Friends

It is clear from the data that the experience of friendships is crucial to the development of youths' social capital. This finding is in line with that found by others with respect to the formation of social capital among younger age groups (Morrow 1999b, 2000, 2001a, 2001b; Weller, 2006). Friendship networks were discussed as key sources of social capital by every participant. Friends were such a central feature in the lives of these youth that their daily activities were often structured around encounters with friends as seen in some of their discussions of “typical” daily routines:

Britney: Um, I get up in the morning, shower, go to school, come home...well this week I’m studying all week, so I come home and study. But usually I just come home, watch some TV for a little, wait for my friends to get home. Then we go get coffee or something. Hang out at Tim Horton’s on a weekday or something.

Sarah: ...I have all my classes in the morning so I’ll go to my classes. If I’m on break I’ll lunch with a couple of friends. Um, after my last class I usually will stay around here, either study or I’m out with my friends
There was considerable variation in the way youth described their friendships. While some identified a “best friend”, others described a small number of very close friends. Some discussed a larger group of friends as important, while others still identified more than one friendship network in their distinction between two separate groups of friends. Unlike Morrow’s (1999b, 2003) finding of gendered patterns in such distinctions, there were no discernible patterns in these different articulations of friendships. The longevity of friendships ranged from fairly recent (a matter of months) to well over a decade. All forms of friendships, however, shared themes of uncritical support, “being there” for each other, assistance (material and practical, e.g. in a school subject), and companionship.

Sarah: Well...ok. Before like whenever we’d have like little like problems we’d always like talk about it...And just like they stood up for me and they were always there and they comfort me and...they’re really important because they always, I don’t know they just make me feel safe. They make me happy. We always have a good time when we’re together...we have fun times.

Jessica: Actually, I have a house full of very close friends. I’d say right now I would consider them all my best friends. There’s three of them. They live just about a block away on [Franklin]. And um, I’m just usually over there. It’s only a block away and I walk there. And I spend most of my time there...And you know when you need somebody to talk to...ah...family problems things like that um they’re always there.

Steven: He’s a good friend. He’s a lot smarter than me in math so he helps me out with that. And I’ll help him out with other things. He helps me out with school and...he’s always there....

Jason: ...Like we’d tell each other anything and we’re always there to give other advice sort of thing. So it’s a really good like support role for each other.
Phoebe: ...There’s three of us. And we’re all kinda I don’t know, we’re all together like always. So I consider both of them my best friend.
I: What makes them your best friend as opposed to just a friend?
Phoebe: We’re always there for each other no matter what...They make me feel special. They’re...like they will...they’re always there for you...
Like if I’m feeling really down. Like little special. Like if I ask them to do something they’ll be there in a heartbeat. Or if in the same situation I’m not feeling too great, they won’t say anything but they’ll do something just to make my day and to make me feel better.

Ashley: Um, like just the group of friends that I have right now, like there’s four of us...I just like...I don’t know just like...the idea that they’re support like if anything is going wrong, like anything that’s troubling me, I always have them and know that no matter what I do they’re always going to be there for me. So it’s kind of like, I can go out there and make mistakes, learn, and it’s not like I’ll be by myself all the time. There’s someone there.

In summary, the informal social networks in which older teens build social capital did not differ dramatically from what has been described in the youth-centred social capital elsewhere for younger age groups (c.f. Morrow, 1999b). Two types of informal networks, based on family and friends, were described by youth as most important to them. It is the intensity of relationships and what they offered that made them so important. Within these networks, youth described having received unconditional support, guidance, material assistance, expanded social networks, and company.

Identity and Sense of Belonging
In the youth-centred social capital literature, young people have been found to identify with a number of groups and ‘communities’, including those associated with school, family, and interest groups (Morrow, 1999b). A sense of belonging and identity are integral parts of social capital formation within youths’ social networks (Weller, 2006). Just as Coleman (1988) argued, these shared values and
interests are important for the development of a sense of belonging and for fostering relationships of trust. When asked why their friends are important to them and how these relationships developed, the youth in this study often described shared interests and values as a central joining feature of the group. Group identities were marked by signatures such as clothing and accessories, music, and activities.

I: So what makes your friends important to you?
Jessica: Um, we usually share a lot of the same things. We're all in debt and we all have not the relationship with our family... Just life experiences I guess we have in common... We like to do the same things, we all really like music like movies... Ya I think it's important to have things in common... we have at least a few things in common

Phoebe: We all really like shoes. So if one of us has a new pair of nice shoes that they like, they'll complement them and then they'll take them!... They're exactly the same as me. So it makes it easier to talk to them because they have the same stuff pretty much to say... I think... you know how I said me and my friends have the same feeling. I think that's cause of the way we're brought up... The way you've been brought up is the kind of people you become friends with. You have the same morals and whatever.

Implicit in Phoebe's account is the interaction between influences of family and friends. In particular, Phoebe suggested that the values and morals instilled early in life, through family, influence with whom youth become friends, typically leading them to befriend 'like' individuals. Though being part of the group entailed adopting an identity and having some commonality, it did not always include members with the exact same identity and values. Differing values and interests were recognized and embraced in some of the youths' accounts.

Ashley: I don't know like they can just relate to me. And like if I'm having a bad day I can call one of them up and then they'll be like "ok let's go out
for coffee or just come over or whatever". And just like they're all like different. Like some of them like different things so I don't know we're all different but we all come together and we all have a good time when we're together.

Isaac: Ah, I guess um, being in a group, you're included in something. Like a lot of like... before I was... I wasn't too into hanging out with people. I would always go home and... because of my parents, studied. I'd read books. I was more book smart so everybody just looked at me like "Oh you're the smart guy". As I kind of developed, got more outgoing, you kind of make different friendships, you join different groups, you start hanging out with different people, so it's almost on every night of the week you go out with somebody. Like some other group. So like for me it's either I hang out with ah, the younger kids that are 17 years old still in high school and some of them I've known for a really long time, like 10 years. And then there's always the new group that you meet either from work that they invite you out to a bar and sneak you in cause you're not of age. Like ah, it's... it's just that feeling that "oh I'm included in something, a group that's older than me. That's cool. Like I look up to them".

This complexity of youths' identities suggests their associations are often more fluid than bound to one specific group.

Participation and Engagement

Putnam's (2000) thesis of declining social capital and the disengagement of contemporary youth was based upon indicators of civic engagement and lifestyle choice including, for example, individualized leisure pursuits such as watching television. Putnam documented how, within the United States, people who watch TV also read newspapers less, are less trusting of others, and are less engaged in their communities as they substitute this individualized form of leisure for more communal ones. He notes:
Nothing - not low education, not full-time work, not long commutes in urban agglomerations, not poverty or financial distress - is more broadly associated with civic disengagement and social disconnection than is dependence on television for entertainment. (2000: 231).

Many of the young people in this study did in fact watch television; however, it was far from an individualized leisure pursuit. Instead, the youth described group identities built upon television watching. Television was described as a bonding activity for youth and their friends:

Ashley: Um, like usually like we're both big CSI fans. So like every single night for like 2 or 3 hours we'll sit there and watch CSI or we have some of them on DVD and we'll try and guess what happens kind of thing.

Jessica: I have a house full of friends... We watch tv. We all like the same shows - Desperate Housewives, Prison Break and the OC... So ya, we actually have... like I went over there last night... we usually... I usually go over there to watch the shows...

Video “gaming” took on a very similar role among networks of male friends. However, neither television watching nor video gaming was pursued at the expense of more traditional group activities. Virtually all of the youth participated in some form of group activity that did not differ significantly from what has been described elsewhere in the youth-centred social capital literature with respect to younger age groups, including team sports, informal sports clubs, arts clubs, school councils, informal leisure groups (Jarett, Sullivan & Watkins, 2005; Leonard, 2005; Morrow 1999b, 2000, 2001a, 2001b, 2003; Weller, 2006). The youth described gaining feelings of accomplishment, confidence, and a sense of belonging from these groups in addition to expanding their social networks of support, information, instrumental aid and guidance. For example, when asked to describe why her dance team is important and how participating makes her feel, Phoebe had this to say:
Phoebe: I feel a part of something... When you achieve something, whether it be we get a high score in a competition or you finish a routine that no one liked it and it seemed impossible, we’ll all celebrate and we’ll all hug each other like “we did it”! We feel together. We accomplished something as a team.

Similarly, in describing his experiences on the volleyball team at his school, Brock expressed a sense of accomplishment, increased confidence, belonging and respect in the following way:

Brock: Well like if you perform well, you get a sense of accomplishment I guess and just being with your friends it’s content I guess... It’s a really good group and everyone respects each other... I got a lot more confidence.

Even more individualized sports were described as creating feelings of belonging, support, and comradeship as expressed in Luca’s description of his experiences in playing Badminton:

Luca: ... As a whole, like we had group meetings or team meetings. And we talked about stuff, what to do if you’re in different situations. Like coaching stuff. And... team kinda effort, and everyone can put on things... So, just the feeling that um... that they’re there for you...

Though they engaged in the same forms of activity as were found for younger youth, the youth in this study did differ from participants in previous youth-centred studies in that formal volunteering (eg. through organizations) was minimal. However, informal volunteering was found to be a significant source of social capital for them (Morrow, 1999b; Weller, 2006). Only two males in the sample described their engagement in formal, organized volunteering and neither did so for altruistic reasons. Instead, both had other motivations for joining
volunteer organizations. Interestingly, neither described their experiences with this volunteering as being important in the development of their social capital:

Isaac: I volunteer at my ah grade school...I teach a computer class there. Ah, just once a week...I had to get my community service hours. [volunteer hours are required for high school completion in this province]

Ching: Eh, the [name of school] Green thing, we did clean ups. It wasn’t like you feel you belong to it. You just do volunteer hours. Looks good on your college application.

These alternative experiences of participation and engagement, and the ways in which youth develop and maintain social networks within them are important to consider for social capital formation, as sites for social capital formation point us to particular types of networks for social capital formation.

Youth Employment and Social capital
Thus far, this paper has focused on youths’ social capital within the family, community and peer groups. It has been demonstrated that the form and nature of older teen’s social capital both supports and contrasts with the work of Coleman (1988, 1990) and Putnam (2000) in various ways, as well as both supporting and contradicting what has been found for earlier age groups. This section explores Putnam’s (2000) claim that participation in the labour force decreases social capital available to individuals by displacing time otherwise spent in the community and social involvement. It is well recognized that paid employment is a significant feature of many young people’s lives (Hobbs & McKechnie, 1997; O’Donnell & White, 1998). In this study, well over three-quarters of the participants had experience of paid employment in the form of part-time work, and one participant
was in the labour force full-time. The participation of the young people in this study in paid work calls into question Putnam’s (2000) suggestion that it leads to a decrease in social capital since youth developed significant social capital networks within the work place. In particular, the youth spoke at length of the significant relationships they formed in the workplace and the social capital resources available to them as a result. For example, in response to a question as to the most important people in her life, Sarah said:

Well, one group...would be the girls I work with. I like them because we’re really close. Well there’s four or five of us that are really close... Because we’re all roughly the same age and we’re all girls. And we’re all growing up and we’re all having our boy problems and our medical problems and everything else. Like just scares and everything that we all just kinda got connected...like we all had something in common.

Sarah went on to say that it was through her connection with the girls she worked with that she derived a great deal of emotional support. This relationship, however, was not restricted to the space they worked in. Sarah, like many of the other youth in the study, also spent time with her coworkers outside of the workplace, forming a good friendship.

Sarah: ...we’ll go see a movie, we’ll go hang out. Usually, once a week we’ll all go out to dinner....Somewhere nice...have a good conversation. Sometimes we’ll go after...we’ll go to someone’s house maybe drink a bit.

Involvement in paid work not only provided a means for youth to expand their peer networks, but also provided a structure in which youth could develop relationships with other adults outside of the family. Though they may have originally begun work for money, some of the youth discussed how they
expanded their social networks through adults in the workplace and gained access to various resources they otherwise might not have. For example, in his discussion of the work he did for a school, Isaac emphasized the relationship that he developed with a specific teacher in the school as a result:

Issac: It’s evolved....like he’s my friend basically just, although he’s a lot older than me, but ah...like ah...we talk about stuff that goes on in our families...like ah, course he knows that I like computers so he always tries to get me deals on whatever he can. Like online deals or things like that...and he ah (pause)...um...um...he gives me like a reference. He was a good reference for when I was applying scholarships and things like that. Like...so he....he always put in a good word for me in situations.

Both Sarah and Isaac’s discussions are exemplary of the ways in which youth in this study described the social capital developed through paid employment, both with peers and adult coworkers. Young people appear to develop social networks that afford them social and emotional support, access to information, and instrumental aid, as well as benefits from the human and symbolic capital of adults they connect with in the labour force, as well as in the family and school.

Factors in Establishing Sources of Social Capital
In his consideration of constraints on the formation of social capital, Coleman (1988, 1990) focused on the structure of the family. Bourdieu (1986) articulated constraints posed by a deficiency in other forms of capital, particularly economic capital. Present within the data was evidence of three additional structural considerations in the formation of social capital for youth, namely area of residence, age, and gender.
Area of residence

With the exception of the elderly, youth are more dependent on their local environment than adults for accessing facilities and establishing or maintaining social networks. Youth living in peri-urban areas, and even more so those living in the rural outskirts, expressed boredom and frustration with the lack of facilities in their local community. When asked what they liked and disliked about their neighbourhoods, claims about the constraints of their local environment were frequently present in youths' accounts.

Phoebe (peri-urban): ...Ya I live out in the middle of nowhere...
Everything I do is in (city). My friends live there and there's the mall.
And the movies.
I: There isn't really anything to do?
Phoebe (peri-urban): It's kind of a pass-by town. You never...I mean there's not!

The lack of facilities and activities available to youth living in peri-urban and rural areas impacted negatively on their ability to maintain networks, particularly with peers. This, in turn, put constraints on their ability to develop social capital within peer groups. Access to facilities necessitated travelling to other areas outside of their immediate locale, preventing many youth from being regular participants.

I: How do you like [town]?
Britney (peri-urban): It's boring! (laughing)
I: What do you find boring about it?
Britney (18 years old, peri-urban): There's just nowhere to go. Everything is in [city].
You have to drive all the way out here to do something fun...So I don't go very often. (laughing)

The converse was also evident. Youth living in a variety of areas across the urban centre expressed positive attitudes towards their local neighbourhood, citing the abundance of facilities and “fun” things to do:
Isaac: I live in the [area of the city] around ah [City Centre] mall. I just call up friends, hang out, go to the movies, go to grab something to eat sometimes. And ah, it’s pretty close to the mall so just go there.

I: What area do you live in?
Jessica: Downtown area...I was always outside playing and there was lots of parks. I swam in the pool there.

Though it was more frequently articulated in the context of peer networks, this structural constraint was also evident for extended family relationships. Youths’ limited mobility affected the amount of time spent with extended family members. In his discussion of his relationship to his grandmother, Brock commented:

Brock: Well we were kind of close but there was like the distance factor so. Not so much and then ah, when we moved to the east side (of the city) like right across the road from her it got a lot closer.
I: So you’re hanging out with your grandmother somewhat regularly?
Brock: Ya.

Evident from these accounts is the fact that youths’ social capital is shaped and constrained by their local environments owing to their lack of mobility and only partial autonomy. In his assertion that contemporary youth are becoming increasingly disengaged, Putnam (2000) failed to consider how the broader sociopolitical context shapes youths’ ability to participate. Field (2003) points out that government actively shapes the arena in which individuals engage in leisure activities or stay at home. Through its decision regarding what amenities and facilities are to be made available in local communities, the local government has played a key role in shaping the field in which youth can participate in activities that foster social capital. This was made clear by Ching, a 16 year-old male who was extremely dissatisfied with his sub-urban neighbourhood south of the city centre because he felt it was “boring” and lacked facilities:
Ching: ...we should have more community centres...but most places...that's just not an option.
I: There’s not very many community centres that you can go to?
Ching: No...but in [city] there’s like five community centres and one YMCA.

Field (2003) further states that “we can only understand withdrawal from engagement if we take it seriously and understand it as a field of choice” (p. 39). It follows that a more contextual approach must be taken to understanding the nature of youths’ social capital and the constraints placed on it given that the lack of involvement may reflect the absence of options, rather than withdrawal or the rejection of involvement.

**Age**

The impact of the local surroundings on their ability to develop and maintain social networks differed by age. This variation in social capital across various age groups supports what has been found elsewhere in youth social capital studies (Smylie, 2009). Older teens demonstrated greater autonomy and mobility and were better able to compensate for the constraints placed on them by their local neighbourhood. Many discussed having access to a vehicle, either through parents or friends, and more easily travelled to social spaces where interaction could take place. Nevertheless, younger participants creatively used cyberspace to maintain their social networks and to overcome the isolation of living in peri-urban and rural areas, as well as to overcome both regional and international distances. Owing to their age and their limited independent mobility in the absence of a full driver’s license, friendships and family relationships were not easily maintained through face-to-face interaction. Though there were no questions pertaining to the use of the internet in the interview protocol, younger teens expressed that technological forms of communication became particularly
important for them as a means to maintain their relationships with other youth. In particular, youth highlighted the use of instant messaging to keep in touch with friends who were a great distance away:

Phoebe: I use MSN Messenger. I used it a lot when I first came (to Canada) to keep in touch with my friends.

Jessica: I've had friends move away that were really close before... I mean there's always MSN, webcam, you can still talk and see each other and everything.

I: Do a lot of young people use MSN to keep in touch and maintain those friendships?

Jessica: Same with MySpace... it can help keep you in touch with people that moved far away or whatever that you don't get the chance to see very much... Instead of calling them up or you know saying "oh let's go to Tim Hortons or go walk near the river or something, catch up", you can just talk to them on MSN.

Technological forms of communication were also important for maintaining relationships and disseminating information in the absence of immediate face-to-face contact among younger participants who were otherwise closer in proximity. For example, Ching, a 16 year-old male high school student expressed that during non-school hours at home, he would talk to 'friends' on his 'contact list':

I: On your messenger contact list? [referring to MSN Messenger] What do you use it for?

Ching: Asking people questions. Like homework. Like about information about events and stuff.

I: What kind of events do you ask them about?

Ching: Like when semi is. [referring to the semi-formal dance] Stuff like that. Like you ask the people who are doing Council so that you know like before the announcement is made when the semi is. You can also actually make an impact on what the school's event is without actually being a part of it. Just tell them, go on [messenger] and tell them.
While their older counterparts discussed travelling for face-to-face contact or using the telephone, younger teens were more likely to use technological forms of communication to maintain ties with family members as well. In her explanation of how she keeps her cousin in an adjacent major city up-to-date with her problems, Britney states:

Britney: Everytime I do have a problem I’ll send her an email. Like if it’s an email, she’ll reply the same day. That’s how I approach her pretty much because she’s not with me all the time.

Similarly, with respect to her relationship with her father, Ashley discussed:

Ashley: He actually...his job, like he transfers his job will move him all the time and he’s in Georgia right now. So I don’t know, it’s just that...he’ll email. So he’s always there, even though he’s not physically here.

These narratives suggest that alternative ways to maintain social networks were important for younger teens whose autonomy and mobility was more constrained than that of older teens who were able to hold full driver’s licenses. Different spaces for promoting social interaction, such as cyberspace, should be considered when exploring social capital formation for youth. Research explicitly exploring the use of cyberspace among youth to establish and maintain social capital networks, is needed.

Gender

Gender differences were evident in some, though not all, elements of youths’ accounts of social capital. Gender was a significant structuring principle in determining the social space that youth used to build social networks, as well as the nature of relationships both within and outside of the family.
Though all of the youth described “hanging out” as the activity in which they engaged most frequently with friends, when probed as to what this entailed, discussion differed between females and males. For girls, the spaces for hanging out tended to be public spaces, namely coffee shops, shopping malls and movie theatres:

Britney: A lot of time I go get coffee and we just talk about school.
I: So the coffee shop is important? Having that.
Britney: YA!

Sarah: We’ll usually just go to Starbucks. We’ll go to ah...it depends, we’ll just shop. We’ll go to the mall...we’ll go see a movie. Have a good conversation shopping.

Phoebe: We go to the movies...like me and my girlfriends might have a movie day.

Boys tended to be much more vague with their responses. They were more confined to their homes and most frequently described playing video games with their friends as the typical social event, though when they did venture out it was to “grab a bite” to eat at a restaurant.

Jason: It’s usually just sitting around...have a few friends over at one of our houses. Usually be sitting around. ..Or we’ll go out to like a restaurant or something. Hanging out all the time and like playing video games.

Ching: We go out and grab a bite or just hang out at someone’s house...We are always hanging out. We go to each other’s houses and play video games all night long.

Steven: I’d usually go out with some friends. Saturday, Sunday, I’m out all the time. I’m either at a friend’s house, or at my house with everyone...Ah we have a poker game every once in awhile. Play the guitar hero. I happen
to have the guitars so. So we'd be doing that.

Isaac: Oh, whew (sigh), basically anything and everything. I guess they're spanning from sitting on the couch...um, board games, video games.

These experiences run contrary to previous research that has shown that girls have more restricted access to public space for a variety of reasons, including parents' expectations, stereotypical gender expectations and fears or anxiety about safety (Valentine, 2004). It is important to note that this research was not conducted in Canada and that the same public sentiments may not hold in the Canadian context. The youths' narratives in this study suggest that there may be a difference in the Canadian context as female participants were not confined to their homes, but rather, spent a great deal of time in public spaces. Similar findings have been reported in research conducted with females in the UK (Morrow, 2003). In general, the youths' narrative support the results of the quantitative analyses in this project (see Chapter 3), as well as previous research (Morrow, 2002) that suggests young males and females differ in their sources of social capital.

The nature of friendships was also gendered. When asked what friends “do” for them, or what benefits they get from the friendships, it was made clear by the teens' accounts that friendships with males and females fulfilled different functions. Friendships among girls tended to fulfill more emotional functions as described by the participants below:

Ashley: I just like...it's like we're there for each other kind of thing. Like I'm like...whenever she has a problem she comes to me...it's just that, I don't know, she's always there for me like if I need anyone, she's there. I'm like, if I have a secret that I can't tell anyone else, like if I did, I know I could tell her and she wouldn't tell anyone. And it's just like that...like if I need anything she'll help me. So it's always like we're each other's support link.
Jessica: Um...sometimes I tend to overreact in situations...and it’s not like huge or blow up or anything. But they just kind of bring me back down I guess...And you know when you need somebody to talk to...ah family problems, things like that, um they’re always there.

Sarah: Well my girl friends it’s more like we talk and we’re more like...our problems or we’ll talk...it’s a whole different thing hanging out with girls and guys!

Friendships among males were typically more instrumental involving standing up for each other, providing help with homework, lending small amounts of money when needed, or just being someone to hang out with:

Isaac: Like if he had problems with someone, that we’d stand up for each other...We’re not too good at giving advice. You know there...like...we each have our secrets but we don’t care. Friends, we hang out.

Brock: We help each other out sometimes with Chemistry and stuff...we learn from each other pretty much...Ya, there’s the gym and ah...I don’t know...I guess it’s knowledge.

Steven: He’s a good friend. He’s a lot smarter than me in math so he helps me out with that. And I’ll help him out with other things. He helps me with school and...he’s always there when you really need someone to make fun of.

Luca: For money. I would say borrowing from my friends if it’s not a lot. Rides I would go to my friends.

Most youth in the sample discussed solely same-gender friendships. However, the gendered nature of friendships became particularly evident among youth who had mixed-gender friendships as well:
Jason: And then we were like...we became really close friends...Like we’d tell each other anything and we’re always there to give each other advice sort of thing. So it’s a really good like support role for each other. ...Um, the fact that she’s always there. She’s always someone I can go to talk to about anything. She’s always offering advice.

Ching: Ya, like my best friend, when my parents first separated, I did talk to her...ya, she was there when I needed someone to talk to.

A few of the youth who had mixed gender friendships explicitly described the difference in these friendships in which female friends fulfilled a more emotional and supportive role, where males served the more instrumental role:

I: What do your girl friends do for you?
Sarah: Well...well they do like comfort me when I need it. They’re always there. Cause you know girls are more caring and stuff so...more than guys (laughing).
I: And what about your guy friends? Is there anything you get from being friends with the guys? Anything that they do for you?
Sarah: Well the guys...they come...they’re like my bigger brothers. They watch out for me. They make me feel safe. Like I can go places with them and not feel like you know “this is sketchy” or something...They just make me feel safe and they make me feel comfortable. That they’re always going to be there to be like “Oh I’ll watch your back” and “I’ll help you out”...

The marked gender differences in the nature of friendships among the youth were echoed in family relationships. Parents were identified by youth as very important to them, however, the nature of their relationship with each parent was different. The recognition of these different roles was further gendered with girls articulating and recognizing these differences more frequently. The emotional role that mothers fulfilled was clearly acknowledged by youth.

Phoebe: I would talk to my Mom. And she would talk it all out and she would sit me down and make me feel better.
I: What would make you go to your mom instead of your dad?
Phoebe: Mom is more understanding and sympathetic where my dad's more "tough it up". He's more into the showing me what the real world's like.

I: Why is your mom important to you?  
Britney: Um, cause I don't know what I would do without her (laughing). She's just...she's always there, like I can tell her anything I want...Like I talk to her about my friends, my boyfriend, school. Anything like that. Anything I'm like stressed with or anything.

I: Why is your mom important to you?  
Isaac: Basically, she's always been there for me...took care of me, always watched over me...um, kind of like...just like she's my safety blanket. Cause she took care of me so much that ah...I confide in her. Much more than I do any other person. Kind of like, I can tell her anything and I know she'll understand.

I: So what do you rely on your grandmother for?  
Brock: Um, I would have to say kind of comforting, like. She...I rely on her for comfort I guess.

Luca: Just the fact that she's around...She's there for me when I need her...Just the fact that knowing that she's there makes it easier on me. If I need someone to talk to she'd be there.

Conversely, fathers were recognized as fulfilling more of an instrumental role through the provision of safety, shelter and physical aid:

I: Why is your dad important to you?  
Britney: I don't know. I feel like he protects me from everything (laughing). He always helps me with my car...He takes care of all the physical things.

I: What makes you dad important to you?  
Jessica: I don't know, it's just like the little things he's always telling me that I never realized like when I was younger um, just anything from like changing a tire to ah...microwaves and toasters really take up a lot of energy...just small lessons.
I: So what does your dad do for you?
Luca: Well, he pretty much get the groceries in the fridge.

I: so why is your dad important to you?
Isaac: Because he's the one that kind of brings in the income. He makes my life easier by providing for me and not...not so much in an emotional way but in like a material way, as in food and clothing and um say a roof over my head.

The articulation of differences in both friendships and familial relationships suggests that the provision of emotional support and instrumental aid (two elements of social capital) are gendered. Building on Bourdieu’s approach to social capital, which recognized that women are responsible for maintaining affective relationships (Bourdieu, 1986; Reay, 2004), authors have elsewhere used the concept of ‘emotional capital’ to understand the gendered nature of such relationships. In developing the concept, Nowotny (1981) referred to “knowledge, contacts, and relations as well as emotionally valued skills and assets, which hold within any social network characterized at least partially by affective ties” (p. 148). Reay (2004) has done more recent work to develop the concept in relation to its benefit for young people. She uses the term to refer to “the stock of emotional resources built up over time within families and which children could draw upon” (p. 6). In her work, Reay suggests mothers play the key role in developing this emotional capital. The findings here seem to support this assertion though they suggest that it might also be relevant for understanding the nature of friendships with females who appear to be responsible for the provision of emotional resources within networks outside of the family. These gendered relations of social capital, both within and outside of the family, reflect broader societal norms about the provision of care and the prevailing cultural images of women as emotional beings.

155
Youth Transitions and Changing Networks of Social Capital

The youth-centred social capital literature has made great strides in improving our understanding of youths' experience of social capital. There remains, however, much to be learned about the nature of this social capital with respect to its stability over time. One of the things this research demonstrates is the fluid and changing nature of the social networks from which youth mobilize social capital. As youth move rapidly through stages of life and (re)formulate identities, it is likely that they move through a variety of social networks. In the quantitative analyses for this project (see Chapter 3), youth demonstrated significant shifts in the effects of social capital as they moved through various stages of adolescence. The narratives of youth told throughout this qualitative phase support findings from the quantitative analyses that the effects of youths' social relationships is not static, but rather changes as youth move through various social networks and contexts over this life stage. As the youth moved through stages of life, such as transitioning from grade school to high school and from high school to post-secondary education or into the workforce, their social networks often changed as well.

Phoebe: In England my best friend, I'm still friends with but it's hard to live so far away and they don't have any concept of life here. And so much has changed because you figure our life would change so much that a lot of my friends over there have changed like they all moved on and are older... Plus when we went to high school we kinda grew apart too. We didn't have any classes together. And since we got older things have kinda changed.

This young woman recognized that her changing circumstances, namely moving to a different country, and transitions from elementary school to high school altered her existing relationship with a close friend. Similar experiences were
articulated with respect to participation in leisure activities and groups. For example, Isaac discussed how he was not as involved in leisure activities at the time of our discussion as he had been in the past. He gave the following rationale:

Isaac: Um, as of like now I'm not too involved cause I'm just trying to transition into the university. Like ah...pretty booked up on a lot of labs and lectures and um, with a part time job on the weekends. So that's kinda not too much time for myself. But ah, in the past...ah, during the summer I ah, volunteer...for the gardening program...ah I've been pretty involved with um, with the environmental side of things.

Isaac’s transition from high school to university and his attempt to acclimatize to the workload and class schedule prevented him from participating in volunteer organizations and causes that he had been involved in in the past.

Transitions through lifestages were not the only catalyst for changing social networks. The (re)formulation of identities and experimentation with various lifestyles was identified by some youth as the reason for altering social networks. For example, Britney discussed how she had a friend who was very important to her, but with whom she very rarely spoke at the time of the interview. When asked what had led to this change in their relationship she responded with the following description:

Britney: Um, at the end of grade 12, she got into a very huge party phase. And she was wasted every night and like slutting around (laughing). And I don’t know, I just didn’t want to hang out with her anymore...We all kinda...this is going to sound mean but we always kinda talk about the one friend. And I don’t know...just they realized how much she changed and we don’t like the way she is.

In this narrative we see that Britney’s former friend was engaging in behaviors that Britney and her friends did not want to participate in. As a result, the composition of the social network was altered. In addition, the identities of the
girls remaining in the group were strengthened. According to Schaefer-McDaniel (2004), a sense of belonging and identity form a significant part of the conceptual framework of young people’s social capital. As articulated by some of the youth in this study, peer groups are constantly being (re)constructed which has implications for the (re)formulation of participants’ identities and social capital. The social capital available to both the female rejected by the group, as well as the remaining group members, was altered as a result of the changing nature of this social network. If Britney’s group had not rejected the friend, potential bridges to another social network, with different social norms, would have been formed. The remaining members of Britney’s group lost the social capital that would have come from keeping this one friend in their network. Vice versa, the rejected member has lost the social capital tied to the group of peers that rejected her.

These narratives provide examples of how individual networks of social capital can change over time among youth. What is apparent from their experiences is that the individuals and groups that act as significant sources of social capital for youth are not static, rather, they change over time. Youth’s networks from which social capital accrues are quite fluid insofar as they exhibit significant dynamism and adaptability in response to changing circumstances and the changing biographies of youth. Youth are constantly reformulating networks and making new friendships as their circumstances change and as they transition through various stages of life. In attempting to understand youths’ social capital and the potential benefits it may have for them, we must be cognizant of this dynamism and fluidity.

The Formation of Sources of Social Capital in Routine Daily Interactions

As youth described their daily routines and social interactions, three characteristics stood out as important to the development of social capital: face-to-face interaction, common interests, and in particular, the experience of an
emotional connection with the individuals or groups with whom they interact in family, peer, and community contexts.

**Face-to-face Interaction**

In their descriptions of the people most important to them and that they could rely on, and how these relationships developed into significant ones, the youth in this study describe the necessity of face-to-face interaction. Almost all of the youth stated that spending more time with significant other(s) provided the foundation for developing important, strong relationships that they could draw on. For example, Jessica discussed at length her relationship with a group of friends that lived together in a house on her street. When probed as to whether she was always as close to them as she is now, she responded:

Jessica: No actually, ah, they lived in residence last year and that’s when I met them. Like through a friend. And then that friend that we both knew, she lives out in [the county] so she’s not that close, but we [the rest of the group] were closer so we’d all hang out more and that’s how we became more closer.

Similarly, in a discussion about how she developed the close friendships with a group of school peers, Sarah said:

Sarah: I met through my...well most of them through my ex-boyfriend. Well we became mutual friends, especially like the people that come here now [referring to the University she attends] that we, the more the time we spend again we all got closer.

Face-to-face interaction, as described by the youth, creates a sense of solidarity and identity tied to the relationship. Many youth described losing a shared identity and feelings of solidarity, key elements of social capital (Putnam, 2000), and a
diminished significance to relationships in their lives when face-to-face interaction was no longer possible. For example, in her explanation of why her former "best friend" was no longer someone she relied on, felt close to, or would claim as a significant person in her life, Phoebe said:

Phoebe: In England my best friend, I'm still friends with but it's hard to live so far away....like I can still talk to her but it's probably more now just general conversation rather than like (pause) we used to.

In a similar vein, when asked to elaborate on why his family is not important to him and why he feels he doesn't turn to them, Ching suggested:

Ching: Well, as you can see we're never home with each other, you know....But like we never see each other. My mom comes home at 9. And I'm out and stuff a lot.

Later in our conversation Ching divulged that his parents had separated and his father had moved to a city approximately 1000 kilometers away. The following dialogue took place:

I: Are you as close to your dad in Ottawa as you were before he moved?
Ching: We weren't ever actually 'close' [using fingers to indicate quotation marks]. We don't spend time together....

As described by the youth above, face-to-face interaction appears to be a necessary condition of the generation of social capital for young people. Relationships in which youth identified forms of social capital, such as emotional support, material aid, or information channels, were those in which they had regular face-to-face
contact with the other party. The youth suggested that face-to-face interaction contributed to a strong relationship, a sentiment best articulated by Sarah:

Sarah: ...the more time we spend again, we all got closer.

Nevertheless, the increased use of ‘distance media’ (e.g. email, instant messaging, cellular phones, video conferencing etc.), particularly among youth, raises the question as to whether this face-to-face interaction is necessary to produce social capital, or whether emerging forms of technology might be suitable substitutes. While the youth in this study showed a clear and strong preference for face-to-face interaction with both family and friends, they did make reference to the use of distance media to overcome physical distance and to maintain their social networks in some instances. As already discussed, though there were no questions pertaining to the use of the internet in the interview protocol, some youth expressed that technological forms of communication became particularly important for them as a means to maintain their relationships with other youth (see quotations from Phobe and Jessica on page 156) or with an absent parent (see quotation from Ashley page 157). Britney further elaborated how she keeps her cousin in an adjacent city updated on events in her life:

Britney: Everytime I do have a problem I’ll send her an email. Like if it’s an email, she’ll reply the same day. That’s how I approach her pretty much because she’s not with me all the time.

Though the youth in this study showed a willingness to rely on distance media to keep in touch with friends and family, relationships maintained in this way were not discussed with the same enthusiasm and excitement as relationships involving regular face-to-face contact. Instead, the interaction appeared to involve bare
utilitarian, mundane communication, limited to “catching up” on the state of each other’s social lives:

Jessica: ...it can help keep you in touch with people that moved far away or whatever that you don’t get the chance to see very much, but it’s also kind of a way to [pause] not see that person...and...which obviously, seeing them in person would probably be a lot better. You can actually interact. So it has its pros and its cons.

These narratives suggest that face-to-face interaction is a key element of the micro-level process through which social capital is generated by youth. Relationships identified by the youth as the most important for social capital were those in which they had regular face-to-face contact with other parties. In the absence of this face-to-face interaction, the youth described their relationships as being weakened, and/or not at all important sources of social capital. Though they demonstrated a propensity to rely on distance media to maintain social ties, the narratives of the youth in this study suggest that it is not an adequate substitute for face-to-face interaction.

**Common Interests**

Central to the process through which youth foster social capital, is the development and awareness of common interests between youth and the individuals with whom they build their social capital. The youth in this study described many common interests with those they identified as significant sources of social capital for them, including meeting for meals, playing sports, attending a sporting event, shopping, watching television shows, or attending music concerts:

Sarah: So Saturday mornings I would bowl. And there was this one girl my age named “Catherine” and we hung out every Saturday and we would bowl.
Jessica: Um, we usually share a lot of the same things. We're all in debt and we all have not the greatest relationship with our family. Just life experiences we have I guess in common... We like to do the same things, we all really like music, like movies, same shows... I think it's important and having things in common... We got to ah concerts together. It's important to have things in common.

In playing sports, watching television shows with others, eating a meal, or attending concerts, these participants were part of a group with common interests. These objects became symbols of the group and formed a basis for individual and group identity, as well as group solidarity, both key elements to the formation of social capital (Putnam, 2000). These common interests among group members and their translation into shared symbols, produces a level of intersubjectivity, a recognition of where one fits in the group and what distinguishes oneself as a member of it.

*Emotional Connections*

The data indicate that a third element in the process of social capital development by youth is intense emotional connections to the individual and/or group. The youth describe having an intense emotional connection in their social encounters with significant people they identify in their lives. Many of the youth remarked on the emotional 'highs' experienced with these individuals. For example, when speaking of how her girl friends make her feel when she is with them, Sarah indicated:

Sarah: Well, it's *excited* because there's like always new stories and it's like it's not really boring. I feel like I said before I feel *refreshed* because you can get everything off your chest so it's like [sighs and loosens shoulders]. Or (pause) how else do I
feel? (long pause) I don’t know I’m just excited because we always have fun. [emphasis added]

Similarly, when probed as to why he joined intramural volleyball at his university and how he feels when he is with his teammates, Brock responded:

Brock: I love it! It’s a lot of fun and the social aspect. Like it’s fun to play and to be with your friends....Exciting and (pause) I guess comforting. [emphasis added]

These emotional connections were sometimes expressed in the youths’ narratives in the form of gestures, such as cheering. In her description of what gives her a sense of belonging to her dance group, Phoebe evidences such gestures:

Phoebe: When you achieve something. Whether it be we get a high score in a competition or you finish a routine that no one liked it and it seemed impossible, we’ll all celebrate and we’ll all hug each other like ‘we did it’! We feel together. We accomplished something as a team.

The face-to-face interaction and common interests shared with others contribute to the emotional connection experienced by these youth. These emotional connections need not always be positive ones. There were instances where youth discussed solidarity being fostered within an emotionally “low” climate. For example, Jessica described how she and her fellow team members experienced feelings of injustice, cruelty and lack of respect as a result of the actions of team coaches. As described by Jessica below, team members pulled together as a group, and gained a sense of solidarity in the face of this perceived mistreatment:
Jessica:...there's just little things like administration and the coaches and um, just crap that you shouldn't have to deal with...but we do. And so sometimes I'm thinking, 'why am I spending so much time...but I think mostly what's keeping me there is the girls on the team because we've got so close. Also, I think that I'm afraid that if I do quit...also I don't want to quit cause I don't want to feel like I'm just leaving them behind...We hang out a lot...as a team."

Likewise, Ashley described a home environment of 'low' emotional energy as her sister suffered from anorexia and her parents divorced, with constant fighting and feelings of sadness and hopelessness. This intense 'low' emotional energy, however, resulted in an increase of solidarity among family members to help her sister recover from her illness:

Ashley: ...it's just like I saw the pain, like I wanted to be there for her kind of thing. So I kind of, I don't know we just got closer because like we'd open up to each other. But when she was going through it, I didn't want anything like...she was just like crazy....We lived in the same house like um we'd be in the same room and we wouldn't say one word to each other. And if she was saying something to any one of our family members, she'd be yelling like 'I don't wanna eat'...And then after when she realized she did have a problem...then we started like...she just started opening up to me and we became closer."

The fact that a sense of belonging and solidarity was fostered within a climate of "low" emotional energy suggests that it may be more the intensity of the emotion, rather than the form, that is important in the development of social capital by youth.
The Contingent Nature of the Mobilization of Youths' Social Capital

The youth-centred social capital literature has yet to explore the circumstances in which youth mobilize specific sources of social capital or to explain the context-bound nature of these resources. One aim of this research was to examine the conditions under which youth mobilize their social capital. After exploring the nature of their social networks more generally, including individuals and groups that they identified as most significant to them, the youth were presented with a series of scenarios and were asked to discuss who they might turn to or have relied on in the past in that given situation. These scenarios were intended to cover the major forms of social capital including information, social support, guidance, and material aid of various types. What was apparent from their discussions was that youth are deliberate and strategic in their deployment of social capital. Their mobilization of their social networks was bound to the given context or circumstances facing them at the time. This mobilization was situationally specific. For example, though Phoebe had indicated that if she had a personal problem and/or an important decision to make she would rely on her parents, she qualified this later in her response:

Phoebe: If it was involving school...I would ask the opinion of both my best friends and my boyfriend...Because my parents aren't in that situation so they have a better understanding and they can relate.

Common among many of the youth was an acknowledgement of specific figures in their life that were more appropriately suited to specific circumstances. It was apparent that the social support, guidance, and assistance gained from their social networks was not universal, but rather mobilized only within the context of specific situations. Youth carefully weighed the experiential knowledge and expertise of people in their social networks before deciding who was best suited to address their needs. For example, throughout the interview Sarah had spoken of...
her mother as someone that she could talk to about anything. However, when presented with the prospects of a personal problem she indicated that she would be more likely to turn to her friends instead:

Sarah: Because we have more... because sometimes like my mom she'll say stuff that's sometimes dated. She has a lot... like she knows a lot of stuff cause she comes here [referring to the university] so she's still ok, like hip or whatever you know. But my girl friends are the same age as me. We have more in common. We know what's going on.

Underlying Sarah's hesitation to turn to her mother in certain circumstances was a mistrust of her mother's knowledge.

In addition to experience in and knowledge of a certain area, trust was a significant factor in determining which social networks youths mobilized in a given situation. This trust was built up over time with the individual:

Steven: I'd go to my parents. Like an important educational or decision that would affect my life... I guess it's just because they're my parents so I know that they care for me and that they're not going to screw around and and go with it just to mess me up. They would want me to get the best thing out of life. So I can trust them.

I: So they've instilled trust in you over the years? How did they do that?

Steven: Like they always help me out most of the time... most of the time they come up with the right decision.

Trust was provided as a reason for not turning to social networks in specific situations. For example, Luca had indicated that he would not turn to friends to discuss matters of romantic relationships because he did not trust them. He described this previous experience with his friends:

Luca: Well, they're there for me if I need them. But for the most part, I would rather keep things to myself. Like... just letting others know... like
I’ve seen things go around pretty quickly in high school...I’ve tried it once the first time was a disaster.

Luca went on to describe the situation to which he was referring in which he had confided in his friends to seek their advice about a girl he was interested in and they betrayed his trust by telling many people throughout the school of his interest.

These examples suggest that youth are strategic in their deployment of social capital. It is apparent that the fostering of social support, information channels, and potential instrumental resources, does not necessarily mean that they will deploy them when needed. Youth appear to acknowledge the resources available to them and weigh their options depending on the circumstance, their own and others’ experience and knowledge, as well as the levels of trust that have been established over time within the network. Perhaps relevant here is Bourdieu’s (1986) concept of ‘sociability’ which refers to the ability and disposition to sustain and use one’s networks. This must be accounted for in studies of young people’s social capital. Young people need to recognize their specific relationships and networks as a resource in order for it to be considered social capital and this recognition appears to be contingent on the immediate circumstances facing them.

Social Capital Influences on Youths’ Sexual Behaviour
This study has explored the nature of youths’ social capital, in addition to how it is developed and mobilized by youth in their everyday interactions. What remains is to determine how the various sources of social capital described by youth, influence young people as they navigate this life stage. This final section of the paper focuses on one common aspect of transitioning through adolescence, emerging sexualities. It expands on the earlier quantitative analyses examining the connection between social capital and youths’ sexual behaviour (see Chapter
3). Using youths’ accounts of their everyday interactions, this section demonstrates how youths’ sexual behaviour is impacted by their social capital and their social contexts. The youths’ narratives suggest that social capital is linked to their sexuality in four ways – through shared norms and values, lines of communication or silence, information channels, and opportunities.

**Negotiating social norms**

Sexuality was discussed by all of the youth at various points in their narratives without prompting. Nevertheless, at the end of each interview, the youth were provided the opportunity for prompted reflections on their descriptions of their everyday interactions with significant individuals and groups and to describe how they perceive these people had influenced their sexual behaviour.

Virtually all of the youth attempted to situate what they articulated as ultimately their own ‘personal’ choices with respect to their sexual behaviour, referencing this behaviour as either part of accepted norms or in conflict with norms held by the significant figures in their lives. Youth described a wide range of norms including abstinence until marriage, consistent condom use, and the promotion of youth as sexual beings. Participants who described interactions in which they had strong emotional connections and/or who identified more with a group, tended to locate their sexuality within the expected norms of the individuals with whom they interacted in these contexts. Youth spoke of their parents’ influence:

Isaac: I believe that they [talking about his family] play...I think the biggest role...they taught me from a young age that you know it’s good to wait. It’s something that you should like save your like... you want to give it to somebody that means the world to you at the end.

Ashley: [talking about her father] He’s like you know, he’s like...just
cause I think he’s so like...like he goes to church all the time. It’s just like...it would seem weird to be like “oh I lost my virginity” and you’re not married. Just cause you know it’s like “abstinence until you’re married and in love”. I just think it would be weird kinda cause he’s just like he follows the Bible. And it would just kind of be like...breaking the rule.

They also described the influence of their friends:

Jason: It could just be the fact that I know that they [my friends] are sexually active that I feel it’s ok to. Because the people that I trust and I know they’re good people.

Ching: ...like the people are in the same group, you usually tend to have the same ideals. Like people in my church because it’s their religion, they won’t be having sex until they’re at least 19 and maybe even married because that’s their...ya. And computer science they are like “geeks-are-us”, you know (laughing)...So it does influence...I think this whole conformity idea I guess. With me I guess my friends really impact my sexual ideals.

Phoebe: ...And like, people who haven’t been brought up the same, if they become friends and talk about “oh I did this with this guy” the other person might think “is that what I should be doing? Is that acceptable for me?”. A lot of people are influenced that way...the people you’re friends with have a really big influence. That link with...but it depends on what their beliefs are too.

The narratives of some of the youth also gave an indication as to the interrelationship between social capital in the form of normative expectations among familial and peer contexts. The youth tended to articulate familial contexts as the primary source of normative expectations surrounding sexuality. Nevertheless, the youth indicated that the normative expectations of family learned early in life, structured with whom they became friends. The youth described how they tended to gravitate toward peer groups that supported these same norms and values:
Phoebe: My parents...cause of the way they brought me up. So what I should and shouldn’t do, what right. That’s a big influence. My friends (pause)...what we discuss together, even how far you’d go, um.... The way you’ve been brought up is the kind of people you become friends with. You have the same morals and whatever.

In their narratives, youth anchored their sexual experiences or sexual choices within various family, peer and community contexts. They described their family and friends as important figures that reinforced their personal beliefs related to sexual behaviour. In their stories, the youth described feeling more confident and self-assured as a result.

Phoebe: because they have the same...they were brought up the same so we have the same ideas about it, but we shared that we have the same ideas...it kinda makes my decision a little stronger to see that that what they think too.

Brock: Well, I think it’s comforting that some of my friends do want to wait until marriage cause...I don’t know...it’s comforting to be around people with the same views.

Lines of Communication: Support and Alienation

Social capital appeared to influence the sexuality of youth in their routine interactions through social support or alienation vis-à-vis lines of communication with significant people in their lives. What these youth say is consistent with the results of the quantitative analysis in which the ability to talk to family, friends and members of the broader community, had a significant impact on youths’ sexual behaviour (see Chapter 3).

Some of the youth described having open lines of communication, in which they felt free to discuss issues of sexuality openly in the various social contexts
within which they interacted. In these contexts, youth described feeling valued, respected and supported in their ability to make autonomous choices. These youth appeared to have more positive attitudes toward sexuality, to be more comfortable with their sexuality, and were less likely to describe struggles with their sexuality.

Ashley: [describing her interactions with her father and her comfort talking to him about sex] I don’t know. Just cause like he’s opened up he’s talked about sex with us freely. Like if we have a question, he’ll answer it and like he’ll tell...like he told us he was like, he was 13 when he lost his virginity...he’s open...like everything and anything he’s done when he was our age like stupid or anything, he’s told us, so he’s like “don’t feel like you’re stupid for doing it or for asking” just come to me...

Brock: ...I get that [advice about sex] a lot from my friends. I guess (pause) like seeing how they respect me gives me more confidence to do my own thing and be myself.

Jessica: ...she [a friend] won’t judge me I guess. Um, and she just...I mean, she doesn’t always have the right answer, like “ok this is what you should do” blah blah blah blah...like sometimes she just you know gives me you know what “here’s some options I think and you know you can the best decision with that”.

For other youth, however, social capital appeared to influence their sexuality very differently through the silencing of discussions on their sexuality. These youth tended to struggle more with aspects of their sexuality. Some of the youth described feeling confused or fearful about sexuality through this lack of communication with significant individuals in their lives:

Phoebe: I know one of my friends is on birth control....Sometimes I kind of think...like I mentioned it to my mom once [emphasis by participant] and she was like...she didn’t really say anything. But I could tell she wasn’t really impressed. She wasn’t....it wasn’t that she wasn’t impressed by the idea, but she really didn’t like me...she said it screws up your body and I’m really into a healthy lifestyle and
so birth control screws it up. But sometimes I think I might…like
(long pause)...I haven't done anything but sometimes I think "where
is this going"?

I: …Thinking of your past girlfriend, did you talk to her about sex
at all?
Ching: No. She didn’t talk to me about it. Why would I bring it up?!
Like you know, you say something wrong, you’re asking to get dumped!
(laughing)

Some youth described feeling anxiety, discomfort and alienation with respect
to their sexuality as they were forced to keep secret their experiences and struggles
with sex. This struggle is best exemplified by Jessica, a young lesbian who
described feeling discomfort about her sexual experiences with her family as
discussions about sexuality were silenced at an early age for her:

Jessica: …because of my situation, they don’t…I think they might know
but I don’t really know….
I: Your situation being you have a female partner?
Jessica: Ya, right.
I: So you haven’t come out to your parents yet?
Jessica: No….Cause I’ve introduced them but just as a friend. Well, when I
was younger I felt I couldn’t…I just don’t feel that there’s a need to say it
right now. It just makes things a little more comfortable than them knowing.

Experiential and Professional Knowledge
Youth in this study discussed acquiring knowledge that they used to make
decisions about sex through their social relationships. In this way, the youths’
social capital influenced their sexuality vis-à-vis the provision of information. In
the interviews, youth expressed confidence and trust in the experiential
knowledge of significant people in their lives. This experiential knowledge tended
to be negative experiences, that is, what not to do or how to avoid the negative
consequences of sexual behaviour. Youth described basing their sexual decisions upon this experiential knowledge of others:

Sarah: ...it's like “Wow, I had that problem too” or ya then you guys can like share that then um (pause) both feed off, like your experience. Like you don’t make that mistake or you know how to treat something.

Jessica: Like from the girls that have been...mostly the girl on the basketball team because we’re still relatively close...Ya, (laughing) I get a lot of information from her...She’s the one who’s like “it’s so painful” and ah, just things you know “you have to stay up all night with baby and feed it and they’re crying and changing dirty dirty diapers”. Things that I know right now that I’m not ready for. So... it’s influenced me a lot because I’m like “I don’t want that”...and she’s on the pill as well. And I know I’ve heard of quite a few people that got pregnant while taking the pill and so it’s like, well if you want to be sexually active you can take the precautions but it still doesn’t work. So do I really want to take that chance sometimes? No.

For other youth, this knowledge was acquired from people in their lives whom they trusted as professionals in sexuality. For example, in talking about his mother, from whom he receives sexual health information, Steven commented:

Steven: She’s now in the job where she goes around to the high schools talking to kids about it. Naturally she knows it’s gonna happen so she just wants to make sure I’m safe I guess.

Virtually all of the youth described acquiring knowledge about sexuality from family, friends, and even family members of their friends. Types of information included experiences with timing of first sexual intercourse, use of contraception and/or condoms, and successful means of negotiating sex with partners. Each of the youth recalled how this experiential knowledge helped them in making decisions about their own sexuality.
Opportunities
The fourth and final way social capital appeared to influence the sexualities of the youth in this study was through opportunity. Some of the youth spoke of the opportunities provided to them through their social relationships. These opportunities included in the majority of cases, meeting new sexual partners. However, it also included obtaining condoms and/or contraception. Steven describes below how he obtained condoms through his mother, who works in the sexual health section of a local health unit:

Steven: ...you know my mom...Now she’s working at the Health Unit...she brought a bag full of condoms home and left them in the bathroom for us.

For other youth, some social contexts provided opportunities for more sexual health-compromising behaviours. Some of the youth who were involved in team sports described “away games” as an opportunity to be distanced from parental monitoring and to engage in sexual behaviour.

Jessica: Like we do, there’s a couple of times that we’ve gone out and got plastered. Like we went to um, we went to Quebec. We went away on a tournament and we didn’t have a game the next day, we were leaving the next day. And we were in Quebec so we went out. And, we have a couple underage on our team. They’re just 18. But in Quebec they’re of age so we were like “yes we have to go make the best of it”. And it was a lot of fun...even the guy’s team at the college...like sometimes we have to share a bus. And they’ll be in the back and you hear them “oh ya I banged this girl” blah blah blah

The sexually-based opportunities provided to them through their social relationships and interactions were one way in which social capital influenced
these youths' sexuality. The nature of this influence varied greatly among the youth from sexual health-enhancing to sexual health-compromising behaviour. Male and female study participants did not describe the role of social capital vis-à-vis sexually-based opportunities provided to them in significantly different ways.

Discussion
This paper explored the nature of social capital for youth, the means by which youth develop and mobilize social capital, and the ways in which social capital influences youths' sexual behaviour. The findings of the study expand on the existing youth-centred social capital literature and on the previous quantitative component of this research, linking social capital and sexual behaviour (see Chapter 3).

Sources of social capital that older youth develop and mobilize are not dramatically different from what has been found for younger age groups (c.f. Morrow, 1999a; 1999b). Parents and friendship networks were the two critical sites for the formation of teens' social capital insofar as they gained from them social support, guidance, material aid, information, and the opportunity to expand their social networks. These findings are closely aligned with related quantitative analyses (see Chapter 3) in which parents and friends were the two most significant sources of social capital influencing the timing of first sexual intercourse among youth. Contrary to previous literature (Edwards, Hadfield, Lucey & Mauthner, 2006; Edwards, Hadfield & Mauthner, 2005; Gillies & Lucey, 2007; Seaman & Sweeting, 2004) which suggests that siblings are an important source of social capital, very few of the participants in this study suggested that their siblings were important, despite the fact that 15 out of 18 participants had at least one sibling.

As a challenge to Putnam's (2000) thesis of the civic disengagement of youth, the participants in this study participated in civil society through art clubs, sports
teams, and school councils. This finding is consistent with the existing social capital literature (Morrow, 1999; Weller, 2006) that suggests that contemporary youth, rather than being dis-engaged, are finding creative ways of participating that have thus far been ignored by those working within a social capital framework.

Area of residence, age and gender were salient at many points in the study as factors shaping the nature of youths' social capital. The extent to which young people were able to move around freely to participate in activities and to maintain regular contact with friends and family was constrained by both physical geography and social norms with respect to legal ages. These findings echo those of the quantitative analysis (see Chapter 3) that demonstrated the gendered nature of social capital. It is worth noting that ethnicity may likewise play an important role in the formulation of social capital outside of the family. Research has in fact begun to examine the role of ethnicity in the formation of social capital, and ethnicity itself as social capital (see for example. Zhou & Bankston, 1994). Unfortunately, there was only limited representation from minority ethnic or racial groups in the sample, precluding the possibility of examining ethnically specific social capital. Other youth who were underrepresented in this study include transgendered and youth with disabilities. It is left to future research to elaborate on the unique and particular ways in which these different groups of youth as well as youth living in other regions of Canada formulate and mobilize social capital.

Younger youth and those living in rural areas whose mobility constraints often made face-to-face interaction with peers difficult, turned to cyberspace to bridge these gaps. Gender, in some respects, appeared to mirror or pre-figure gender relations in accounts of friendship and family, with female friends and mothers being recognized for their emotional work, and fathers and male friends recognized for their ability to provide instrumental support and material aid. On
the other hand, the findings ran contrary to expected gendered roles in which girls have more restricted access to public space owing to parents' expectations, stereotypical gender expectations and fears or anxiety about safety (Valentine, 2004). Consistent with Morrow's (2003) findings, girls were not confined to their homes, but rather, described spending a great deal of time in public spaces.

Of particular interest is the fact that the accounts of social capital from these youth emphasized the fluid nature of their social networks. In response to changing circumstances, transitions through life stages, and changing identities, youths' social networks demonstrated dynamism and adaptation. These accounts of transitions and changing identities may help explain the earlier quantitative results (see Chapter 3) which demonstrated significant shifts in youths' sources of social capital as they matured from 12 to 16 years of age. This has significant implications for future research using a social capital framework in relation to youth since it suggests that social capital is re-negotiated among youth in specific circumstances and cannot be approached as a static resource.

The youth in the present study were acutely aware of the resources available to them within their social networks. When presented with specific scenarios, they demonstrated strategic mobilization of these resources. Experience, knowledge and trust appear to be three factors considered by youth when mobilizing specific social networks. Different social networks and sources of social capital are mobilized in different contexts. This suggests that if we are to explore the benefits of youths' social capital in relation to various indicators of well-being and achievement, we have to approach the construct contextually. This variability, contextuality and conditionality of the mobilization of social capital, however, further adds to the difficulty of defining the concept more generally. Social networks that provide youth with constructive social resources in one situation do not necessarily get mobilized in a different situation.
To better understand the ways in which social capital impacts youth as they negotiate this life stage, youth were asked explicitly about how they perceive their social contexts having influenced their sexuality and sexual decisions. The narratives youth provided suggested four means by which social capital impacts youths’ sexual behaviour. Social norms were articulated by virtually all of the youth who attempted to situate their sexual behaviour, attitudes and decisions within the normative expectations of various contexts in which they were embedded. Youth suggested that parents provide norms and values at an early age and structure the types of people youth become friends with later in life. Youth describe the tendency to become friends with those who share similar values. They suggest that these contexts provide them with support and self-assurance. This finding sheds light on the results of the quantitative analyses (see Chapter 3) where the statistically significant relationship between parents and youths’ sexual behaviour disappears when peers are added into the model. It is perhaps that parents exert this influence through the provision of normative expectations, values and attitudes which determine the types of peer groups youth become involved in.

Lines of communication were a second way in which the youth described an influence of their social contexts on their sexuality. There was variation in the experiences of youth in communication with others about sex, which ranged from open and welcomed communication, to the silencing of sex talk that was learned at an early age. Many of the youth who described open lines of communication were less likely to struggle with their sexuality than youth who found themselves embedded in social contexts in which sex talk was silenced. Given these descriptions by youth, it is not surprising that the quantitative analyses (see Chapter 3) demonstrated a link between the ability to talk to people, such as family, friends, coaches, teachers and others in the community, and the timing of first sexual intercourse. It is perhaps, as the youth described in this study, feelings
of respect and support for their own autonomous decision making which result from these open lines of communication, that account for this link.

It may be likely that information received through this communication, the third way in which youth perceived their social contexts influencing their sexuality, may also account for the link found in the quantitative analyses (see Chapter 3). Youth in this study described receiving a broad range of information on contraception, pregnancy, the timing of first intercourse, experiences of pain in first intercourse, and the use of protection during intercourse, from family, friends and the broader community. They recalled how this information was incorporated into their sexual decision-making.

Finally, the youth in this study described how their social contexts provided them with opportunities to meet sexual partners, to access protected intercourse, and to engage in intercourse in sexual health-compromising ways through the consumption of alcohol.

The findings of this study point to important considerations for research and for sexual health promotion initiatives. Uncovering the nature and mechanisms in and through which social capital is developed and mobilized in this study, has added more clarity to the variable and conditional nature of youths’ social capital. Social capital researchers, particularly those engaging in quantitative research, need to take into account that social capital is not static. In order to fully understand social capital and its relation to various outcomes, including employment, health, crime and income inequality, researchers must examine the transitions of individuals in and out of numerous social capital networks over time. Researchers must additionally examine the quality of relationships among individuals including affective connections, rather than the mere presence or absence of such relationships.

In terms of sexual health promotion, the findings from this study suggest that youth are embedded within numerous social contexts that each impact their
sexual behaviour and decision-making in a myriad of ways. The findings from this study suggest that sexual health promotion efforts should be concentrated on opening communication and information channels to all youth, not just within the family, but in other contexts youth have identified as important to them, including peer groups and the broader community. Individuals who have experiential knowledge to impart appeared to be perceived by youth in this study to have a significant impact on sexual decisions made by youth. Sexual health education programming that incorporates such experiential knowledge, for example by way of peer education or personal story-telling, has the opportunity to offer meaningful impacts on youth as they formulate decisions related to their sexuality. At its most general level, however, this study suggests that youth’s sexual behaviour is embedded within social contexts. Sexual health promotion activities that move away from a focus on individual “risk” behaviours and characteristics to the contexts within which youth are embedded, would assist in improving the sexual health of young people.
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CONCLUSION

This study explored the social context of young peoples' sexual behaviour in Canada, focusing on the transition to sexual adulthood experienced as first sexual intercourse and moving beyond the traditional focus on the problematic nature and/or 'risks' associated with sexual behaviour among youth. Tendencies to focus on 'risk-factors' and to treat youths' sexuality as 'dangerous' have also focused on individual characteristics correlated with such behaviour, assuming that youth freely make sexual health-enhancing or sexual health-compromising choices. These assumptions ignore the social context within which youth become sexual, as well as the constraints and possibilities for engaging in sexual behaviour that present themselves in the everyday lives of youth. By highlighting the ways in which youths' sexual behaviour is embedded within varied social contexts, including family, peers, and the broader community, this dissertation allowed for a more holistic understanding of the sexual health-related behaviours of youth, and how social forces work to place youth on pathways to differences in the timing of their transition to sexual adulthood. To this end, this dissertation has drawn on the literature on social capital, building upon several previous studies (Crosby, Holtgrave, DiClemente, Wingood, & Gayle, 2003; Crosby, DiClemente, Wingood, Salazar, Rose, & Sales, 2007; Denner, Kirby, Coyle & Brindis, 2001; Furstenberg & Hughes, 1995; Gold, Kennedy, Connell & Kawachi, 2002; Morrison, Howard, Hardy, & Stinson, 2005; Smylie, Medaglia, & Maticka-Tyndale, 2006; Weitzman & Chen, 2005).
Weaving Analytic Threads in the Link between Social Context and Youths' Sexual Behaviour

Both quantitative and qualitative methodologies were used, drawing on interviews with youth themselves to expand on initial quantitative examinations of the impact of youths' interactions within family, peer, school and community context on their timing of first sexual intercourse. Building on Virginia Morrow's (1999) work, Chapter Three operationalized a youth-specific conceptualization of social capital to explore whether indicators of social capital had a significant statistical influence on the timing of first sexual intercourse among youth in Canada. Most consistent among those that had a significant impact on timing of first sexual intercourse were measures of peer relationships for both males and females. This is consistent with the youth-specific social capital literature (Morrow, 1999) which cites peer groups as a dominant context within which youth develop and mobilize social capital. The findings of the current study, however, point to more complex relationships than have been articulated in the social capital literature to date. Particularly, the influence of these peer relationships changed over time with different indicators from three time points during adolescence, age 12 or 13 years, age 14 or 15 years and age 16 or 17 years, having a significant impact on the timing of first sexual intercourse. The narratives of youth solicited through the qualitative phase of this study, presented in Chapter Four, shed light on this statistical pattern by highlighting the particularly fluid nature of youths' peer group relationships as they move through various stages of adolescence. In interviews, youth described their realities as ones in which social capital is not static, but rather changes as they move through various social networks and contexts over this life stage. As some youth described transitions from grade school to high school and from high school to post-secondary education or into the workforce, they also described changes in social networks and the re-formulation
of identities. It is therefore not surprising that the quantitative findings did not demonstrate consistent results for indicators of peer relationships over time.

The fact that both the statistical analyses and narratives of youth from the interviews support peer groups as a dominant influence on sexual behaviour, is not to say that family relationships had no influence. In fact, several of the quantitative indicators of the quality of relationships with family members showed statistically significant impacts on the timing of first sexual intercourse in bivariate analyses. It is worth noting that the significant indicators measured communication with mothers and fathers, and the quality of relationships with both parents measured by the extent to which participants felt they were understood, treated fairly and were shown affection by parents. In the interviews with youth, important aspects of familial relationships that were articulated as impacting sexual behaviour were in fact lines of communication, information, feeling valued, respected and supported. It is, therefore, not surprising that parallel quantitative indicators were those that were significantly related to timing of sexual behaviour in the bivariate analyses.

The parental effects, however, disappeared in the multivariate analyses suggesting that their influence is exerted through other measures, namely those related to peer groups. For example, indicators of the quality of females’ relationships with their fathers at ages 14 to 15, and 16 to 17 years demonstrated statistically significant impacts on timing of first sexual intercourse in both the bivariate and multivariate analyses until measures of peer relationships were added. This suggests that the influence of fathers is through peers and also suggests that the influence of peers is stronger than that of fathers. Peers’ influence appears to take over from fathers’ at these later stages of adolescence. Findings of the in-depth interviews with youth provided detail for understanding these statistical relationships. In their narratives, several of the youth indicated that the influence of the family on their sexuality played out, in part, through peer
groups by way of norms of acceptable behaviour. Many youth described how the normative expectations of their parents, learned early in life, influenced with whom they became friends. The youth described how they tended to gravitate toward peer groups that supported these same norms and values. There is literature to support the suggestion that as youth age, they tend to pull away from family, especially parents, and establish stronger bonds to peers who share similar values and goals. During adolescence, young people begin to spend more time with peers, away from the supervision of parents, asserting their independence as they establish identities of their own (for a review of this literature see for example Collins & Laursen, 2004). Given that the dependent variable in this analysis was one that measured timing of first sexual intercourse in late adolescence (older than 16 and 17 years), the absence of significant predictors within the family may, therefore, not be surprising. Family-based measures might have fared much better in a model predicting sexual behaviour in earlier adolescence. While such an exploration was not possible with the National Longitudinal Survey of Children and Youth, given the scarcity of sexual behaviour data at younger ages, future research might explore the relative significance of family relationships and peers within early adolescence. It is worth noting that these findings, though theoretically rooted in a youth-specific conceptualization of social capital, have affinities to theories articulated by an earlier proponent of social capital, namely James Coleman. Coleman (1988, 1990) suggested that the primary and initial locus for the formation of social capital is within the family. Coleman articulated interconnections between parents and peers as sources of capital for children, as well as norms as a dominant form of social capital. Both of these assertions are supported through the quantitative and qualitative findings of the current study.

Though the family was evident in the current study as a context having an impact on youths’ sexual behaviour, both in the statistical and qualitative data, the findings diverge from the youth-centred social capital literature in terms of the
gender of significant family members. The youth-centred social capital literature (c.f. Morrow, 1999) suggests that mothers are the most important source of social capital within the family. In interviews, youth in this study spoke of both mothers and fathers as important with roughly equal frequency. Social capital within the family, however, was in fact "gendered" in the youths' narratives, with mothers providing youth with more emotional support, and fathers as fulfilling instrumental and material needs.

An additional difference from the youth-specific social capital literature was found in the case of siblings as a source of social capital. While much of the youth social capital literature cites siblings as a significant source of social capital for youth within the family (Edwards, Hadfield, Lucey & Mauthner, 2006; Edwards, Hadfield & Mauthner, 2005; Gillies & Lucey, 2007; Seaman & Sweeting, 2004), only one indicator of sibling relationships was statistically related to the timing of first sexual intercourse, and only in the case of males. The qualitative data shed light on this finding. Although the majority (15 of 18) of participants had at least one sibling, only two described siblings as a significant source of social capital and as having an impact on their sexual behaviour. These two youth described emotional support, information and advice from siblings as influencing their sexual behaviour. It is therefore not surprising that the one indicator of sibling relationships that was significantly related to the timing among sexual behaviour of males in the statistical analyses, related to the ability to talk with brothers about oneself and one's problems. In contrast, other youth in this study supported Coleman's (1988, 1990) assertion of siblings as diluting the social capital available to youth within the family. In the interviews with youth, older siblings leaving the natal home were described by some youth as a pivotal event marking increased time and better quality relationships with parents for themselves. The current study supports both the youth-centred social capital literature and the more adult-centred conceptualization provided by Coleman in so far as the youth
demonstrated both the ability to develop their own social capital within peer relationship and, in other cases, a conscious recognition of the competition among siblings for social capital within the family.

Youths' interaction within the broader community, through school, participation in sports and other leisure activities, as well as informal volunteering were also statistically related to the timing of first intercourse among youth. The only school-based measures of social capital that were significantly related to the timing of first sexual intercourse, however, were indicators of peer relationships within the school context (feeling left out at school for males, and the quality of school experiences, including bullying and getting along with classmates, for females). Other measures of school social capital, namely the quality of relationships with teachers, were not statistically related to the timing of first intercourse among either males or females. In the interviews with youth, school itself was neither mentioned as a significant source of social capital, contrasting previous research within the youth-specific social capital literature (Morrow, 1999), nor as significantly influencing sexual behaviour. Instead, the peer relationships formed in school contexts and the lines of communication, information, and norms of behaviour provided within them, were described by the youth in this study as significant sources of social capital that also impacted on sexual behaviours. Taken together, the quantitative and qualitative results suggest that the social capital provided by schools may be restricted to providing a setting or environment for peer-to-peer contacts.

With respect to interaction with the broader community, being involved in leisure activities such as Scouts and 4H Clubs was related to an increased likelihood of postponing sexual intercourse beyond the age of 16 or 17 years for males in the quantitative analyses. Though none of the youth in the interviews discussed participating in such leisure activities, it may be that these contexts endorse norms of sexual behaviour favourable to postponing sexual intercourse.
beyond the average age in Canada. The current study suggests that sports-based activities have the opposite affect on the sexual behaviour of young people. In the quantitative analyses, participating in sports without a coach was related to a decreased likelihood of postponing sexual intercourse beyond the age of 16 or 17 years for females. Sports were described in the narratives of some of the youth as providing both the opportunity to engage in sexual behaviour, as they gained autonomy from parental supervision through ‘road trips’ and ‘away games’, as well as promoting sexual behaviour among team members. Therefore, it is perhaps the opportunities and norms typically promoting in sports-based activities that underlie the statistically significant relationship found between sport participation and timing of first sexual intercourse in the quantitative phase of this research. The details of how the social capital of school, clubs, and sports influence sexual behaviour requires further research.

The Formation of Youths’ Social Capital

The current study shed further light on the link between social capital and sexual behaviour by examining the mechanisms through which the social context impacts the sexual behaviour of young people. This research explored the conditions in which social capital is developed and mobilized by youth in the everyday interactions. What is it about peer, family and broader community contexts that allow for the development of lines of communication, norms of behaviour, exchange of information and the articulation of normative expectations which impact youths’ sexual behaviour? In their attempts to construct meaning of their everyday interactions, the youth in this study described three factors as important conditions determining the relationships in which they built and mobilized social capital - face-to-face interaction, common interests, and emotional connections. The contexts that youth described as significantly impacting their sexual
behaviour were those in which they had regular face-to-face contact, they interacted with people with whom they shared common interests, and those in which they felt a strong emotional connection, regardless of whether the emotions were positive or negative.

Almost all of the youth stated that spending more time with significant other(s) provided the foundation for developing important relationships upon which they could draw. Even among those who used electronic communication to maintain contact with significant others, face-to-face interaction, articulated as "hanging out" or spending time together, created a sense of solidarity and identity tied to the relationship. The importance of face-to-face contact was further confirmed by youth who described losing a shared identity, feelings of solidarity and diminished significance of the relationship when face-to-face contact was no longer possible. Interestingly, a measure of the frequency of face-to-face contact with peers was a significant predictor of the timing of first sexual intercourse in the quantitative phase as well. According to the youth in this study, it is this face-to-face contact that in part allows for the development of social capital in the form of communication, information, norms of behaviour and opportunities which influence youths’ sexual behaviour.

Sharing common interests was also an important condition in the development of social capital as articulated by youth in the interviews. In watching television shows with friends, playing video games or attending music concerts, the youth felt part of a group with common interests. These interests became symbols for the group and formed the basis for individual and group identity and solidarity. The common interests produced a recognition by the youth of where one fits in the group and what distinguishes oneself as a member of it.

In interviews, young people provided numerous examples of how they felt strong emotional connections to the social interactions within which they developed social capital. These included both positive emotions, as in teammates
sharing exceptional accomplishments, as well as negative emotions as in feelings of mistreatment that brought a sports team together. Along with face-to-face interaction and common interests, these emotional connections were factors determining in which contexts youth would develop and mobilize social capital.

Various social structural factors impacted on youths’ formation of social capital within familial, peer group and broader social contexts. In their descriptions of their everyday interactions, youth in peri-urban and rural areas expressed frustration with the lack of opportunity and the inability to maintain social networks, particularly with peers. Older youth in this study described greater autonomy and mobility, allowing them to more easily compensate for the constraints placed on them by their area of residence. These narratives may aid in the understanding of the findings of bivariate statistical analyses in which respondents from rural and peri-urban areas (areas with a population of less than 100,000) demonstrated a decreased likelihood of postponing sexual activity. Faced with the lack of alternative activities, youth in this study described frequently ‘hanging out’ with friends and/or attending ‘parties’. These activities perhaps provide greater opportunity to engage in sexual activity than do the public arenas in which urban youth spend time together.

Finally, gender appeared to be a prominent structuring principle in determining the social spaces youth in this study used to build social networks, in addition to the nature of their relationships with peers. For young females, spaces for spending time with friends tended to be public spaces such as coffee shops, shopping malls and movie theatres. Conversely, young males tended to be more confined to their homes, most frequently playing video games during interaction with peers. These findings support those from previous literature on youths social capital (Morrow, 2003), which suggest that females spend a great deal of time in public spaces. These differences described by the youth in the interviews shed
light on the difference in significant indicators related to the timing of first sexual intercourse between males and females.

**Concluding Remarks**

*Limitations of the study and implications for theory and research*

Though there are, unarguably, health risks posed by transitions to sexual adulthood, a focus on ‘risk’ behaviours and/or risky groups in the adolescent sexuality literature ignores the constraints and possibilities for sexual health behaviours placed on youth by their social contexts. This dissertation has adopted the framework of social capital in moving away from the risk-models that dominate this literature. The findings of this dissertation move forward, present challenges, and suggest new directions for both social capital and sexuality research.

The findings from both the quantitative and qualitative phases of this research suggest that the social capital framework is useful in understanding the social contexts and structures that impact youths’ sexual behaviour. Using a national data set containing both indicators of sexual behaviour and social capital, this study found broad trends among Canadian youth that supported a link between indicators of social capital and the timing of first sexual intercourse. Interviews with youth contributed to a better understanding of these trends and provided support for the fact that ‘social capital’ in various forms and contexts structures the realities of youth as they transition to adulthood. The findings suggest that social capital is thus a useful tool with which to focus on the circumstances of everyday life and to examine the social context of youths’ sexual health behaviours.

The findings from this study move the social capital literature forward in understanding what social capital is for youth, how it is developed, and the mechanisms through which it impacts one aspect of their transition to adulthood.
(becoming sexual adults). This is but one small step forward and many questions and challenges remain for future research on social capital. First, the findings suggest that researchers must approach social capital as a dynamic concept, and must pay attention to the nature and quality of relationships rather than their mere existence. In both quantitative and qualitative data, sources of social capital and the contexts in which it is developed demonstrated great fluidity and change as youth moved through this phase of life. Further research into the nature, not only of youths' social capital and transitions, but also of adults' social capital as they transition through various life stages is needed. Second, several social characteristics such as age, gender and area of residence were found to structure the possibilities youth had to develop and maintain social capital in family, peer and broader community contexts. The limited qualitative sample in this study in terms of geographic location, ethnic diversity and levels of cognitive and physical ability, did not allow for the exploration of other structuring conditions that shape the social capital of young people. Further qualitative research with samples representing greater geographic diversity, ethnic and cultural diversity, as well as varying levels of cognitive and physical abilities are needed to better understand the nature of social capital in different populations. Third, the findings of the qualitative phase of this study, including the conditions in which social capital develops and the ways in which it impacts on youths' sexual behaviour, can be used as a foundation for future quantitative studies to explore these trends on a much larger scale. Regional and national research is needed to more fully and effectively examine social contexts and structures. Fourth, this study focused on just one aspect of transition to sexual adulthood - first sexual intercourse. There are diverse pathways in transitioning to sexual adulthood for youth of differing sexual orientations and cultural and religious backgrounds. Further exploration of social capital within these varying pathways is needed to more fully understand
whether the form and mobilization of social capital varies over different expressions of sexuality.

This research has generated new knowledge and directions for the adolescent sexuality literature. The study has generated new knowledge on the mechanisms through which social contexts, including family, peers and the broader community, affect youths’ sexual behaviours. Young people’s everyday face-to-face interactions, shared interests and emotional connections developed within these contexts provide lines of communication, articulations of normative expectations, information about sexual health, and opportunities to engage in sexual health-enhancing and sexual health compromising behaviours. This knowledge will be critical for sexual health research, promotion and practice to effectively respond to the social contexts and structures that affect sexual behaviour among youth. Current sexual health promotion efforts are predominantly directed at changing young people’s knowledge, attitudes and behaviours, failing at producing significant long term improvements in the sexual health of this population (Kirby, 2001). This research suggests that interventions which target more ‘upstream’ factors, such as social relationships, opportunities for different types of peer interaction, and lines of communication, will more effectively address the conditions which structure youths’ sexual behaviours, and in so doing, will have a more long-term impact. Therefore, this dissertation provides a foundation for new directions in our health promotion efforts. It urges researchers, policy-makers, and sexual health practitioners to reconceptualize their approach to the sexual behaviour of young people in Canada, moving away from discourses of ‘risk’ and toward a consideration of the social contexts and structures in the lives of youth.
REFERENCES


Appendix A

METHODOLOGICAL NOTES ON MISSING VALUES

In the methodological chapter (Chapter 2) rates of attrition across the three cycles of the National Longitudinal Survey of Children and Youth (NLSCY) were discussed. Various reasons, including changes in the sampling frame, a reduction in the survey’s budget, death of respondents, and relocation of respondents to a First Nations reserve, were cited for this attrition. Collectively, these accounted for missing data among approximately 3% of the longitudinal cohort in Cycle 2 (2.6% of males, 2.4% of females), approximately 4.5% of this cohort in Cycle 3 (4.6% of males, 4.4% of females), and 22.4% of males and 16.5% of females in Cycle 4. While it is not surprising that the Cycle 4 data contains the highest rate of attrition of longitudinal respondents\(^\text{42}\), it is nevertheless important to explore the characteristics of these respondents with what data is available for them from surveys administered to the Person Most Knowledgeable (PMK) of these respondents. Table XI presents weighted descriptive data for youth non-respondents who did not take part in Cycle 4 data collection vis-à-vis data collected from these PMKs.

The data provided by the PMK suggest that the largest proportion of both female and male youth non-respondents had PMK’s who lived in the Prairie provinces (35.5% and 31% respectively) or in Ontario (36.2% and 31.6% respectively).\(^\text{43}\) The majority of these PMKs resided in large urban centres with populations of over 100,000 (53.2% of females, 62.4% of males) and were female (83.1% for female non-respondents, 92.9% for male non-respondents). The

\(^\text{42}\) Reasons for attrition in Cycle 4 are speculative but may include residential mobility and entrance into post-secondary education, as well as response fatigue.

\(^\text{43}\) The survey only required the PMK to indicate which province they themselves reside in. It is unclear how many of the respondents who did not complete cycle 4 of the survey resided with their PMK.
The overwhelming majority of the PMKs providing data for non-respondents were married (67.7% for female non-respondents, 74.4% for male non-respondents) and had completed high school (81.5% for female non-respondents, 81% for male non-respondents).

The majority of non-respondents came from "in tact" families (60% of females, 65.5% of males). Additionally, the majority of respondents who did not complete Cycle 4 lived in households with family incomes in the upper middle (50.8% of females, 39.3% of males) and highest (25.8% of females, 33.3% of males) income quintiles. It follows, not surprisingly, the majority of non-respondents had families that lived in single, detached houses (78.2% of females, 83.9% of males).

Table XI.

Characteristics of cycle 4 non-respondents based on data provided by the Person Most Knowledgeable, by gender

<table>
<thead>
<tr>
<th>Region of Residence</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>6.5%</td>
<td>10.1%</td>
</tr>
<tr>
<td>Prairies</td>
<td>35.5%</td>
<td>31.0%</td>
</tr>
<tr>
<td>Quebec</td>
<td>15.3%</td>
<td>19.0%</td>
</tr>
<tr>
<td>Atlantic</td>
<td>6.5%</td>
<td>8.3%</td>
</tr>
<tr>
<td>Ontario</td>
<td>36.2%</td>
<td>31.6%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Size of Area of Residence</th>
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<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>15.3%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Urban, population less than 30,000</td>
<td>24.2%</td>
<td>16.7%</td>
</tr>
<tr>
<td>Urban, population &gt;30,000 and &lt;99,999</td>
<td>7.3%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Urban, population &gt;100,000</td>
<td>53.2%</td>
<td>62.4%</td>
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</table>

<table>
<thead>
<tr>
<th>Gender of PMK</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>83.1%</td>
<td>92.9%</td>
</tr>
<tr>
<td>Male</td>
<td>13.7%</td>
<td>7.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marital Status of PMK</th>
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<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>67.7%</td>
<td>74.4%</td>
</tr>
<tr>
<td>Living Common Law</td>
<td>4.8%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Widowed</td>
<td>1.6%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Separated</td>
<td>7.3%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Divorced</td>
<td>12.9%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Single, never married</td>
<td>2.4%</td>
<td>1.2%</td>
</tr>
</tbody>
</table>
**Table XI, continued**

<table>
<thead>
<tr>
<th>Family Type</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blended Family</td>
<td>2.4%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Step-family</td>
<td>8.0%</td>
<td>11.9%</td>
</tr>
<tr>
<td>Intact family</td>
<td>60%</td>
<td>65.5%</td>
</tr>
<tr>
<td>Other</td>
<td>29.6%</td>
<td>18.4%</td>
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</table>

<table>
<thead>
<tr>
<th>Type of Dwelling</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single, detached house</td>
<td>78.2%</td>
<td>83.9%</td>
</tr>
<tr>
<td>Semi-detached house</td>
<td>8.9%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Garden/townhouse</td>
<td>2.4%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Duplex</td>
<td>0</td>
<td>0.6%</td>
</tr>
<tr>
<td>Low-rise Apartment</td>
<td>4.0%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Mobile Home</td>
<td>4.8%</td>
<td>0</td>
</tr>
<tr>
<td>Hi-rise Apartment</td>
<td>0</td>
<td>1.2%</td>
</tr>
<tr>
<td>Other</td>
<td>1.7%</td>
<td>81.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PMK Graduated High School</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>81.5%</td>
<td>81%</td>
</tr>
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</table>
Subject Line: University of Windsor Research Study

Are you between the ages of 16 and 19 years and live in the Windsor, Ontario area? A graduate student from the University of Windsor is looking for people like you to take part in a research study on young people's relationships with family, friends, neighbours and other people they interact with, what they get from these relationships, and how these relationships impact decisions about sex.

What is involved? If you volunteer to participate, you will be asked to have a private conversation with a researcher to answer questions about what you know about these types of relationships and how these relationships influence decisions about sex and sexual behaviour of young people. This conversation will take about an hour to an hour and a half and can be held anywhere you feel most comfortable.

What will you get? For your participation you will earn $20 (Canadian cash)! You will also be contributing to research that will help us understand influences on young people's sexual behaviour.

To learn more about this or if you are interested in participating, email Lisa Smylie at smylie@uwindsor.ca today!
Appendix C

UNIVERSITY OF WINDSOR ETHICS APPLICATION
AND LETTER OF APPROVAL

WINDSOR

Today's Date: January 16, 2006
Principal Investigator: Ms. Cecilia Simola,
Department: Sociology & Anthropology
RIH Number: 75112
Research Project Title: Economic capital and adolescent sexual relationship experiences
Commence Date: March 28, 2005
Duration: June 30, 2007
Progress Report Due: December 14, 2006
Final Report Due: June 13, 2007

This is to inform you that the University of Windsor Research Ethics Board (REB), which is organized and operated according to the Tri Council Policy Statement and the University of Windsor / Research Ethics Board, has granted approval to your research project on the date noted above. This approval is valid only for the Project End Date.

1. Progress Report and Final Report must be submitted by the date noted above. The REB may seek for monitoring information at any time during the project's approval period.

2. If the nature of the research, or deviations from, or changes in, the protocol or consent form are to be modified without prior written approval from the REB, Minor changes in ongoing studies will be completed when submitted on the Request for Review form.

3. Investigators must also report promptly to the REB

a. failures or near misses involving the risk to the participants and/or affecting significantly the conduct of the study,

b. adverse and unexpected events or events that are both serious and unexpected,

c. any information that may adversely affect the ability of the subject or the conduct of the study.

Items involving serious, unexpected, or changes are available on the REB website: www.consent.uwo.ca

We are now reviewing your study.

Michael Muldowney, PhD
Chief Research Ethics Board

Dr. Eleanor Malarkey, Epistemology, Sociology & Anthropology
Linda Horn, Research Ethics Coordinator

This is an official document. Please sign on the original document only.

205
UNIVERSITY OF WINDSOR
APPLICATION TO INVOLVE HUMAN SUBJECTS IN RESEARCH

(Please complete, print and submit seven (7) copies of the Form to the Ethics Co-ordinator, Office of Research Services Chrysler Hall Tower, Room 309)

DATE: March 3rd, 2004

Application Status: New X Addendum __ Renewal __ REB #

TITLE OF RESEARCH PROJECT: Social Capital and Adolescent Sexual and Relationship Experiences

Faculty Investigator

<table>
<thead>
<tr>
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<th>DEPT &amp; ADDRESS</th>
<th>PHONE/EXT</th>
<th>E-MAIL</th>
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<tr>
<td>Dr. Eleanor Maticka-Tyndale</td>
<td>Soc/Anthropology CHS 50-1</td>
<td>255-3000-2290</td>
<td><a href="mailto:maticka@uwindsor.ca">maticka@uwindsor.ca</a></td>
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Faculty Co-investigator(s)

Faculty Supervisor(s)

Student Investigator(s)

<table>
<thead>
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<tr>
<td>Lisa Smythe</td>
<td>Soc Anthropology CHT 09B</td>
<td>255-3000-4075</td>
<td><a href="mailto:Lisa.smythe@uwindsor.com">Lisa.smythe@uwindsor.com</a></td>
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</table>

1 Faculty Investigator Assurance

I certify that the information provided in this application is complete and correct.

I understand that as principal Faculty Investigator, I have ultimate responsibility for the conduct of the study, the ethics performance of the project and the protection of the rights and welfare of human participants.

I agree to comply with the Tri-Council Policy Statement and all University of Windsor policies and procedures, governing the protection of human subjects in research, including, but not limited to, the following:

- performing the project by qualified and appropriately trained personnel in accordance with REB protocol,
- implementing no changes to the REB approved protocol or consent form statement without notification to the REB of the proposed changes and their subsequent approval of the REB,
- promptly reporting significant adverse effects to the REB within five (5) working days of occurrence and
- submitting, at minimum, a progress report annually or in accordance with the terms of certification.

Signature of Faculty Investigator: __________________________ Date: ____________

2 Faculty Supervisor Assurance

I certify that the student(s) or guest investigator(s) conducting the research is/are knowledgeable about the regulations and policies governing research with human subjects and has/have sufficient training and experience to conduct this study in accordance with the approved protocol.

I agree:

- to meet with the investigator(s) on a regular basis to monitor the research progress,
- to be available, should problems arise during the course of the research, to supervise the investigator(s) in solving such problems,
- to ensure that the investigator will promptly report significant adverse effects to the REB within five (5) working days of occurrence,
- if I am unavailable, as when on sabbatical leave, vacation or absent longer than one month, I will arrange for an alternate faculty supervisor to assume my responsibility during my absence, and I will advise the REB in writing of such arrangements and
- submitting, at minimum, a progress report annually or in accordance with the terms of certification.

Signature of Faculty Supervisor: __________________________ Date: ____________
B. SUMMARY OF PROPOSED RESEARCH

1. Describe the purpose and background rationale for the proposed project, as well as the hypothesis/es/research questions to be examined.

Public health researchers have provided a growing body of evidence for the salutary effects of "social capital", which comprises the resources inherent in the networks of relationships at the core of groups and communities, including families, friendship groups, neighborhoods, churches/synagogues/mosques, schools, clubs, sports teams, and towns. Social capital theory predicts that those with close family relationships, positive peer group influences, and a sense of community cohesion and trust, as well as dense networks of social/emotional support, will enjoy better health. Research on the well-being of adolescents has begun to use the concepts and processes inherent in social capital theory; however, to date, none of this research has fully utilized, tested, conceptualized or operationalized social capital for adolescents. The current conceptualization of social capital is ill-equipped to explain youths' well-being since it has been developed from the perspective of adults. The proposed project is a preliminary inquiry into the contribution that social capital theory can make to understanding the contexts and factors that influence youths' well-being, by exploring the meanings of social capital for adolescents and articulating an adolescent-appropriate conceptualization and operationalization of social capita.

2. Methodology/Procedures (YES/NO)
Do any of the procedures involve invasion of the body (e.g. touching, contact, attachment to instruments, withdrawal of specimens)? ☐ ☒

Does the study involve the administration of prescribed or proscribed drugs? ☐ ☒

Describe, sequentially and in detail, all procedures in which the research subjects will be involved (e.g. paper and pencil tasks, interviews, surveys, questionnaires, physical assessments, physiological tests, doses and methods of administration of drugs, time requirements, etc). Attach a copy of any questionnaires or test instruments.

Due to the exploratory nature of this research, 3 methods will be used in order to develop a youth-specific conceptualization and operationalization of social capital, including (1) picture-taking (2) focused group discussions (FGDs), and (3) semi-structured in-depth interviews (IDIs), with youth between the ages of 15 and 19 years. Upon recruitment and completion of consent, participants will be given a disposable camera and pre-addressed express post envelope, with the instructions to: (a) take pictures of PLACES (i) to which they feel they "belong", (ii) to which they feel a sense of attachment, and/or (iii) where they meet with people who are important to you; (b) keep a list of the places they took pictures of so that anyone looking at it would know what it is; and (c) once the role of film is done (approximately 24 pictures), place the entire camera (with the film still in the camera) into the pre-addressed express post envelope, and bring the envelope to the nearest post office. The participants will be reminded that should NOT take pictures of any people. The participants names will not appear on the return envelopes, making all pictures anonymous. The FGDs allow peers not only respond to questions from the interviewer but also discuss amongst themselves diverse responses to the questions asked, providing detailed responses and an indication of areas of consensus and difference. During the focus groups, participants will be asked to participate in an activity, formally known as "syntegration", in which responses to certain questions (see Appendix B for details) are first written anonymously on "post-it notes" and collected by the researcher. The notes are pinned up on a board so the group can discuss the responses and collect similar ones into categories. In this way, the activity serves to funnel the discussion to toward consensus or similar experiences. (continued on page 9)

3. Cite your experience with this kind of research.

The principal investigator has extensive experience conducting research using FGIIs and IDIs with youth in Canada and in other countries. This has included interviewing or training interviewers who conducted:

(1) FGIs with university students who have traveled to popular spring break vacation destinations.

(2) IDIs with CEGEP students (roughly equivalent to Ontario grade 12 and 13) about how HIV and AIDS have influenced their decisions in the area of sexuality.

(3) IDIs with various kinds of sex workers.

(4) IDIs and FGIs with women and men of varying ages in Thailand regarding their understandings and actions related to HIV and AIDS.

(5) IDIs with teachers and community leaders in Kenya regarding cultural practices related to HIV transmission.

(6) FGIs with primary school pupils (aged 11-17 years) in Kenya regarding their knowledge, attitudes and behaviours related to HIV and AIDS as well as common cultural practices related to HIV transmission.
4. Subjects Involved in the Study
Describe in detail the sample to be recruited including the number of subjects, gender, age range, any special characteristic and institutional affiliation or where located.

The sample will consist of youth, between the ages of 15 and 19 years, living in Essex County, Ontario. Non-probability, purposive sampling will be used to maximize the diversity of the sample and to capture a wide range of experiences of social capital (Strauss and Corbin, 1990:177-193). The initial purposive lines of difference along which youth will be recruited include: gender, urban/periurban/rural residence, ethnicity/religion, and approximate family income, since each of these has been discussed in the literature as potential dimensions of difference in social capital. Additional dimensions of difference may emerge as the qualitative phase progresses. With purposive sampling, the final sample size can only be estimated at study initiation since sampling continues until "saturation" (i.e., a repetition of results with no new information forthcoming) is attained (Ganser and Strauss, 1967). Based on prior research experience it is anticipated that no more than 20-25 qualitative interviews (FGIs of 5-7 youth each and IDIs inclusive) will be required. The adult key informants will be selected based on information obtained in the FGIs and IDIs with adolescents and will represent people who are expected to have extensive information about adolescent social capital.

5. Recruitment Process
Describe how and from what sources the subjects will be recruited. Indicate where the study will take place. Describe any possible relationship between investigators and subjects (e.g. instructor - student; manager - employee). Attach a copy of any poster(s), advertisement(s) or letter(s) to be used for recruitment.

Youth participants will be recruited from a variety of venues targeted because of their likelihood to provide access to youth with varying levels of social capital. Schools, churches, clubs, community organizations, and youth-oriented clinics are expected to be places where youth with relatively high social capital may be accessed since these are places where youth may participate in group activities. Local ‘hang outs’; shopping malls and the downtown core will be used to access youth who may have fewer affiliations with formal groups. Research assistants will approach these organizations and spend time in these locations meeting youth, explaining the project and inviting their participation. Where necessary, organizational approval (e.g. school board, church board, shopping mall manager) will be obtained to conduct recruitment activities. The FGIs will take place in a variety of locations, including community centres, churches, a designated quiet area in a popular shopping mall, ‘private party’ rooms in popular restaurants/hangouts, the university campus, depending on the preference and comfort of youth. IDIs with key informants will likewise take place in locations preferred by those being interviewed, including a place of work, the university, a quiet area in a coffee shop, or a home. Recruitment of adult key informants will be directly through the organizations where they are located and based on references from youth. There are no foreseen relationships between investigators and subjects.

6. Compensation of Subjects
(YES / NO)

Will subjects receive compensation for participation?

[ ] Financial

[ ] In-Kind

Other (Specify)
If yes, please provide details. If subjects choose to withdraw, how will you deal with compensation?

Light refreshments will be provided to participants in order to create a friendly atmosphere, as well as to compensate them for their time. In addition, if the project is funded, gift certificates for one adult pass to the movie theater will be provided to the participants as a token of appreciation.

7 Feedback to Subjects

Whenever possible, upon completion of the study, subjects should be informed of the results. Describe below the arrangements for provision of this feedback.

Preliminary findings will be presented in 2-3 followup group interviews with adolescents. In addition, we will be establishing a secure website with usernames and passwords which the participants themselves will choose in the confidence of the researchers, at the start of their FGIs. In the event that certain participants do not have internet access, we will ask the participants for contact info if they are interested in receiving a summary of findings.

C. POTENTIAL BENEFITS FROM THE STUDY

Discuss any potential direct benefits to subjects from their involvement in the project. Comment on the (potential) benefits to (the scientific community/society that would justify involvement of subjects in this study.

Results of this project will: (1) produce a conceptualization and operationalization of social capital appropriate to youth; (2) test, refine and further test a model of social capital's influence on adolescent intimate dyadic relationships and sexual and sexual health experiences based on the existing research literature and results of the qualitative analyses conducted for this project; and (3) provide foundation for further research on the influence of community on adolescents. In order to provide these benefits to the scientific community, research results will be presented at conferences in the areas of sociology, adolescent sexuality, and health as well as in several peer reviewed publications. In addition, presentations will be made at conferences targeting community health workers and educators who work with adolescents such as the Garolph Sexuality Conference and the annual conference of the Canadian Public Health Association.
D. POTENTIAL RISKS OF THE STUDY

1. Describe the known and anticipated risks of the proposed research, specifying the particular risk(s) associated with each procedure or task. Consider, physical, psychological, emotional and social risks.

Limited psychological and social risks are anticipated due to the collective nature of FGIs. Adolescents will be discussing personal information, including their personal relationships, family dynamics, and leisure activities, in the presence of their peers. In this environment, youth might feel embarrassed by the information they provide in the group discussions and/or feel that they will be judged and subsequently experience a loss of status or reputation among their peers.

2. Describe how the potential risks to the subjects will be minimized.

In order to minimize the aforementioned risks, participants will be asked to talk about "what they know", and will be instructed that this does not necessarily have to be their own personal experiences. Rather, they can discuss experiences that they know of, in more general terms than personal. As such, the participants maintain their own privacy regarding the experiences they share. In addition, many of the responses will first be written anonymously on "post-it notes" and collected by the researcher, such that they can be used to funnel the discussion to toward consensus or similar experiences. Finally, all participants will be reminded that their participation and involvement in group discussions is strictly voluntary, that information provided will be known only to the fellow group members and the researchers, and that inappropriate comments are strictly forbidden. Also, prior to commencing the FGIs, participants will choose pseudonyms such that their real identities are unknown to fellow FGI members, thereby minimizing social risks of loss of status and reputation.

Due to the method of recruitment, there is a possibility that some members of any given FGI are acquainted with one another. In order to minimize this probability, records will be kept of when and where each participant was recruited so that FGIs can be composed so as to minimize the number of participants who may be acquainted.
E. INFORMATION AND CONSENT PROCESS

1. Attach a copy of a Letter of Information describing the procedures and a separate Consent Form. If written consent will not/cannot be obtained or is considered inadvisable, justify this and outline the process to be used to otherwise fully inform participants.

Please see attached

2. Are subjects competent to consent? If not, describe the process to be used to obtain permission of parent or guardian. Attach a copy of an information-permission letter to be used.

Since the sample includes youth aged 15 to 19 years of age, not all participants are competent to consent. While consent will be sought of all participants regardless of age, parental consent will also be sought for those willing participants under the age of 18 years. Contact information of parents/guardians of willing participants will be asked of the participants. Parents/guardians will first be approached by phone, and then in person in order to obtain consent for the underaged youths' participation. Where necessary, organizational approval (e.g., school board, church board, shopping mall manager) will be obtained to conduct recruitment activities.
F. CONFIDENTIALITY

Will the data be treated as confidential? 0 0

1. Describe the procedures to be used to ensure anonymity of subjects and confidentiality of data both
   during the conduct of the research and in the release of its findings. Explain how written records,
   video/audio tapes and questionnaires will be secured, and provide details of their final disposal.

Each recruited participant will be assigned a file number. Yellow sheets of paper will be used to hold
contact and other personal identifiers of the youth, including their file number. These files will be kept in
a locked filing cabinet in the faculty investigators' office. White paper will be used to track the participants
of each focus group by file number only. These files will be kept in a location separate from the yellow
files (for example in a locked drawer in one of the student investigators' offices). The masterlist matching
file numbers with participants will be seen only by the faculty investigator, and will be kept in a locked
drawer in a separate location than that of both the yellow and white files. At the start of each FGI,
pseudonyms will be chosen by participants in the confidence of the researchers. Therefore, the real
identities of participants will be unknown to fellow FGI members. Only pseudonyms chosen by the
participants will be used in the final reports, journal articles and conference presentations. Due to the
method of recruitment, there is a possibility that some members of any given FGI are
acquainted with one another. In order to minimize this probability, records will be kept of when and
where each participant was recruited so that FGIs can be composed so as to minimize the number of
participants who may be acquainted. Each participant will be informed, both on the consent form and at
the start of each group discussion, that a promise of confidentiality is only good so long as all group
members stick to it. Furthermore, at the start of the FGIs, each participant will be provided with the url for
the website on which the findings will be posted. The participants will select their own username and
password in the confidence of the researchers. Only those with valid usernames and passwords will be
G. DECEPTION

Will deception be used in this study? [ ] [ ]

If yes, please describe and justify the need for deception. Explain the debriefing procedures to be used, and attach a copy of the written debriefing:

H. REB REVIEW OF ONGOING RESEARCH (Minimum Requirement: Annual Report)

Please propose a continuing review process (beyond the annual report) you deem to be appropriate for this research project/program.

Given the low risk nature of this study, we feel that the annual report should be sufficient.

Use the remainder of this page and an additional page if more space is required to complete any sections of the form, using appropriate headings.

2. Methodology/Procedures: Unfortunately, FGDs are likely to produce information on norms and perceptions rather than individual beliefs and experiences, particularly when these do not coincide with group norms. Consequently, IDIs with youth and with people who spend considerable time with or work with adolescents will also be used to expand on and cross-check the interpretations drawn from FGDs. The FGDs and IDIs will last approximately between 1 and 1.5 hours, interviews with adolescents. Since little is known about adolescents' sources and uses of social capital, it would be difficult to force the topics to be addressed during the FGDs and IDIs, and still arrive at a youth-specific conceptualization of social capital. Therefore, only a rough guideline of themes to be covered has been appended (see appendix A for preliminary FGI and IDI conversational guides). The concept of social capital developed based on FGDs and IDIs will be 'checked' for clarity and member validity in 2-3 follow-up groups. (Please see Appendix A for a chronological list of methods/procedures).
Will the results of this research be used in a way to create financial gain for the researcher? How will conflict of interests be dealt with?

The results of this research will not be used for financial gain for the researchers. No conflict of interests are anticipated.
CONSENT TO PARTICIPATE IN RESEARCH
SOCIAL CAPITAL AND ADOLESCENT SEXUAL AND RELATIONSHIP EXPERIENCES
Youth Participant Interview Consent Form

You are asked to participate in a research study exploring adolescents' relationships with family, friends, neighbours and mentors. The study is being conducted by Lisa Smylie from the University of Windsor.

The purpose of this study is to understand the places teens feel they belong, the people who are important to them, and people they can rely on and trust, as well as what they "get" from their relationships with these people.

If you volunteer to participate in this study, you will be asked to participate in a personal interview which will contain questions related to what you know about teens' relationships at school, at home, on sports teams, at church, and within your neighbourhood, and how these relationships influence teens' sexual behaviour. Although some questions may be difficult for you to answer, you are encouraged to be as open and honest as possible. The interview should take about 1 to 1.5 hours, and will be held in a location of your choosing, at a time that is convenient for you.

The interview will be tape-recorded. Anything you say in the interview is strictly confidential. Any identifying information about you or other individuals in the groups, or about whom you speak of, will not be included in the transcriptions or in any printed material resulting from this study. The tapes will be destroyed after they are transcribed, or will be returned to you if you prefer. Pieces of information you provide may be quoted in scholarly publications, reports and presentations, using a fake name of your choice.

Your participation in this study is completely voluntary. You may refuse to answer any questions that you feel uncomfortable with, without any need for an explanation on your part. You are free to end the interview at any time. You can take a copy of this form with you if you like.

I will make myself available to you anytime should you have any questions. If you have any questions or concerns about any aspects of this research, please feel free to contact Lisa Smylie at 253-3000 ext. 3978, or by email at smylie1@uwindsor.ca. If you are interested in the results of this study, you can choose a name and password with which you can access a secure website holding a summary of the findings of the study.

This study has been reviewed and has received ethics clearance through the University of Windsor Ethics Review Board. If you have questions regarding your rights as a participant in this study, please contact:

Ethics Co-ordinator
Chrysler Hall Tower, Room 309
University of Windsor
Windsor, ON N9B 3P4

216
Thank you for your time, cooperation and participation.

Participant’s Name (Please Print)

Participants Signature                      Date

Investigator’s Signature                      Date
Appendix D

INTERVIEW GUIDE

Qualitative Research Instrument
In-depth interview conversation guide

1. Introduce the project and ensure informed consent using the project information sheet
2. Insure consent form is signed, give a copy to the participant

Demographics
• How old are you?
• Were you born in Canada?
• (if not) When did you move to Canada?
• Were you born in Windsor/Essex County?
• (if not) When did you move to Windsor/Essex County?
• How would you describe your ethnicity (ethnic background)?
• What area of Windsor/Essex County do you live in (ex. South Windsor, Sandwich, Leamington...)?
• How do you like your neighbourhood? What are some good things about it? Negative things?
• Who do you live with (ex. Both parents, mom only, dad only, siblings, grandparents...)?

Warmup

• Tell me about a typical day for you? What do you do during an average day?
• Tell me about a typical week for you. What kinds of things do you do on a weekly basis? For example, other than going to classes, is there anything else you do at school? After school how do you usually spend your time? At night? On weekends?

Sources of Social Capital
I’m interested in knowing about you in relation to other people in your life.

• Can you tell me three people that are most important to you?
• Why are they important to you?

*Go through each of the three people with the following questions:
• How long have you known (name of person)?
• How did your relationship with (name of person) develop?
• Were you always as close to them as you are now?
• What made you close to them?
• (if not born in Canada) Did you know them before you moved to Canada?
• How has your relationship with (name of person) changed since you moved to Canada?
• (if not born in Windsor) Did you know them before you moved to Windsor?
• How has your relationship with (name of person) changed since you moved to Windsor?

• What makes (name of person) important to you?
• How are you treated by (name of person)?
• How do you get along with (name of person)?
• What activities do you usually do with (name of person)?
• How do you feel when you are with (name of person)?
  • Probe: What positive feelings do they bring into your life?
  • Probe: What negative feelings do they bring into your life?
• What does (name of person) do for you?
  • Probe: What things might (name of person) do you for you?
  • Probe: What might you rely on them for?
• What do you do for (name of person)?

• What kinds of groups or organizations do you belong to or take part in that are important to you. Tell me about (the group/organization) - for example, what you do there?.

*For each of the groups individually, discuss the following:
  • What does it take to be a member of X (place)?
  • Why did you join?
  • What was it that made you feel you belonged?
  • How do you feel when you are in these places?
  • What positive feelings do you feel because of the people in the group?
  • What negative feelings do you feel because of the people in the group?
  • What have you gained from being a part of (name of places)
  • Now let’s talk about the negative feelings or things they bring into your life?
  • How did you feel when you first started spending time in this place? What made your feelings change?
  • (if not born in Canada) How are activities different here than in (county of origin)?
• (if not born in Canada) What do you gain through your activities here that you didn’t in (county of origin)? What did you gain through activities in (country of origin) that you don’t gain here?
• (if not born in Windsor) How do the activities you do in Windsor differ from those you’ve done other places?
• (if not born in Windsor) What do you gain from your activities in Windsor you didn’t anywhere else? What did you gain other places that you don’t in Windsor?
• Is there anyone in particular who is in this group or organization that is especially important to you? What makes them important? How did your relationship develop? How do you get along? How do they make you feel? What do you get from this person - what kinds of things do they do for you (support, help...)?

• Thinking about the groups you’ve told me about that are most important to you, tell me, What makes it/Them important?

Processes by which Social Capital is generated and mobilized

• Who do you most often turn to when you have a personal problem?
• Can you give me an example of a time when you went to (name of person) for help with a personal problem? - for example, what was the problem, how did you approach them, how did they help you?
• Why do you rely on (name of person) for help with a personal problem?
• What makes you feel you can rely on (name of person) for help with a personal problem?
• How did your relationship with (name of person) develop? - for example, where did you meet? Did you get along right away? Did you always feel that this was someone that you could go to for help with a personal problem? When did you start to feel that way?
• How do you get along now?
• How often do you see each other?
• In what situations do you think you wouldn’t be able to rely on (name of person) for help with a personal problem? Why?

• What about when you have to make an important decision? Who would you go to?
• Can you give me an example of a time when you went to (name of person) when you had to make an important decision? - for example, what was the important decision, how did you approach them, how did they help you?
• Why do you rely on (name of person) for help in making an important decision?
• What makes you feel you can rely on (name of person) for help in making an important decision?
How did your relationship with (name of person) develop? - for example, when did you meet? Did you always get along? Did you always feel you could go to them for help in making an important decision? When did you start to feel that way?

How do you get along now?

How often do you see each other?

In what situations do you think that you wouldn’t be able to rely on (name of person) for help in making an important decision? Why?

What about when you need information about something? Who would you go to?

Can you give me an example of a time when you went to (name of person) when you needed information? - for example, what type of information did you need, how did you approach them, how did they help you get the information you needed?

Why do you rely on (name of person) for information or help finding information?

What makes you feel you can rely on (name of person) for information or finding information?

How did your relationship with (name of person) develop? - for example, when did you meet? Did you always get along? Did you always feel that you could go to them when you needed information? When did you start feeling this way? How do you get along now?

How often do you see each other?

In what situations do you think that you wouldn’t be able to rely on (name of person) for help in getting information? Why?

How about when you need things like money, or a ride somewhere? Who would you go to?

Can you give me an example of a time when you went to (name of person) for these things? - for example, what did you need? What did you need it for? How did you approach them? Did they help you get what you needed?

Why do you rely on (name of person) for these things?

What makes you feel you can rely on (name of person) for these things?

How did your relationship with (name of person) develop? - for example, when did you meet? Did you always get along? Did you always feel that you could go to them for these things? When did you start feeling this way? How do you get along now?

How often do you see each other?

In what situations do you think that you wouldn’t be able to rely on (name of person) for these things? Why?

What are some of the other important things you go to other people for help with?
• Can you describe a time when you went to someone for (other type of help)? - for example, who did you go to? What was the thing you needed help with? How did they help you?
• Why did you go to (name of person)?
• What made you feel you could rely on them?
• How did your relationship develop? - for example, when did you meet? Did you always get along? Did you always feel comfortable going to them? When did you start feeling this way? How do you get along now?
• How often do you see each other?
• In what situations do you think you wouldn’t be able to rely on them for this type of help? Why?

Influences of these sources of social capital on sexual behaviour

• Who do you talk to most about sex? Probe: If not mentioned, ask specifically about parents, friends (male or female), teachers.
• What is it about (name of person) that makes you feel you can go to them for help with issues about sex? Ask this for each type of person listed in previous question.
• Do you have a bf/gf?
• How long have you been with them?
• Where and how did you meet your bf/gf?
• Do you talk with your bf/gf about sex?

Some of the research suggests that the places and people we have been talking about today have an important impact on teens' sexual behaviour (any sexual activity ranging from kissing to intercourse)

• Do you think that these people or groups play a role when you are making decisions about sex?
• How do they play a role?
• Probes (only if nothing offered): Do they give you information?
• Are they someone you admire and look up to or someone you want to be like? Do they get you access to condoms/contraception? Do you share their attitudes about sex with you?
• What do your friends think about engaging in sex? About using condoms? about using birth control?
• How do your friends influence the way you think about sex? about condoms? about birth control?
• Have you talked to your family about sex? What does your family think about sex, about birth control? About condoms?
• How does your family influence the way you think about sex? about condoms? about birth control?
What about some of the other people you mentioned before when we were talking about people who were important to you and people you could go to? How do they influence your decisions when it comes to sex?

Debriefing and Member Check

What we’ve been talking about is something that people call social capital. What is meant by social capital is the things or feelings that you get from belonging to different groups. These can be very important or useful to us. For example, I may be able to get a “hook up” for a summer job through someone in my family, or a neighbour. Or, I was able to recruit people for this study through someone I worked with. These are examples of how we can use our social relationships to get things from them.

What I’m trying to understand is how social capital works for teenagers – where they get it from, what parts of it are most important to them, and how they use it, particularly how it influences their sexual behaviour. For example, some teens may find that participating in sports teams puts pressure on them to drink and engage in sex. Others may be part of a group of friends that doesn’t approve of sex. Some might be close to a teacher that they get information from about where to get condoms or how to get prescriptions for birth control. These are ways that social relationships can act as a resource to impact teens’ sexual behaviour. Now that I’ve told you about social capital, can you think of anything that has been left out of our conversation that I should know about?

• For example, are there other groups I should know about that provide you or teens you know with social capital?
• Are there other groups or people I should know about that are important influences on your or other teens’ sexual behaviour?
• Are there things or feelings that you get from belonging to a group that we haven’t talked about yet?
• Are there ways you use or benefit from these things that we haven’t talked about?
• Are there any issues I haven’t covered related to youths’ sexual behaviour and/or social relationships that you think is important?
• What do you hope will come out of a study about youth’s sexual behaviour? What would be useful for people your age?
• Do you know of any other people who might be willing to participate in the study? (If so, give them an information sheet to pass onto the person).
• How did you find out about the project?
• Did you want to choose your own “fake” name to be used in any reports if we take quotes from your interview? (Only a first name is needed)
• Did you want to give me an email address so that I can email you the results, reports and papers that come out of the project?

Closing
This has been really interesting and very useful in helping me understand what social capital is for teens. Thanks for being so open and honest with me.

*Don't forget to give them their compensation!
Name: Lisa Smylie
Year of Birth: 1977

Education:

September 2002-September 2009
University of Windsor, Windsor, ON
Ph.D. (Sociology with specialization in Social Justice)
Dissertation: The Influence of Social Capital on the Timing of First Sexual Intercourse among Canadian Youth

September 2000-September 2002
University of Windsor, Windsor, ON
Master of Arts (Sociology)
Thesis: Social Capital and Socio-economic Status as Determinants of Physical, Mental, and Self-rated Overall Health in Canada

September 1996-September 2000
University of Windsor, Windsor, ON
Bachelor of Arts, Honours (Criminology)
Minor: Psychology