

Buying and Selling Sex in Québec Adolescents: A Study of Risk and Protective Factors

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Received: 20 August 2008 / Revised: 26 January 2010 / Accepted: 26 January 2010 / Published online: 9 March 2010
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Abstract This study examined the exchange of sexual services for compensation (e.g., money, drugs, alcohol) in high school students. The sale of sex in young people from non-clinical samples has been the subject of recent studies, but buying such services has received far less attention. This study described these two phenomena and associated factors within a nonclinical sample of 815 high school students ($M = 15.86$ years) from Québec. According to our results, 3% of these youth reported having bought and 4% reported having sold such services in their lifetime. More girls were involved in selling sexual services and more boys were involved in buying them. Young people generally disapproved of prostitution. Logistic regressions revealed that attitudes in support of prostitution, history of sexual abuse, casual sex, and the number of stressful life events were related to the sale of sex. Furthermore, observing sexualized social activities and exhibiting approving attitudes towards prostitution were associated with buying sexual services.

Keywords Sex work · Prostitution · Adolescence · Attitudes · Risk factors · Protective factors

Introduction

The World Health Organization (1988) proposed this definition of prostitution: “An adapted and dynamic process involving a

transaction between a seller and a buyer of sexual services. Prostitution has to do with all exchanges of sex for money or goods and services, such as drugs, food, housing, clothing, etc.” There is, however, a tradition of limiting prostitution to a job or a trade. Considering that adolescents are not necessarily involved in a trade, the terms buying and selling sex were chosen for our study of Québec adolescents.

Selling Sex

In a sample of Canadian street youth ($N = 361$), 23% reported having sold sexual services for money or gifts (Stoltz et al., 2007). Two American studies found similar percentages. Twenty-five percent of the homeless adolescents interviewed ($N = 620$) claimed to have been involved in prostitution (Yates, Mackenzie, Pennbridge, & Swofford, 1991), while 15% of young adults made the same claim ($N = 151$) (Tyler, 2009). Some have named this phenomenon “survival sex.” Though these numbers are very revealing, very few studies have been conducted in industrialized countries on the exchange of sexual services for compensation (e.g., money, drugs) among youth in the general population, and available data mainly targeted the sale of such services. A study by Pedersen and Hegna (2003) showed that 1–2% of boys and girls aged 14 to 17 who attend secondary school sold sexual services in the past year ($N = 10,828$). The average age of the first sexual experience of this nature was about 14 years. The item used to measure prostitution was: “give sexual favors for payment.” In a recent study (Svedin & Priebe, 2007), 1.4% of young people in a representative sample ($N = 4,339$) answered the following question affirmatively: “Have you ever sold sexual services?” Participants had a mean age of 18 years ($SD = .74$) and attended secondary school. In this sample, the mean age of the first incident was 15.9 years. The most common means of coming into contact with the buyer was via a friend, and money was the most frequently used currency of

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negotiation for both girls and boys. However, a higher proportion of girls sold sexual services for clothes or other objects. Conducted in Sweden and Norway, these two studies did not, however, identify young people's attitudes towards these phenomena.

Exploring the risk and protective factors associated with buying and selling sex is important, all the more so in view of preventing it. Some researchers have focused on risk factors associated with the sale of sexual services mainly by women or female adolescents. One factor that has emerged from these studies is a history of sexual violence in teenagers (Bagley & Young, 1987; Pedersen & Hegna, 2003; Stoltz et al., 2007; Svedin & Priebe, 2007). Van Brunschot and Brannigan (2002) suggested that a lack of parental supervision, parental neglect, or a deviant image of oneself and one's sexuality were possible explanations for the connection between childhood sexual abuse and selling sex. Nonetheless, results have been contradictory regarding the relationship between a history of sexual violence and prostitution. Some researchers have not detected this association for female adolescents (Nadon, Koverola, & Schludermann, 1998).

Other contextual factors that may have contributed to these behaviors include sexual relations at an early age (Pedersen & Hegna, 2003; Svedin & Priebe, 2007), leaving home (Nadon et al., 1998; Van Brunschot & Brannigan, 2002), or a dysfunctional family environment (Lung, Lin, Lu, & Shu, 2004; Van Brunschot & Brannigan, 2002). Furthermore, many of the young people involved in selling sex reported behavioral problems (Pedersen & Hegna, 2003; Svedin & Priebe, 2007) and substance abuse (Lung et al., 2004; Pedersen & Hegna, 2003; Svedin & Priebe, 2007). Finally, according to Svedin and Priebe's (2007) study, youth who have sold sexual services were more likely to consume pornography, regardless of the form it took. Pornography use was more frequent (38% of these young people watched pornography every day) and more deviant (e.g., hard-core pornography) than among other young people. Some factors related to the sale of sexual services have thus been identified. However, the factors that might protect young people have not been explored. Documenting these factors would be useful for sketching a more accurate portrait of the situation and better orienting prevention efforts. The buying of sexual services by adolescents is another phenomenon that has received little attention, and it was targeted in this study.

Buying Sex

Most surveys that have examined the phenomenon of the buying of sexual services by adolescents involved African countries and, to our knowledge, none have assessed the situation in industrialized countries (Dunkle et al., 2007). A qualitative study in Durban (South Africa) revealed that, among 14- to 22-year olds, buying sex can begin at a young age, and it was more likely to involve the exchange of sex for gifts rather than for money (Kaufman & Stavrou, 2004).

Studies targeting adult buyers primarily explored the motivations or the psychological profiles of customers of sexual services (Monto, 2004; Pitts, Smith, Grierson, O'Brien, & Misson, 2004). Other surveys compared adult male users with non-users, thus identifying the factors associated with buying sexual services. Users have been set apart from non-users by their need for more sensation and risk taking, and by their greater discomfort during interactions with women (Cameron & Collins, 2003; Xantidis & McCabe, 2000). According to Philaretou (2003), hypermasculinity, including negative attitudes towards women, was another factor associated with the buying of sexual services. Monto and McRee (2005) compared 1,672 men who had been caught by police purchasing the services of a prostitute with a representative sample of men in the United States. The former group reported a higher number of sexual partners in the last year and fewer had a stable sexual partner. They also demonstrated more open attitudes regarding sexuality. Finally, they participated in several other sex industry activities, such as consuming pornography and patronizing strip bars. There was no significant difference between the two samples in terms of their history of sexual violence, either as the victim or perpetrator. It was noted that differences between the samples were negligible. While these studies made it possible to describe certain characteristics associated with men who buy sexual services, they did not shed light on the situation of young buyers or on the role of protective factors.

Young people's attitudes towards people who sell or buy sexual services or towards prostitution are little understood. Clinicians have pointed to social trends, such as the hypersexualization of youth (American Psychological Association, 2007) and the trivialization of certain sexual behaviors, particularly since the arrival and accessibility of Internet-based sexual content (Peter & Valkenburg, 2006). Buhi and Goodson (2007) concluded from their literature review that adolescents' attitudes towards sexuality, along with other factors (e.g., perceived norms), predicted their sexual behaviors. However, studies have yet to be conducted regarding buying and selling sex, both in terms of cognitions and behaviors.

Hypotheses

The primary objective of this study was to examine the factors associated with whether or not young people of both genders are involved in buying and selling sex. Other research questions were also pursued: (1) What is the overall attitude of young people towards prostitution? (2) How many young people of both genders report being involved in buying or selling sex? (3) What is the context in which these sexual exchanges occur (e.g., frequency, age, description of the first contact)? Given pending decisions to invest energy and money in high school programs to prevent prostitution, such questioning seemed essential and timely for the Province of Québec.

Based on the previously mentioned literature, it was hypothesized that sexual abuse, sexual precocity, at-risk alcohol and drug use, consumption of pornography, and a large number of stressful life events would be positively associated with selling sex. Social support would be negatively associated. Other factors were also explored: sexual behaviors (e.g., casual sex, sexualized social activities), parents' openness to communicating about sexuality, the perception of one's mental and physical health, attitudes towards prostitution, and involvement of one's social network in the sex industry.

In terms of buying sexual services, our hypotheses were drawn from literature that was specific to an adult population. We thus postulated that buying sexual services would be positively related to consumption of pornography, favorable attitudes towards prostitution, and certain sexual behaviors (e.g., casual sex and sexualized social activities). The other above-mentioned variables were also explored in relation to the buying of sexual services.

Method

Participants

Recruitment for the (non-clinical) sample of students was carried out among all classes of Grades 11 and 12 at four public high schools in Québec City. This is an urban center of nearly 500,000 inhabitants in the province of Québec, where the majority of the population is French speaking. All the targeted classes participated ($N = 54$). The schools, which ranged in size between 540 and 1,696 students, were selected as a way of targeting lower- and middle-class socioeconomic communities. Two of these schools had a high poverty index (41.04 and 47.24), which means that the percentage of families living below the poverty line was very high (Gouvernement du Québec, 2008). The two others schools had a poverty index that varied between 12.27 and 22.06, which indicated a somewhat moderately privileged community. The parents of the 1,459 adolescents were solicited. The percentage of parental agreement (consent) from the four schools was 61.2% (varying between 40.7 and 73.9%).

Among the 893 adolescents whose parents gave their consent, 820 (91.8%) anonymously completed a self-administered questionnaire in their classroom. Five questionnaires were excluded before compilation because their data was invalid ($n = 2$) or because they reported having been dishonest ($n = 3$). Thus, the final sample consisted of 815 young people (465 girls and 349 boys, one young person neglected to mention his or her gender) aged 15 to 18 years old ($M = 15.86$, $SD = .74$). These adolescents spoke French and identified with the Québécois cultural majority. Half were in Grade 11 (51%), while the other half were in Grade 12 (47%), and a small number (2%) were in a special studies class. They were almost all born in Canada (95%), as were their parents (90%) or at least one of their parents

(5%). Most of the adolescents lived with their birth family (70%), while 29% lived in another type of family (e.g., single-parent or blended family), and less than 1% were in foster care.

Procedure

The survey took place from October 30 to December 8, 2006, in four public secondary schools in the greater Québec City area. Parents of targeted adolescents were asked for their active written consent. A research assistant was available in the classrooms and the average time needed to complete the questionnaire was 60 min. Students handed in their questionnaires to the research assistant in a sealed envelope in order to ensure confidentiality. These procedures were approved by the Comité d'Éthique de la Recherche at Université Laval.

Measures

The survey questionnaire consisted of three sections: (1) the young person's sociodemographic characteristics and life context (taken from Aubin et al., 2002; Boyce, Doherty, Fortin, & MacKinnon, 2003; Institut de la statistique du Québec, 2004; Statistics Canada, 2005), (2) sexualized social activities and attitudes towards these activities, and (3) prostitution and attitudes towards prostitution. Several of the scales had to be developed partially or totally by the research team since no other scale validated for these variables was available. In certain cases (e.g., attitudes towards prostitution, description of sexualized social activities), interviews were carried out to develop items with university and college students, and workers from various community youth organizations.

Buying and Selling Sex

The developed questions refer to selling sexual services: "Have you ever received something (money, drugs, alcohol, gifts or other) in exchange for sexual contact (touching, oral sex, intercourse, or another activity of a sexual nature)?" and to buying sexual services: "Have you ever given something (...) to obtain a sexual contact (...)" These questions were introduced by a statement specifying that the section dealt with prostitution. The scale in their lifetime was: never (1), 1 to 3 times (2), 4 to 10 times (3), and 11 or more times (4). To conduct regression analyses, the answers to the two items were recoded as 0 (never) or 1 (one or more times).

Contextualizing the Exchange of Sexual Services

Information was gathered to describe the individuals involved (i.e., whether the relation was homosexual, heterosexual, or included exchanges with both genders, and the connection with

the other person). These aspects were measured by the following questions: “Was this person: a friend, an acquaintance, a stranger, or other?”, “Was this person: of the same gender as you or of the other gender?”, “About how old was the person to whom you gave or from whom you received something for sexual contact (less than 12 to 41 and older)?” We also evaluated the strategies used by buyers or sellers to contact the other person. “How did you enter into contact with this person: by yourself, with the help of someone in your social network (friend, family), you were approached by the person, or other?” One question referred to the age of the participant the first time he or she sold or bought sexual services (12 and under to 18). An additional question pertained to the level of coercion in the sale (“Did you feel you were coerced? Yes or no?”).

Disapproving Attitudes Towards Prostitution (DATP)

We created 45 positive and negative items with regard to attitudes towards prostitution. To extract the factors, a principal component analysis with an oblique rotation was conducted since the factors were expected to correlate. Items were retained in the factor solution if they had communalities of $>.30$, inter-item correlations of $<.56$, and if they did not load on multiple factors. The final 33 items included three factors, which were labeled according to their content: (1) social disapproval (19 items, $\alpha = .89$), (2) no positive aspects (8 items, $\alpha = .82$), and (3) exploitation (6 items, $\alpha = .83$). These items are presented in the Appendix. The response scale ranged from 1 (*completely disagree*) to 4 (*completely agree*). This solution explained 36.7% of the variance. The Kaiser–Meyer–Olkin index was used to evaluate the factor solution’s viability. A high index indicates weak partial correlations. The .95 index suggests that the present solution was excellent. The global score of the measure was obtained by inverting certain items and then calculating the mean of the 33 items. The mean was determined by accepting a threshold of 10% for missing data ($n = 3$). We were unable to calculate the global score for 10 participants because they had four or more missing items from the measure. The overall scale had an alpha of .92. A high overall score signified disapproval of prostitution.

Stressful Life Events

Four items (painful break-up with girlfriend or boyfriend; serious problems at school; pregnancy or abortion; death of a loved one) were taken from National Longitudinal Survey of Children and Youth (Statistics Canada, 2005). Two other items (i.e., moving and placement in foster care) were added. The response options were no (1) or yes (2). After transformation, the global score of this measure was determined by adding up adolescents’ life events, for a range of 0–6.

Sexual Behaviors, Sexual Precocity, and Network Involvement in the Sex Industry

Two items were used (one-night stand; friends with benefits) to measure casual sex. As the items were correlated, answers were grouped to form a dichotomous score (0–1) after transformation. Nine sexualized social activities (SESA) were investigated: wet t-shirt contests, stripteases, dances inspired by music videos, two people of the same gender kissing to excite others, imitation of fellatio with an object, dance contests in which people mime sexual positions, fellatio contests, group sex, and group masturbation contests. For each activity, adolescents were asked to indicate, since turning 14, if they had ever seen someone do this activity and if they had ever done this activity themselves. The global score was obtained by adding the number of sexualized social activities the adolescent had observed or participated in, for a possible range of 0 to 9.

To measure sexual precocity, participants were asked to indicate their age at their first consensual sexual experience, either oral sex or intercourse. The scale ranged from 1 (never have) to 8. Two participants indicated 12 years of age and under and eight participants answered 18 years of age. The scores of 2 (under 12 years old) and 3 (13 years old) were coded 1 (precocious), while the other scores were coded 0.

An item was developed to evaluate the variable involvement of a member of their social network in the sex industry (prostitution and nude dancing). The response options were no (1) or yes (2).

Sexual Abuse

The items and scale of measurement came from the Violence against Women Survey conducted by Statistics Canada (1993). The items used were: “When you were a child (before the age of 13), did anyone force you or try to force you into a sexual activity (sexual touching, kissing, caressing, penetration)?”, and “When you were an adolescent (13 to 18 years old), did anyone force you or try to force you into a sexual activity (sexual touching, kissing, caressing, penetration)?” The absence (1) or presence (2) of sexual abuse was measured. Since sexual violence during childhood and adolescence were correlated, the two items were grouped in a dichotomous score after transformation of 0 (absence) or 1 (presence).

At-Risk Alcohol Use and Drug Use

The items were taken from the National Longitudinal Survey of Children and Youth (NLSCY) (Statistics Canada, 2005). The following questions were asked: “In the last 12 months, how many times have you been drunk?”, and “In the last 12 months, how many times have you taken drugs?” The scale ranged from 1 (never) to 5 (every week) for alcohol use and from 1 (never) to

6 (3 to 5 times per week) for drug use. A single dichotomous variable was created, in which the score 1 indicated the youth had experienced a high frequency of alcohol abuse (score 4 and 5) or drug abuse (score 5 and 6). A score of 0 indicated lower frequencies.

Consumption of Online Pornography

This measure, based on the definition of Internet pornography by Carroll et al. (2008), assessed how often participants used media to increase their sexual excitement. It consisted of six items (e.g., entering a pornographic website to look at photos, clips, or pornographic films; entering a website with live chatting and discussing sexual topics with strangers; exchanging images, clips, etc. of a sexual nature on the Internet). The scale used was 0 times (1), 1–2 times (2), 3–12 times (3), 13–24 times (4) in a year, or more than two times per month (5). The global score was obtained by calculating the mean of the six items and a high score indicated a high level of consumption of online pornography. The internal consistency was .68 for this sample ($N = 803$).

Health or Mental Health Perceptions

Two items were used and the retained scale varied from excellent (1) to bad (4). The following two items suitable for adolescents (Zullig, Valois, & Drane, 2005) were analyzed separately: “How do you perceive your physical health?”, and “How do you perceive your mental health?”

Social Support

This four items measure was inspired by the NLSCY (Statistics Canada, 2005): I have a family and friends who help me to feel protected from danger, safe, and happy; I know someone who I trust, to whom I can turn for advice if I’m having problems; If something was wrong, nobody would help me; I feel well understood by my parents. The Likert-type scale varied from 1 (totally disagree) to 4 (totally agree). After an inversion of the third item, an overall score was obtained by calculating the mean of the items. A high score indicated the presence of an adequate social support in general (i.e., from parents, friends, and others). This measure had an internal consistency of .73 for this sample.

Parents’ Openness to Communicating about Sexuality

The three developed items used the same scale as the preceding variable. These items were: My parents think that the school should be responsible for my sexual education; My parents talk openly and comfortably about sexuality at home; At home, it is better not to talk about sex in front of my parents. After having inverted the first and last item, an overall score was obtained by

calculating the mean of all the items. A high score signified that parents were open about sexuality and that it was possible to talk about sexuality at home. The internal consistency of this measure was .67 for this sample.

Data Analysis

Descriptive analyses were first conducted to explore young people’s attitudes and behaviors surrounding buying and selling sex. Univariate analyses (chi-square tests) made it possible to compare attitudes and behaviors by gender. Then, associations between various risk and protective factors of buying and selling sex were verified. To this end, correlations were performed to verify the explanatory potential of the risk and protective factors. Logistic regression analyses then made it possible to study the variables’ relative contribution to the prostitution behaviors (Tabachnick & Fidell, 2006). All analyses were performed with the software SPSS version 13.

Results

Descriptive Analysis

On the basis of Table 1, it could be concluded that a large majority of adolescents (94%) stated that they had neither bought nor sold sex. Thus, 3% ($n = 23$) reported having bought and 4% ($n = 33$) reported having sold such services in their lifetimes. More boys reported having bought (5% vs. 2%) and more girls reported having sold sexual services (6% vs. 2%).

Table 2 reports data by gender for the DATP scale and its sub-scales. First, the data showed that most adolescents disapproved of prostitution (i.e., 85% for the sub-scale social disapproval) and saw it as exploitation (i.e., 73% for the sub-scale exploitation). However, 65% of adolescents believed that there were some positive aspects for the client in terms of sexuality (see the Appendix for a description of the items).

Context for Prostitution

Buyers

Twenty-three young people in the sample reported having given something (money, drugs, alcohol, gifts, or other) to obtain sexual contact. For the majority of these youth (96%, $n = 22$), this behavior occurred from one to three times in their lives. Only one person reported buying sexual services more than four times. Four (17%) adolescents reported that they were 12 or younger the first time, more than half (57%, $n = 13$) were 14 or 15, three were 16, and one youth was 18 years old. In general, the other person was a friend (65%, $n = 15$) or an acquaintance (30%, $n = 7$), and was of the opposite sex (96%, $n = 22$). Only one youth reported having been involved with a stranger. In 73%

Table 1 Boys' and girls' involvement in buying and selling sex

Involvement (over lifetime)	Boys (<i>n</i> = 346)		Girls (<i>n</i> = 462)		χ^2	Total (<i>N</i> = 808)	
	<i>n</i>	%	<i>n</i>	%		<i>N</i>	%
Buyer	16	5	7	2	6.92**	23	3
Seller	6	2	27	6	8.49**	33	4
Buyer and seller	3	1	6	1	–	9	1
Neither	326	94	432	94	0.12	761	94
Buyer or seller	19	6	28	6	0.12	47	6

** *p* < .01**Table 2** Description of young people's Disapproving Attitudes Towards Prostitution

Disapproving attitudes	Boys (<i>n</i> = 342)			Girls (<i>n</i> = 462)			Total (<i>N</i> = 804)		
	<i>M</i>	<i>SD</i>	%	<i>M</i>	<i>SD</i>	%	<i>M</i>	<i>SD</i>	%
Social disapproval	1–2.9 (disagree)		24	9		15			
	3–4 (agree)		76	91		85			
	<i>M</i>	3.3		3.5		3.4			
	<i>SD</i>	0.5		0.4		0.4			
No positive aspects	1–2.9 (disagree)		71	62		65			
	3–4 (agree)		29	38		35			
	<i>M</i>	2.6		2.8		2.7			
	<i>SD</i>	0.6		0.6		0.6			
Exploitation	1–2.9 (disagree)		36	21		27			
	3–4 (agree)		64	80		73			
	<i>M</i>	3.1		3.3		3.2			
	<i>SD</i>	0.7		0.6		0.6			
Combined (<i>N</i> = 804)	1–2.9 (disagree)		38	20		27			
	3–4 (agree)		62	81		73			
	<i>M</i>	3.1		3.1		3.2			
	<i>SD</i>	0.5		0.4		0.4			

(*n* = 16) of the cases, the seller was between 12 and 18 years old. For two (9%) participants, this person was between 19 and 40 years old and, for four (18%) others, he or she was under 12 years of age. Normally, they came into contact with this person themselves (57%, *n* = 13) or with the help of their social networks (26%, *n* = 6). Only 17% (*n* = 4) said they were approached by the other person.

Sellers

Thirty-three young people in the sample reported having received something (money, drugs, alcohol, gifts, or other) in exchange for sexual contact. For the majority of these young sellers of sexual contact (85%, *n* = 28), this behavior had occurred one to three times. However, for three (9%) adolescents, it had happened from four to 10 times, and for two (6%), it had occurred more than 10 times. Eleven of these youth (33%) were 15 years old the first time, 10 (30%) were 13 or 14 years old, six (18%) were 12 and or younger, and 6 (18%) were 16 years of age. For the most part, the other person was a friend (61%, *n* = 20) or an acquaintance (27%, *n* = 9), and was of the opposite gender (94%, *n* = 31). For most of these young people,

this person was between 15 and 18 years old (53%, *n* = 17) or between 12 and 14 years old (25%, *n* = 8). Some were involved with adults (16% with adults ranging from 19 to 40 years old and 6% with adults over 40 years old). Normally, they came into contact with this person on their own (69%, *n* = 22) or with the help of their social network (28%, *n* = 9). Only one young person (3%) was approached directly. Ten (30%) of these young people felt they were coerced into this sexual activity.

According to our results, young people bought and sold sex in comparable proportions (4% vs. 3%). Some of these youth demonstrated both behaviors. Nine young people (i.e., six boys and three girls) out of the 47 who were involved have sold and also bought such services. More girls than boys sold such services and more boys than girls bought them.

Risk and Protective Factors

Preliminary analyses were conducted before carrying out logistic regressions. Table 3 describes the independent variables. Intercorrelations between these variables and dependant variables (i.e., buying or selling sex) can be found in Table 4.

Some predictive variables were significantly correlated with selling or buying sexual services. Selling and buying showed a correlation of .30. In terms of attitudes, only the global score of the scale was integrated into the analyses.

A first logistic regression was carried out with the sale of sexual services as a dependent variable. Gender was brought in as the first step for control. It contributed more than the constant $\chi^2(1, N=782)=10.61, p<.01$. The predictive variables were included in another step. These 15 variables significantly added to the contribution of gender alone, $\chi^2(16, N=782)=77.16, p<.01$. The variables and their regression coefficients are presented in Table 5. According to a Wald test, the four variables, in addition to gender, that significantly predicted the sale of sex were disapproving attitudes towards prostitution, casual sex, number of stressful life events, and history of sexual abuse. Odds ratios revealed that the presence of sexual abuse was associated with a 3.03 times greater risk of selling sex. As for the casual sex variable, when the value was 1, the risk was 4.02, and when the “number of stressful life events” variable increased by 1, this value was 1.57. Finally, when the variable “Disapproving attitudes towards prostitution (DATP)” increased by 1, the probability of having the value 1 for the dependent variable (i.e. selling) was .19 (or 81% less risk).

Another logistic regression was conducted with buying sex as the dependent variable. Gender came under the first block for control. It contributed more than the constant $\chi^2(1, N=783)=5.38, p<.05$. Then, the 15 predictive variables were included in another step. These variables significantly added to the contribution of gender alone, $\chi^2(16, N=783)=46.82, p<.01$. These variables and their regression coefficients are shown in Table 6. According to the Wald test, the two variables that significantly predicted buying sexual services were disapproving attitudes towards prostitution (DATP) and the observation of sexualized social activities. Odds ratios made it possible to observe that an increase by 1 to the observed sexualized social activities variable made it 1.66 times more probable to obtain 1 as the value of the dependent variable (buying sex). When the variable “Disapproving attitudes towards prostitution (DATP)” increased by 1, the probability of having a value of 1 for the dependent variable was .17 (or 83% less risk).

Discussion

This study documented the buying as well as the selling of sexual services by young people in a period of their life when they are having their first sexual experiences. There was no comparable data available on the buying of sex among adolescents. Our results showed that some adolescents had bought sexual services. Therefore, it should not be seen as an issue unique to adults.

These numbers also confirmed that exchange of sexual services for compensation is not a common practice in secondary

school students aged 15 to 18. Indeed, the vast majority (94%) of participants reported never having sold or bought sexual services. Furthermore, analysis of young people’s attitudes towards this phenomenon revealed that the majority of boys and girls disapproved of such behavior. Many of them did, however, consider that prostitution allowed the client to adequately fulfill his or her sexual needs. Thus, our results do not offer a rationale for universal prevention programs. However, additional information on the involvement, as well as the context, of adolescents may offer cues as to which interventions would be most relevant to target.

Four percent ($n=33$) reported having received something in exchange for sexual contact. Data from the two comparable studies on selling sex (Pedersen & Hegna, 2003; Svedin & Priebe, 2007) carried out on representative samples in Oslo, Norway, and in five Swedish cities arrived at slightly lower numbers (between 1 and 2%). Their definition of prostitution was largely the same as that used in the present study, with sexual behavior not being limited to sexual intercourse. However, their sample was representative unlike our sample, which included lower-class to upper middle-class students. On the one hand, our finding of 2% of boys selling sex was similar to that documented in the two above-mentioned studies. On the other, we reported a higher percentage (6%) of girls selling sex; this contradicts the two Nordic studies, which concluded that boys were more involved in selling sexual services.

Knowing more about the context might contribute to explaining those results. In our study of selling sexual services, we may have mainly repertoired the exchanges between adolescents who were acquainted; indeed, only two adolescents reported selling sex to strangers. Furthermore, in half the cases of selling sex, the other person was of the same age group (15 to 18 years old), and in a quarter of them, someone younger (12 to 14 years old). But nonetheless, adults were involved in 1 out of 5 cases. That the buyer of sexual services was most often known (e.g., a friend or an acquaintance) for participants of both genders may point to exchanges of attention rather than anonymous sex work. But, it may also imply abuse by someone within their network. Indeed, as much as a third of the girls and 17% of the boys felt they had been coerced. In general, the buyer was of the opposite gender (94%). Pedersen and Hegna’s (2003) and Svedin and Priebe’s (2007) hypothesis that homosexual relationships could explain the high number of boys selling sex was thus not confirmed in our sample. Neither of the two previously cited studies described the buyers’ characteristics, though they suggest that the selling of sexual services could be accounted for in part by the involvement of older adults, mostly by offering a place to hang out or drugs. Our data suggest that additional explanations should be explored. Approximately 1 adolescent out of 5 in our less privileged sample was first involved in selling sexual services when 12 years old or younger which could be interpreted as sexual exploration between peers or being a victim of child abuse. Accepting gifts may indeed be associated with an

Table 3 Description of risk and protective factors, by gender

Variables	Total (<i>N</i> = 815)*		Boys (<i>n</i> = 349)		Girls (<i>n</i> = 465)	
	<i>N</i>	%	<i>n</i>	%	<i>n</i>	%
SESA (observation) (<i>N</i> = 812)						
0	132	16.3	64	18.4	68	14.7
1	157	19.3	70	20.2	87	18.8
2	159	19.6	58	16.7	100	21.6
3 and more	364	44.8	155	44.7	209	45.0
<i>M</i> (<i>SD</i>)	2.44	(1.86)	2.45	(1.99)	2.43	(1.75)
SESA (participation) (<i>N</i> = 808)						
0	369	45.7	186	54.2	182	39.2
1	226	28.0	97	28.3	129	27.8
2	112	13.9	36	10.5	129	16.4
3 and more	101	12.5	24	7.0	77	16.6
<i>M</i> (<i>SD</i>)	1.04	(1.32)	0.75	(1.08)	1.25	(1.44)
Sexual precocity (<i>N</i> = 815)						
Yes	116	14.2	52	14.9	64	13.8
Stressful life events (<i>N</i> = 814)						
0	96	11.8	52	14.9	44	9.5
1–2	517	63.5	216	62.1	300	64.5
3–6	201	24.7	80	23.0	121	26.0
Casual sex (<i>N</i> = 814)						
Yes	325	39.9	128	36.8	197	42.4
Network's involvement in sex industry (<i>N</i> = 812)						
Yes	41	5.0	15	4.3	26	5.6
Sexual abuse (<i>N</i> = 814)						
Yes	100	12.3	14	4.0	86	18.5
At-risk alcohol and drug use (<i>N</i> = 815)						
Yes	222	27.2	103	29.5	119	25.6
Online pornography (<i>N</i> = 813)						
1 (0 times)	154	18.9	29	8.3	124	26.7
1.1–2 (1–2 times)	503	61.9	221	63.5	282	60.8
2.1–3 (3–12 times)	126	15.5	80	23.0	46	9.9
3.1–5 (13 times and more)	30	3.7	18	5.2	12	2.6
<i>M</i> (<i>SD</i>)	1.66	(0.66)	1.87	(0.70)	1.50	(0.57)
Physical health perception (<i>N</i> = 808)						
Excellent	368	45.6	189	55.1	179	38.6
Good	354	43.8	124	36.2	230	49.6
Acceptable	86	10.6	30	8.7	55	11.8
Mental health perception (<i>N</i> = 808)						
Excellent	444	55.0	211	61.5	233	50.2
Good	300	37.1	105	30.6	195	42.0
Acceptable	64	7.9	27	7.9	36	7.8
Social support (<i>N</i> = 810)						
1–2.9 (disagree)	110	13.6	63	18.3	47	10.0
3–4 (agree)	700	86.4	281	81.7	418	90.0
<i>M</i> (<i>SD</i>)	3.48	(0.54)	3.38	(0.58)	3.55	(0.49)
Parents' openness to communicate about sexuality (<i>N</i> = 810)						
1–2.9 (disagree)	276	34.1	127	36.9	149	32.0
3–4 (agree)	534	65.9	217	63.1	316	68.0
<i>M</i> (<i>SD</i>)	3.04	(0.65)	2.96	(0.64)	3.09	(0.66)

* One participant did not mention his or her gender and is added to the total

Table 4 Correlations (r or ϕ) between the various predictors and dependent variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Selling sex	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2. Buying sex	.30**	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
3. Sex	.10**	–.09**	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
4. DATP	–.15**	–.20**	.25**	–	–	–	–	–	–	–	–	–	–	–	–	–	–
5. Events	.16**	.03	.08*	.00	–	–	–	–	–	–	–	–	–	–	–	–	–
6. Alcohol and drug use	.06	.00	–.04	–.09**	.18**	–	–	–	–	–	–	–	–	–	–	–	–
7. Precocity	.17**	.12**	–.02	–.13**	.13**	.20**	–	–	–	–	–	–	–	–	–	–	–
8. Sexual abuse	.23**	.03	.22**	.04	.25**	.09*	.12**	–	–	–	–	–	–	–	–	–	–
9. Casual sex	.19**	.11**	.06	–.08*	.28**	.40**	.30**	.20**	–	–	–	–	–	–	–	–	–
10. Family in industry	.07	.03	.03	–.01	.09*	.11*	.08*	.12**	.13**	–	–	–	–	–	–	–	–
11. Physical health	.10*	.08	.16**	–.06	.12**	.05	.07	.16**	.07	.02	–	–	–	–	–	–	–
12. Mental health	.11**	.07	.12**	–.15**	.15**	.12**	.07	.15**	.09*	.09*	.26**	–	–	–	–	–	–
13. Online pornography	.08*	.14**	–.28**	–.28**	.16**	.16**	.18**	.11**	.25**	.07	.04	.03	–	–	–	–	–
14. SESA (observation)	.13**	.17**	–.01	–.08*	.29**	.26**	.19**	.16**	.42**	.11**	.03	.08*	.35**	–	–	–	–
15. SESA (participation)	.16**	.06	.19**	–.03	.30**	.26**	.22**	.26**	.47**	.16**	.02	.08*	.29**	.59**	–	–	–
16. Social support	–.12**	–.09**	.16**	.29**	–.04	–.06	–.03	–.11**	–.01	.02	–.19**	–.28**	–.08*	–.01	.04	–	–
17. Parents' openness	–.05	–.03	.10**	.13**	.11**	.06	.02	–.05	.09**	.11**	–.03	–.12**	–.01	.08*	.10**	.46**	–

Note: Bold: Coefficient Phi (ϕ) and Cramer's V

* $p < .05$. ** $p < .01$

Table 5 Summary of the logistical regression predicting selling sex

	<i>B</i>	Wald	OR	CI (95%)	<i>p</i>
Sex	1.71	7.29	5.54	1.60–19.23	.01
Family in industry	0.20	0.07	1.22	0.29–5.21	ns
Social support	–0.44	1.08	0.65	0.28–1.47	ns
Online pornography	–0.08	0.06	0.92	0.47–1.80	ns
Stressful life events	0.45	5.74	1.57	1.09–2.26	.02
Disapproving attitudes towards prostitution	–1.65	10.67	0.19	0.07–0.52	.001
Physical health perception		2.67			ns
1	–0.25	0.16	0.78	0.23–2.66	ns
2	–0.88	2.27	0.42	0.13–1.30	ns
Mental health perception		4.44			ns
1	–0.03	0.01	1.03	0.24–4.42	ns
2	0.96	2.03	2.60	0.70–9.71	ns
Sexualized social activities (observation)	0.13	0.82	1.13	0.87–1.49	ns
Sexualized social activities (participation)	0.06	0.09	1.06	0.73–1.53	ns
Casual sex	1.39	5.83	4.02	1.30–12.43	.02
Sexual precocity	0.77	2.85	2.17	0.88–5.33	.09
Sexual abuse	1.11	4.98	3.03	1.15–8.04	.03
At-risk alcohol and drug use	–0.41	0.76	0.67	0.27–1.67	ns
Parents' openness to communicating on sex	–0.34	0.95	0.71	0.36–1.41	ns

Note: Nagelkerke $R^2 = .37$

Table 6 Summary of the logistical regression predicting buying sex

	<i>B</i>	Wald	OR	CI (95%)	<i>p</i>
Sex	–0.75	1.59	0.47	0.15–1.52	ns
Family in industry	–0.09	0.01	1.09	0.17–7.23	ns
Social support	–0.11	0.05	0.90	0.35–2.30	ns
Pornography	0.14	0.17	0.87	0.45–1.68	ns
Stressful life events	–0.15	0.45	0.86	0.55–1.34	ns
Disapproving attitudes towards prostitution	–1.76	9.56	0.17	0.06–0.53	.00
Physical health perception		3.76			ns
1	–1.42	3.49	0.24	0.06–1.07	.06
2	–0.52	0.59	0.59	0.16–2.26	ns
Mental health perception		0.31			ns
1	0.26	0.09	1.29	0.24–7.03	ns
2	–0.07	0.01	0.93	0.19–4.66	ns
Sexualized social activities (observation)	0.50	10.79	1.66	1.23–2.24	.00
Sexualized social activities (participation)	–0.08	0.12	0.93	0.61–1.42	ns
Casual sex	0.86	1.82	2.36	0.68–8.19	ns
Sexual precocity	0.62	1.22	1.85	0.62–5.54	ns
Sexual abuse	0.00	0.00	1.00	0.22–4.48	ns
At-risk alcohol and drug use	–0.79	1.82	0.45	0.14–1.43	ns
Parents' attitudes towards sexuality	–0.38	0.84	0.69	0.31–1.54	ns

Note: Nagelkerke $R^2 = .30$

acceptance of sex on the gift giver's terms, a notion that suggests an imbalance of power for children and adolescents alike (Dunkle et al., 2007). Other avenues of interpretation, particularly that transactional sex may indeed be used to gain access to luxury items, daily commodities or a higher status in social networks, have also been suggested but could not be documented in our survey. These transactions could also be

motivated by parental pressure on adolescents to be financially independent.

As to buying sex, our report showed that more boys than girls bought such services. The buying of sexual services was found in our sample to involve mostly someone they knew (95%) of the opposite sex (96%). Paying for sexual services from an individual of the same sex or from a stranger was reported by

only one boy. Again, the hypothesis of a majority of homosexual exchanges is not confirmed in our sample. These young buyers mostly solicited adolescents but children under 12 and adults were also mentioned, which suggests a variety of contexts. Almost all of their involvement was recent but a minority had bought such services when they were 12 or younger. Qualitative studies would clarify if it was a context of sexual exploration or sexual abuse. Dunkle et al. (2007) have shown the importance of verifying if the behavior of buying sexual services is related to a general pattern of gender-based power, control and violence.

For a majority of sellers and buyers, such behaviors were infrequent (from 1 to 3 times). When more frequent, this activity may point to more generalized problematic sexual behavior (Association for the Treatment of Sexual Abusers, 2006) or be classified as sex work. It could also be indicative of sexual abuse with retribution as a means of keeping the activity secret, as Pedersen and Hegna (2003) proposed. Unfortunately, our data did not take these differences into account. We considered all sexual exchanges as a transaction between a seller and a buyer, regardless of the participants' age and relationship. It would, therefore, be important in subsequent studies to examine the various forms that sexual exchanges for compensation can take in young people.

Factors Linked to Selling Sex

We were able to link certain individual and contextual factors to the sale of sexual services. In keeping with our original hypotheses, a history of sexual abuse and the number of stressful life events were related to such behaviors in adolescents. In terms of sexual abuse, our results were consistent with others studies (Bagley & Young, 1987; Stoltz et al., 2007; Svedin & Priebe, 2007). Young people who have experienced sexual abuse since childhood seem to be at higher risk of selling sexual services during adolescence. Several explanations have been put forth to explain this association, including the image that youth have of their sexuality or their lack of parental supervision (Van Brunschot & Brannigan, 2002). Context was another factor that could explain adolescents' involvement in the sale of sexual services. Indeed, a high number of stressful life events was also associated with these sexual behaviors, including a romantic break-up, the death of a loved one, and moves. According to studies performed with clinical samples, family stressors contributed to the likelihood of selling sex (Lung et al., 2004; Van Brunschot & Brannigan, 2002). In addition, our results showed that girls were more involved in selling sexual services.

Our analyses also allowed us to document other associated factors that have not yet been examined. Casual sex and favorable attitudes towards prostitution were associated with the sale of sexual services. Given that casual sex was documented as predicting depression in college students (Grello, Welsh, & Harper, 2006), it could also be related to behavioral problems

such as selling sex. The process linking casual sex to the sale of sex remains to be explored but the two types of relationships involve a possible lack of commitment. Favorable attitudes towards prostitution were associated with selling and also with buying sexual services. The young people who approved of prostitution presented the highest risk of carrying out such behaviors. Our results concurred with Buhi and Goodson's (2007) review of the influence of attitudes on sexual behaviors. As our study was transversal, it remains to be seen if it was rather participants' involvement in sexual services that influenced their attitudes.

Factors Linked to Buying Sex

In addition to favorable attitudes towards prostitution, the only factor that was significantly connected to buying sexual services in our sample was the observation of sexualized social activities (SESA), such as wet t-shirt contests or stripteases. Our team developed the SESA questionnaire to verify the existence of this phenomenon during adolescents' social activities. According to the literature, adult customers of prostitution were more likely to participate in other sex industry activities and to demonstrate more open attitudes towards sexuality (Monto & McRee, 2005). Our results supported these findings. However, it was surprising to us that simply observing several SESA at adolescents' gatherings was associated with the consumption of sexual services. We had thought that participation in SESA would be a better predictor. This could indicate that youth involved in buying sexual services are part of particular social networks that encourage these practices, even though they may not personally participate in SESA in front of people they know. They might prefer the anonymity of buying sex or the false intimacy of prostitution. The influence of observing SESA, which often portrays women as sexual objects, could be manifested in a trivialization of sexual acts or an objectification of others. As this was the first study to explore the phenomenon of SESA, it is difficult to draw conclusions.

While pornography is associated with this attitude of desensitization, it is remarkable that this variable was not a determining one in our study, unlike in Svedin and Priebe (2007). Moreover, unlike what had been predicted, the two potential protective factors (i.e., social support, parents' openness to communicating about sexuality) did not reduce the risk of adopting the behaviors of selling and buying sex. According to Buhi and Goodson (2007), the norms of young people's social networks (including friends and family) with regard to sexuality influenced their sexual behavior. Future research should pursue this avenue. In terms of social support, our items were limited to a general perception of current support. They could have been more specific to buying and selling sex or to sexuality, and have made a distinction between peer and family support.

Strengths and Limitations

This study had certain strengths and limitations that should be pointed out. First, the non-clinical sample added to studies that targeted youth who lived on the street or who exhibited certain behavioral problems. Second, particular attention was paid to the choice, and especially the development, of some of the scales. Many of the variables had never been measured as such (e.g., SESA, DATP, online consumption of pornography). Work on the content validity of the constructs and analyses of the metric qualities made it possible to develop valid scales.

Limitations of this study were associated with the presence of a non-representative sample, the transversal nature of the data, and a possible tendency for adolescents to underreport such a sensitive topic. It was thus impossible to draw inferences about the causal nature of the relationships found. In addition future studies need to document more thoroughly the context in which these behaviors occurs. Qualitative analysis of in-depth interviews with youths may offer insight into the behaviors and motivations behind such acts.

Implications

This study described buying and selling sex in high school students. The definition of this phenomenon in young people as casual sexual exchanges and exploration or exploitation remains to be clarified, as well as the many forms it could take. We should, for example, take into consideration gangs, which recruit high school girls for gang organized prostitution (Dorais & Corriveau, 2006). Adolescents may not describe these relationships as selling sex and we need to adjust our surveys to better define such sexual transactions.

This study also identified certain factors associated with the selling and buying of sexual services. Even if contextual risk factors

were included, few of the more distal factors were explored, such as factors related to family environment (e.g., parental supervision, dysfunctional family), the school environment, or the broader social environment. We could also study some factors proposed by Buhi and Goodson (2007), such as skills (e.g., refusing), personal standards, norms and emotions, or environmental constraints (e.g., time at home alone). Including these various factors would make it possible to sketch an overall portrait of the problem and its influences. A study of adolescents' motivations and use of coercion in those relationships would also be useful.

Indicated prevention programs could target youth who have been victims of sexual abuse, young people with positive attitudes towards prostitution, those reporting a high number of stressful life events, those who are having casual sex, and observers of SESA. On the other hand, it does not seem essential to offer universal prevention programs on prostitution. Although the exchange of sexual services for compensation was not very frequent in the sample used, it nonetheless appears important to pursue universal sex education and the promotion of healthy sexual behavior free of coercion and respectful of both partners' desire and consent. In closing, let us remember that, when dealing with adolescent buyers or sellers of sexual services, the reasoning behind our interventions must be founded on the idea of care and protection of vulnerable youth and the pursuit of sexual health.

Acknowledgments This research was funded by Social Sciences and Humanities Research Council of Canada (SSHRC). We thank the Centre de recherche interdisciplinaire sur la violence familiale et sur la violence faite aux femmes (Cri-Viff) and also the Équipe violence sexuelle et santé (ÉVISSA) funded by Fonds québécois de recherche sur la société et la culture (FQRSC).

Appendix

Summary of items and factor loadings for oblimin three-factor solution for the Disapproving Attitudes Towards Prostitution

Items	F_1^a	F_2^a	F_3^a
1. It is not normal to seek out the services of a male or female prostitute	.42	–	–
2. Giving money for sex is a fair exchange ^b	–.41	–	–
3. Everyone can contribute to putting an end to prostitution	.42	–	–
4. It is not really appropriate for a father to buy the services of a prostitute	.46	–	–
5. For the client, prostitution is a good way to enjoy an active sex life ^b	–	.53	–
6. To use the services of a female prostitute is to exploit her	–	–	.66
7. Prostitution is an expression of the freedom to do what one wants with one's body ^b	–	.36	–
8. There is a way to reduce the social problem of prostitution	.45	–	–
9. Being an escort (a date for parties and prostitution) to pay for one's studies is acceptable ^b	–.41	–	–
10. Prostitution contributes positively to society ^b	–.53	–	–
11. Prostitution is an excellent way for a client to have access to sexual pleasure ^b	–	.69	–
12. The negative effects that prostitution has on communities and neighborhoods should be made known	.68	–	–

Appendix continued

Items	F_1^a	F_2^a	F_3^a
13. Prostituting oneself for money, drugs, etc. is humiliating	.55	–	–
14. Prostitution is an opportunity for the client to receive affection ^b	–	.49	–
15. Prostitution has always existed so there is no reason to be concerned about it ^b	–.55	–	–
16. Prostitution is a disturbing social phenomenon	.60	–	–
17. Clients of prostitution are perfectly good people who are looking for a little pleasure ^b	–	.40	–
18. People who prostitute themselves are more victims than they are winners	.38	–	–
19. Prostitution allows clients to satisfy their sexual desires or fantasies in a healthy way ^b	–	.62	–
20. Prostitution provides the client the advantage of allowing him or her to try all kinds of sexual practices ^b	–	.71	–
21. There is no good reason to encourage prostitution	.55	–	–
22. People who prostitute themselves are putting their health at risk	.54	–	–
23. Prostitution is a good way for the client to have sexual relations without any commitment ^b	–	.71	–
24. Prostitution is immoral	.61	–	–
25. I would do anything to prevent one of my friends from prostituting herself	.56	–	–
26. To use the services of a male prostitute is to exploit him	–	–	.78
27. A client of prostitution is someone who takes advantage of others	–	–	.66
28. Drug addiction is a frequent consequence of prostitution	.38	–	–
29. We should talk more about the benefits of prostitution for society ^b	–.59	–	–
30. A man who prostitutes himself is treated like a sexual object and not like a person	–	–	.57
31. Prostitution exploits women	–	–	.53
32. There is no reason for prostitution to exist	.50	–	–
33. Prostitution is an unfair exchange in which one person is exploited for another person's pleasure	–	–	.39
Percentage of variance	28.68	5.91	2.07
Factor correlations			
Factor 1	–	–	–
Factor 2	–.40	–	–
Factor 3	.75	–.39	–

^a F_1 : social disapproval, F_2 : no positive aspects, F_3 : exploitation

^b Items to be inverted

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