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Sexual behaviour in early adolescence: a cross-national comparison of Australian and United States youth

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Abstract

Objective—This study used matched samples from schools in the states of Victoria, Australia and Washington, United States (US), to compare sexual behaviour in early adolescence. It was hypothesised that the contrasting dominant policy objectives of harm minimisation in Australia and abstinence in the US would result in state differences for markers of sexual risk, mirroring prior cross-national findings in substance use.

Method—A two-stage cluster sampling approach was used to recruit students from the two states. Self-reported sexual behaviour was examined for 1,596 students in annual surveys from Grade 7 in 2002 to Grade 9 in 2004. Prevalence estimates were derived for each measure of sexual behaviour, and comparisons were made between gender groups in each state.

Results—State differences were found for girls' first sex, with significantly more girls in Washington than Victoria having had sex by Grade 7. By Grade 9, significantly more girls in Victoria reported sex in the last year and more sexual partners than girls in Washington. A large proportion of Grade 9 students across both states reported inconsistent contraception use.

Conclusions—Contradicting the abstinence policy objective, first sex by Grade 7 was more prevalent in Washington than Victoria. Whilst sexual behaviour was more prevalent in Grade 9 in Victoria, the sexually active showed no clear cross-national differences in markers of risk such as contraception use and pregnancy outcomes. Findings demonstrate few cross-national differences in adolescent sexual behaviour despite the different policy contexts of Victoria, Australia and Washington, US.

Keywords

Adolescent development; Cross-national; Problem behaviour theory; Sexual behaviour; Sexual initiation

Introduction

Risky sex amongst older adolescents has been found to be highly prevalent in Victoria, Australia (Agius, Taft, Hemphill, Toumbourou, & McMorris, 2013). Despite an improvement in knowledge about human immunodeficiency virus (HIV) and acquired immune deficiency syndrome (AIDS), knowledge about sexually transmitted infections (STIs) continues to be poor even amongst older adolescents (Mitchell, Patrick, Heywood, Blackman, & Pitts, 2014). Furthermore, although we have good data on the prevalence of sexual behaviour amongst adolescents from Grades 10 and 12, thanks to the National Survey of Australian Secondary Students and Sexual Health surveys (Mitchell et al., 2014), less is known about sexual behaviour amongst younger adolescents in Australia, despite international research indicating that up to 10% of adolescents have had their first sexual experience by the time they turn 14 (Finer & Philbin, 2013; Kastbom, Sydsjö, Bladh, Priebe, & Svedin, 2015).

Existing cross-national research into adolescent health behaviours demonstrates that distinct differences exist between the United States (US) and Australia in their youth alcohol and drug use policies (Evans-Whipp, Plenty, Catalano, Herrenkohl, & Toumbourou, 2013; McMorris, Hemphill, Toumbourou, Catalano, & Patton, 2007). Australian drug and alcohol policies can be characterised by harm minimisation, which considers substance use a normal part of adolescent development and seeks to reduce the negative health and social consequences of drug and alcohol use. The US alcohol and drug policy favours an abstinence approach, which seeks to eliminate use of these substances altogether for underage youth. Existing cross-national research into adolescent health behaviours demonstrates that differences exist between Australia and the US that reflect respective youth alcohol and drug use policies (McMorris et al., 2007).

Although there is currently no national policy for Australian sexual and reproductive health (O'Rourke, 2008), the Australian approach to sexuality education mirrors the harm minimisation focus of drug and alcohol policy. Comprehensive sexuality education in schools is a requirement in most states of Australia, including the state of Victoria. Rather than emphasising abstinence a range of topics are covered from factual information about HIV/AIDS, safe sex practices, and reproduction and birth control, to social issues of managing peer influence, relationships, decision making, and dealing with emotions (Smith et al., 2011).

In contrast, requirements for sexuality education vary across states in the US with many programs emphasising abstinence. Schools in Washington State are not mandated to provide sexuality education apart from information specifically relating to HIV (State of Washington Office of the Superintendent of Public Instruction, n.d.). If districts in Washington State choose to provide sexual health education, they are required to stress abstinence as the most

effective method of preventing sexually transmitted diseases and pregnancy but also provide instruction on names and effectiveness rates of all contraceptives approved by the United States Food and Drug Administration (Alan Guttmacher Institute, 2015; Henry J. Kaiser Family Foundation, 2002; State of Washington Office of the Superintendent of Public Instruction, n.d.). In a survey of Washington school districts (Peters, 2007), 91% of respondents said they covered abstinence, and about 70% described their approach as stressing abstinence whilst also providing information about contraception and STIs. Condom use was covered by 56% of district responders, while 30% were specifically prohibited from discussing condoms and contraception with students (Peters, 2007).

There is a lack of cross-national research that can be used to compare the success of national policies to influence early adolescent sexual behaviour. A prior cross national comparison of older adolescents has suggested that the Australian approach to sexual education of harm minimisation has resulted in better sexual health than in the US (Weaver, Smith, & Kippax, 2005), but used cross-nationally unmatched study methodologies. Conducting cross-national comparisons of adolescent sexual behaviour are unlikely to be valid unless data collection method and sampling are matched. The states of Washington, US and Victoria, Australia are valuable for cross-comparison due to relative similarities in socioeconomic variables, progressive approaches to social issues, population size, geographic distribution, and demographics of the school-aged youth (McMorris et al., 2007), and provided the basis for cross-national comparison in the present study.

There is currently inadequate data to determine if early adolescent sex is a health behaviour problem in Australia. Early sexual initiation is framed as a socially undesirable behaviour in the theoretical framework of problem behaviour theory (PBT), which proposes that risk behaviours such as early sex, as well as drug and alcohol misuse, delinquency, and risky driving tend to cluster together as part of a negative developmental pattern of behaviours (Jessor & Jessor, 1977). Longitudinal studies have found that early sexual initiators are more likely to be associated with pregnancy, more frequent sex, and multiple partners (O'Donnell, O'Donnell, & Stueve, 2001); an increased risk of contracting HIV (Stöckl, Kalra, Jacobi, & Watts, 2013); and inconsistent or poor use of contraception (Finer & Philbin, 2013; Magnusson, Masho, & Lapane, 2012). In a cross-national comparison of 15-year-olds ($n = 5,624$) in Finland, Scotland, France, Poland, and the US, researchers found a consistent positive relationship of early sex with substance use across countries, concluding early sex is appropriate for inclusion in the problem behaviour framework (Madkour, Farhat, Halpern, Godeau, & Nic Gabhainn, 2010).

However, “early sex” is not defined by age in PBT, and there are wide ranging definitions in the literature. The average age of sexual debut in the United States is 17.1 years (Centers for Disease Control and Prevention, 2013), and the median age in Australia is 18 years for females and 17 years for males (Rissel, Richters, Grulich, de Visser, & Smith, 2003), but defining “early sex” is not as straightforward. A variety of cut-off ages have been used by researchers: sex before age 14 (Buttmann et al., 2014), age 15 (Magnusson et al., 2012), and age 16 (Madkour et al., 2010; Spriggs & Halpern, 2008); others have looked at sexual behaviours which occur by a specific grade in high school (O'Donnell et al., 2001), and others report age at first sex as a continuous variable (Cornelius, Clark, Reynolds, Kirisci, &

Tarter, 2007; Mueller, Gavin, & Kulkarni, 2008). For the present paper, we investigated sexual behaviours and age at first sex reported before and including Grade 9.

The present study aimed to firstly identify if there are significant cross national differences in the sexual behaviour of adolescents in the US and Australia, given the contrasting policy contexts. Because harm minimisation sexuality education is a requirement in Victoria, it was hypothesised that Victorians students would demonstrate less risky sexual behaviour than their Washington counterparts. Given that Washington schools are required to stress abstinence, we hypothesised that fewer students would report sexual activity across all ages in Washington compared to Victoria.

Method

Participants

Data were collected as part of the International Youth Development Study (IYDS), a longitudinal survey study of young people in the states of Washington, US and Victoria, Australia. In 2001 - 2002, 5,769 students in Grades 5, 7, and 9 were recruited from schools across both states, using a two-stage cluster sampling approach. Government, Catholic, and independent schools in Victoria, and public and private schools in Washington were first randomly selected, and then a target classroom within each school was selected. Of the eligible sample of 3,856 in Washington State and 3,926 in Victoria, 74.8% and 73.5% participated, respectively (McMorris et al., 2007). Data collection protocols were approved by the University of Washington Human Subjects Review Committee and the Royal Children's Hospital Ethics in Human Research Committee. More detailed descriptions of the sampling, recruitment and procedures can be found in McMorris et al. (2007) and Heerde et al. (2015).

Subsequent to the initial data collection in 2002, students were longitudinally resurveyed again in 2003 and 2004. The data for the present paper are from students in the middle cohort, who were in Grades 7, 8, and 9 during the first three waves of data collection.

Students were excluded from analyses if they were found to have been dishonest in any one of the three waves of data analysed. Dishonesty was determined by an affirmative response to at least one of three questions: if students indicated they were "not honest at all" in completing the survey, if they had reported use of a fake drug, or if they had reported having used illicit drugs on more than 120 occasions in the past 30 days. A total of 41 students from Victoria and 16 from Washington were excluded as their responses were determined to have been dishonest according to these criteria.

Participants from Catholic schools in the Victorian sample (206 in Wave 1; 202 in Wave 2; 194 in Wave 3) were also excluded from analyses as the relevant Catholic school dioceses did not give permission for questions relating to sexual behaviour to be asked of students. Some school districts in Washington similarly did not allow these questions, excluding 33 students from Wave 1, 26 from Wave 2, and 52 from Wave 3.

The resulting sample characteristics are shown in Table 1 and are as follows. Across the three waves used for analyses in the present paper, in Victoria the majority (80.5%) were from Government schools, with the remaining 19.5% of students from independent schools (e.g., non-Catholic religious schools). In Washington, 99.8% of students were from public schools, with the remaining minority from religious or private schools.

Measures

Ever had sex/Past-year sex—In Grades 7 and 8, participants were asked to respond either yes or no to the question “Have you ever had sex.” In Grade 9, participants were asked to respond either yes or no to the question “Have you had sex in the past year.” A measure of Grade 9 “Ever sex” was created by combining responses from Grade 7 and 8 “Ever sex” with Grade 9 “Past-year sex.”

Had sex three or more times in past year—In Grade 9, students were asked “How many times have you had sex in the past year,” and responded using an 8-point scale ranging from “never” to “40+ times.” An examination of responses established that the largest group (42.7%) of sexually active students reported having sex “one or two times.” Responses to the remaining options declined steadily from “three to five times” (18.7%) to “30-39 times” (3.8%), except for the final option of “40+ times” (10.3%). As we were interested in behaviours of sexually active students, only those who had reported yes to the past year sex question were analysed. Frequency of sex was dichotomised to reflect lesser and higher levels of risk of pregnancy and STIs: sexually active students who reported having had sex one to two times in the last year were coded as 0, and those who reported having had sex three or more times were coded as 1.

Had more than three sexual partners—In Grade 9, students were also asked about the number of sexual partners in the past year through two questions: “In the past year, how many males have you had sex with” and “In the past year, how many females have you had sex with.” Students responded on a 7-point scale, ranging from none to six or more, which was then recoded as 0 for less than three partners and 1 for three or more partners (male or female). This was dichotomised to reflect lesser and higher levels of risk, and also enabled comparisons with a large-scale study of high school students' sexual behaviour and knowledge in Australia (Mitchell et al., 2014). In the US, having three or more partners in a single year has also been associated with significantly greater involvement in health-compromising behaviours and fewer protective or positive behaviours (Fortenberry, 1997).

Inconsistent or non-use of condoms and contraceptive methods—In Wave 3, students were asked about the use of condoms and contraception over the past year. Three dichotomous outcome measures reflecting the level of associated risk of pregnancy and STIs were created from responses to two questions: “In the past year, how often did you and your partner(s) use condoms or other latex barriers?” and “In the past year, how often was any form of contraceptive protection, other than a condom, used when you had sexual intercourse (for instance, birth control pills, the patch, Norplant, spermicides, or contraceptive sponges)?” Students responded to these two questions on a 5-point scale ranging from “none of the time” to “always,” and could opt out if the question was not

applicable. Students who responded “always” to a question were coded 0, and those who reported “none of the time,” “less than half the time,” “half the time,” and “most of the time” were coded 1 to reflect “no/inconsistent use.” This is consistent with recommendations that inconsistent condom users should be grouped with non-users as they are essentially alike in terms of other characteristics (Crosby, Yarber, Sanders, & Graham, 2004; Noar, Cole, & Carlyle, 2006). Two measures, “no/inconsistent use of condoms” and “no/inconsistent use of other contraception” were coded in this way. The third measure “Did not always use any contraceptive method” coded students as 0 if they had responded “always” to at least one of the two questions, and 1 if they had not. Students who reported no sex in the past year or selected “does not apply” were excluded from analyses.

An additional measure of recent condom use, “Did not use a condom at most recent sex” was derived from students' yes/no response to the question, “The last time you had sex, did you or your partner use a condom or another latex barrier?”

Sex resulted in pregnancy—Both female and male students were asked about pregnancy. Males were asked “In the past year, how many times have you gotten someone pregnant”, and females were asked “In the past year, how many times have you been pregnant.” Students that responded “never” were recoded as 0; students who responded “one time” or “two or more times” were recoded as 1; students who responded “not sure” were excluded from the analysis.

Analysis

Analyses were conducted using Stata 12.0 (StataCorp, 2011) software, and accounted for the nesting of students within schools and the Wave 1 sampling design. Prevalence estimates and 95% confidence intervals (CI) were derived from logistic regression models' predicted values, after fixing the continuous measure of age at the average age at each wave (i.e., age 15 at Wave 3). Testing for state differences in prevalence estimates was done by regressing state and age on each outcome variable, using logistic regression. Separate models were run for boys and girls in each grade level. The significance of the odds ratios (OR) for the dichotomous state variable (Victoria = 0; Washington State = 1) in each equation ($p < 0.05$) was used to assess statistically significant state differences.

Results

Prevalence estimates of sexual behaviour across ages 13 to 15 for both boys and girls in the two states are presented in Table 2. No statistically significant state differences were found at any wave for boys. Amongst girls, a significant state difference was identified in Grade 7 (age 13), with a greater proportion of Grade 7 girls in Washington (4.1%) reporting ever having sex compared to girls in Victoria (1.1%; state OR = 3.78, $p < 0.02$). Although not significant, a similar state pattern can be seen amongst Grade 7 boys.

By Grade 8, Victorian girls reported similar rates of sexual initiation as their female classmates in Washington State. A statistically significant state difference for girls was found by Grade 9 (age 15), but with greater engagement in sexual behaviour among girls

from Victoria (state OR = 0.66, CI = 0.4-1.0). A similar trend was observed among Grade 9 boys, but this difference was not statistically significant.

It should also be noted that in Wave 3, the question about sexual activity changed from “Have you ever had sex” to “Have you had sex in the last year.” When responses from Waves 1 and 2 were combined with Wave 3 to create an “ever had sex” measure, no state differences were identified.

Prevalences of risky sexual behaviours are displayed in Table 3 for students who reported having had sex in the past year (n = 268). Over half of these sexually active students reported having had sex three or more times, and although no state differences were identified, it is important to note that a large proportion of students in Victoria reported inconsistent or no use of condoms or birth control methods (18.8% [95% CI 6.4, 31.1] boys; 43.8% [95% CI 32.4, 55.2] girls).

The sole significant state difference for Grade 9 girls was for having three or more partners in the past year (19% in Washington; 34.7% in Victoria, OR = .44, p = .032, 95% CI [10.4, 27.7], [23.9, 45.5] respectively). A similar pattern was observed amongst Grade 9 boys; however this difference was not statistically significant.

Discussion

This is the first cross-national study with specifically matched samples and methodology to collect data on sexual behaviour from early adolescents in two states with different approaches to harm minimisation. In contradiction to hypotheses, there was not clear support for lower rates of sexual activity amongst Washington students and Victorian students did not generally demonstrate less risky sexual behaviour than Washington students in Grade 9.

Despite the requirement for comprehensive sexuality education in Victoria (Smith et al., 2011), students in this state did not show lower rates of risky sexual behaviour. This raises questions about the effectiveness of the education that is being provided in Victoria, as it does not seem to translate to safer behaviour amongst adolescents. Based on these results, an evaluation of the current sexuality education programs in Victoria is warranted. Goals for these programs should be clarified and perhaps standardised to ensure that sexuality education is both reducing rates of risky sex, and not lowering the age of sexual debut.

The current findings also provide important new information about the development of sexual behaviour in early adolescence. In a nationwide study of sexuality education in Australian schools, most teachers indicated that they felt strongly that sexuality education began too late for students, and that it should begin in primary school with basic introductions to functions of body parts, reproduction, as well as relationships and feelings (Smith et al., 2011). A randomised controlled trial evaluation of comprehensive sexuality education for Grade 7 students in Boston, Massachusetts found a 30% reduction in sexual initiation amongst students who received the education (Erkut et al., 2013). In light of education goals to reduce risky sexual behaviour, these findings support the suggestion to

target education programs at a younger age group, given that at least 10% are engaging in sexual behaviour by Grade 9, regardless of state or gender.

Further cross-national differences were found between states, with a significantly higher number of Victorian girls having more sexual partners than girls from Washington. Having a higher number of partners will increase the risk of STIs (Richter, Valois, McKeown, & Vincent, 1993; Santelli, Brener, Lowry, Bhatt, & Zabin, 1998). As well, people who have more partners are also more likely to be inconsistent in their use of contraception, especially in this age group (Davies et al., 2006).

An unexpected finding, given the state's emphasis on abstinence, was the slightly higher level of sexual activity amongst Grade 7 Washington students, with over 4% of girls and boys reporting having engaged in sex.

Strengths and limitations

The IYDS is an international, longitudinal study of students in the states of Washington, United States and Victoria, Australia. The matched design and administration of the survey allows valid cross-national comparisons. The study recruited large state-representative samples and used rigorous methodology to ensure that its comparative results would be reliable, and not the result of statistical artefacts.

The data were collected in 2002 – 2004, which could raise questions regarding its applicability to the present day. However, data from other sources are generally consistent with the present study. The National Survey of Secondary Students and Sexual Health has been collecting data from Grades 10 and 12 in Australia since 1992. Although there have been fluctuations across the five surveys, a similar proportion of Grade 10 students reported having had sexual intercourse in each survey (23%, 20%, 24.3%, 27.4% and 22.7% in 1992, 23%, 20%, 24.3%, 27.4% and 22.7% in 1997, 23%, 20%, 24.3%, 27.4% and 22.7% in 2002, 23%, 20%, 24.3%, 27.4% and 22.7% in 2008 and 2013, respectively; (Lindsay, Smith, & Rosenthal, 1997; Mitchell et al., 2014; Smith, Agius, Mitchell, Barrett, & Pitts, 2009; Smith, Dyson, Agius, Mitchell, & Pitts, 2003). In the US, adolescent pregnancy rates have decreased over the last decade, but contraception use and STI prevalence has not changed markedly in this time (Park, Scott, Adams, Brindis, & Irwin, 2014). Data from various states in the US in 2003 (Washington not available) indicate that between 14% and 41% of Grade 8 students reported ever having had sex, and across the US, 10% of male and 4% of females reported first sex before age 13 (Centers for Disease Control and Prevention, 2012a, 2012b). Without evidence indicating a major behavioural shift in either the US or Australia, we would thus argue that the findings of the present study remain relevant.

Although described as a cross-national comparison, we recognise that the states of Victoria, Australia and Washington, US do not fully represent adolescent sexual behaviour in their respective nations. However, state similarities in important demographic and economic factors that influence adolescent sexual behaviour were well matched across these states.

Catholic schools contributed approximately 20% of the IYDS sample in Victoria (McMorris et al., 2007); the effect of missing sexual behaviour data for these students on overall

prevalence rates is unknown. Although sexuality education is mandatory in Victoria, it varies between schools (Smith et al., 2011), and Catholic schools are encouraged to instruct sexual morality according to church teachings (Cahill, Wyn, & Smith, 2004). Religiosity is associated with later sexual debut and less pre-marital sex (de Visser, Smith, Richters, & Rissel, 2007), so we speculate that the excluded students are less likely to be sexually active. However, given that 20-30% of Australian Catholic school students do not identify as Catholic (National Catholic Education Commission, 2013), and even among Catholics, belief is not necessarily predictive of behaviour (Leonard & Scott-Jones, 2010), it is possible that the Catholic school students have similar sexual activity to the rates reported in the present study.

Research on sexual behaviour has been criticised for its reliance on retrospective self-report, which can be less reliable than prospective measures such as diary self-report (Fenton, Johnson, McManus, & Erens, 2001). However, first sex is a salient event that is generally reliably reported, and shorter recall periods, younger age, and relative rarity of a given event also increase the reliability of reported sexual behaviours that are more vulnerable to recall bias such as frequency and contraception use (Fenton, Johnson, McManus, & Erens, 2001). Additionally, we took steps to minimise dishonesty by excluding students whose responses were likely to be deceitful. Nonetheless, readers should take these potential limitations into consideration.

Although the data set is longitudinal, the analyses conducted for this paper are cross sectional. This was done in order to provide a snapshot of behaviours and state-based differences through relatively straightforward analytical processes. We note that the sexual education policy has not been explicitly controlled for in our analyses; rather we are describing reported sexual behaviour in two differing policy contexts. Although this approach does not allow for conclusions to be drawn on the effect of the different policy contexts, our initial papers demonstrating cross-national differences in substance use (McMorris et al., 2007; Toumbourou, Hemphill, McMorris, Catalano, & Patton, 2009), have led to a series of papers exploring the influence of school (Evans-Whipp et al., 2013) and parent policies and practices as explanations for these differences.

Conclusions

This study provided the first accurate cross-national comparison of sexual activity for state representative samples of adolescents aged 13 - 15, attending school in the states of Victoria, Australia and Washington, US. The findings show mostly cross-national similarities with slightly higher sexual activity in Grade 7 in Washington State and a high number of young Victorians engaged in sexual activity by Grade 9. The findings recommend evaluation of Victoria's harm minimisation policies, in that a significant proportion of students in Victoria engage in sexual activity that may be increasing their risk of unplanned pregnancy and transmission of sexually transmitted disease through lack of consistent contraception use, frequent sex, and a high number of partners. Although the picture is somewhat better in Washington, a surprisingly high number of risky sex markers are also present by Grade 9. Future research should continue to monitor and cross-nationally compare early adolescent

sexual behaviour and use comparative evaluation evidence to internationally enhance school sexuality education programs.

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What is already known about this topic

- Sexual behaviour that poses risks of sexually transmitted infections (STIs) is highly prevalent for Australian youth and while improvements have been made, older Australian adolescents demonstrate unsatisfactory knowledge of STIs.
- Little is known about sexual behaviour among younger adolescents before age 15, particularly in Australia.
- Cross national comparisons provide useful insight into adolescent developmental trajectories by highlighting the similarities and differences that occur despite varying political, historical and cultural contexts.

What this topic adds

- Prevalence rates are provided for adolescent sexual behaviour in Grades 7, 8 and 9 in Victoria, Australia
- A unique cross-nationally matched comparison is provided of early adolescent sexual behaviours in Australia and the United States
- Support for further research to more effectively achieve sexual behaviour policy targets by developing and evaluating developmentally appropriate adolescent interventions.

Table 1
IYDS student sample characteristics

	Victoria	Washington
Grade 7	n = 719	n = 877
Mean age (SD; Range)	12.93 (0.4; 11.8-14.5)	13.07 (0.4; 12.0-15.2)
Male	46%	48.80%
Grade 8	n = 704	n = 890
Mean age (SD; Range)	13.96 (0.4; 12.7-15.5)	14.07 (0.4; 13.1-16.1)
Male	46.88%	49.55%
Grade 9	n = 697	n = 867
Mean age (SD; Range)	14.99 (0.4; 13.8-16.5)	15.07 (0.4; 14.0-17.0)
Male	45.17%	49.32%

Table 2
Prevalence estimates of sexual behaviour for all three waves of the middle cohort

	Male			Female		
	Washington State	Victoria	Washington State	Victoria	Washington State	Victoria
	% [95% CI]	% [95% CI]	% [95% CI]	% [95% CI]	% [95% CI]	% [95% CI]
Wave 1 (Grade 7)	Ever had sex	n = 428 4.7 [2, 7.4]	n = 331 2.0 [0.4, 3.6]	n = 449 4.1* [2.2, 5.9]	n = 388 1.1* [0.07, 2.1]	n = 374 7.2
Wave 2 (Grade 8)	Ever had sex	n = 441 6.6 [3.9, 9.2]	n = 330 7.2 [4.5, 9.8]	n = 449 6.2 [3.7, 8.7]	n = 386 20.9*	n = 374 7.2
Wave 3 (Grade 9)	Past-year sex	n = 433 13.9 [9.8, 17.9]	n = 318 15.7 [11.8, 19.6]	n = 445 14.8* [10.8, 18.8]	n = 367 22.6	n = 374 22.6
	Ever had sex	n = 405 18.5 [13.4, 23.6]	n = 298 19.0 [14.6, 23.4]	n = 421 20.1 [15.2, 25.1]	n = 367 22.6	n = 374 22.6

* Significant OR ($p < 0.05$)

Table 3
Past-year risky sexual behaviours of sexually active students in Grade 9 (n = 268)

	Male		Female	
	Washington State	Victoria	Washington State	Victoria
	n = 65	n = 52	n = 71	n = 80
	%	%	%	%
	[95% CI]	[95% CI]	[95% CI]	[95% CI]
Had sex 3 or more times	53.9 [42.4, 65.4]	52.6 [36.6, 68.6]	57.0 [43.3, 70.7]	55.3 [43.0, 67.6]
Had more than 3 sexual partners	30.4 [19.7, 41.1]	44.6 [29.6, 59.5]	19.0* [10.4, 27.7]	34.7* [23.9, 45.5]
No/inconsistent use of condoms	34.4 [22.6, 46.2]	20.4 [3.2, 34.6]	36.8 [23.0, 50.7]	49.0 [38.5, 59.5]
No/inconsistent use of non-condom contraceptive	79.4 [68.8, 90.0]	74.4 [64.3, 84.5]	70.1 [56.7, 83.6]	71.2 [61.0, 81.5]
Did not always use any contraceptives	28.4 [16.8, 39.9]	18.8 [6.4, 31.1]	27.4 [14.8, 40.1]	43.8 [32.4, 55.2]
Non-use of condom at most recent sex	28.9 [17.5, 40.4]	20.3 [5.6, 35.0]	21.6 [11.4, 31.7]	30.9 [19.8, 41.9]
Sex resulted in pregnancy one or more times	2.5 [-1.0, 6.0]	5.5 [-2.5, 13.6]	9.6 [0.8, 18.4]	7.0 [1.4, 12.6]

* Significant OR (p < 0.05)