

## ORIGINAL PAPER

### The experience of First Sexual Intercourse: an Exploratory Study in Greek Women

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#### Abstract

**Background:** A young person's first sexual intercourse is often a remarkable and memorable experience. However, little information exists regarding contextual factors of this first experience and the possible effects on their subsequent sexual life

**Objective:** This study explored the conditions of and women's emotional reactions to first sexual intercourse (FSI), as well as FSI's impact on their future sexual experiences.

**Methodology:** Participants were 899 women aged 19 to 40 yrs, registered in 23 arbitrarily selected GPs private practices. They completed a 30-item questionnaire regarding their first sexual intercourse experience.

**Results:** It was found that information sources for sexual issues (family vs media) significantly influence both the adoption of responsible sexual behaviours and the formation of feelings preceding sexual initiation ( $p < 0.05$ ). The study also demonstrated that even when FSI is perceived as voluntary other correlates (e.g. woman's and /or partner's age, contraceptive use etc.) affect women's emotional reaction to first coital experience and their response to future sexual encounters.

**Conclusions:** The findings of this study provide initial data to suggest that the first sexual intercourse experience significantly impacts women's sexual life. Health professionals should be aware of this information in the development of programs focusing on the promotion of sexual health for adolescents or parents; education.

**Key Words:** first sexual intercourse, Greek, women, contraception, sexual behaviour

#### Introduction

The onset of sexual activity is a major life transition from adolescence to adulthood linked with positive aspects of love, intimate relationships and affirmation of one's identity (Moore & Davidson, 1997; Upchurch, Levy-Storms, Sucoff, & Aneshensel, 1998). Nevertheless, early sexual initiation is associated with increased risks to adolescents' health and well being, such as sexually transmitted diseases (STDs), unwanted pregnancies, emotional stress and low educational attainment (Cotton et al., 2004;

Lammers, Ireland, Resnick, & Blum, 2000; Dickson, Paul, Herbison, & Silva, 1998).

#### Background

Due to the fact that a rising percentage of teenagers experience sexual intercourse there has been considerable research on the timing and conditions of sexual initiation (Wellings et al., 1995; Sprecher, Barbee, & Schwartz, 1995; Driscoll & Kristin, 1995). Attention so far, has focused on the predictors and /or protective factors regarding onset of sexual life as well as on contraceptive use during

first sexual intercourse (FSI) (Goodson, Evans, & Edmundson, 1997; Paul et al., 2000; Koelling, Stone, & Buraphacheep-Coggins, 2002; Svare et al., 2002). However, less is known about the correlates of affective reactions to first coital experience and its influence on later sexual encounters.

The present study was fuelled partly by the high number of calls about sexual education issues made to a telephone helpline of a national non-profit University-based centre dedicated to awareness, education and research in the field of sexual and reproductive health. Between February 1999 and August 2004, 34.6% of adolescents' and young adults' calls dealt with queries about STDs and contraceptive use.

Based on the above observation and taking into consideration the limited published data, the present study aimed at exploring –in a group of young women- the conditions of and women's emotional reactions to FSI, as well as FSI's impact on their future sexual experiences.

## Methodology

### Participants

The present study employed a convenience sample of adult women registered in 23 arbitrarily selected GPs private practices, located in different geographical sites countrywide. A total of 1200 questionnaires were administered and 899 completed forms were returned and used in statistical analysis (response rate 74.9%).

**Table 1: Participants' demographics**

	N (%)
<b>Age</b>	
19-24	298 (33.1)
25-29	176 (19.6)
30-34	184 (20.5)
35-40	241 (26.8)
<b>Marital status</b>	
Single	495 (55.1)
Married	329 (36.6)
Divorced	75 (8.3)
<b>Occupation</b>	
Public employees	154 (17.1)
Private employees	218 (24.2)
Self-employed	71 (7.9)
Students	298 (33.1)
Unemployed	64 (7.1)
Housekeeping	94 (10.5)

Demographic information was unavailable for non responders, thus comparisons with the responders group were not possible. Responders had a mean age of 29.18 ( $\pm 6.39$ ) yrs with the majority (52.7%) belonging to the age group of 19-29 yrs old. Demographic information on the sample including age distribution, marital status and occupation are presented in Table 1.

### Measures

Following a literature review, a 30-item self-administered questionnaire was constructed comprising two sections: The first consisted of basic demographics and background personal information (i.e. age, marital status, age of menarche, sources of information about sexual matters etc). The second section included several questions regarding the first sexual intercourse experience structured as follows:

**Antecedents of FSI:** Participants were asked to report their emotions and fears prior to FSI. Regarding emotions, possible options included stress, fear, desire, shame, insecurity, guilt. Fears related to pain, occurrence of blood, STDs, pregnancy, partner's behaviour.

**Age and relationship with the partner:** Women were asked about their age at FSI. They indicated if they had a relationship with their first sexual partner, its duration, whether their partner was younger, at the same age or older than them and if this was the first intercourse for their partner, too. They also had to reflect on whether they and their partner equally wanted first intercourse to occur.

**Contraceptive use and health behaviour:** Respondents were asked whether and what form of contraceptive method was used during FSI. They had also to indicate if they experienced any gynecological problems after first intercourse and whether they consulted a gynecologist afterwards.

**Other conditions of first intercourse:** Participants had to reflect on their experience regarding pain and /or pleasure at FSI. They were also asked if they had regrets about their choice of partner, the place or the timing of the event.

**Impact of sexual initiation:** Women had to report whether and in what ways their first sexual experience influenced their reaction to later sexual encounters. There were four options: stress, fear towards the partner, sexual unresponsiveness and abstinence from sexual relationships. Sexual unresponsiveness represented what was formerly known as 'frigidity', a term used to describe female sexual difficulties ranging from being uninterested in sex to not having orgasm (Masters, Johnson, & Kolodny, 1995).

**Procedure:** The questionnaire was distributed to all women present in each GPs private practice during a period of two months (October-November 2004). The study was introduced as a study of the conditions of FSI. Women were informed that participation was voluntary and were assured that anonymity and confidentiality would be preserved. Those who agreed to participate were asked to complete the questionnaire at a separate room and drop it in a poll for privacy reasons. During the completion process, the researcher was available nearby in case any queries would arise.

**Statistical analysis:** Data were analyzed with the SPSS statistical package, version 10.0 (SPSS inc, 1999). Logistic regression analysis was used to determine the factors associated with each outcome variable namely emotions and fears prior to FSI, contraceptive use, gynaecologist consultation, emotional reaction to and regrets about FSI as well as influence of sexual onset in later sexual encounters. Since a cross-sectional research design was selected causality could not be implied by the data and therefore the odds ratio was interpreted as a measure of association and not as a relative risk estimate.

## Results

### *Age and relationship with the partner*

The average age at first intercourse was 18.83 ( $\pm 2.28$ ) yrs and it appeared to have a significant positive correlation, though weak in nature, with onset of menstruation ( $r=0.084$ ,  $p=0.012$ ).

The majority had their first sexual experience while in a relationship (92%), with both partners being equally willing (92.9%) and most commonly with an older partner (66.9%). Regarding timing, onset of sexual

life appeared to follow two different patterns: when the partner was sexually experienced, FSI occurred earlier ( $p<0.01$ ) in the relationship whereas the decision for sexual initiation was prolonged with an inexperienced sexual partner (mean=7.15( $\pm 7.48$ ) months and mean=10.20( $\pm 10.33$ ) months, respectively).

### *Information sources and antecedents of FSI*

An 82.8% (N=744) of the responders received information about sexual matters mainly from friends (N=468, 62.9%), family (N=290, 39%) and the media (N=274, 36.8%).

The emotions frequently reported prior to FSI were stress (47.8%), desire (42%) and fear (32%). Fears centered on pain (54.9%), partner's behaviour (40.8%) and pregnancy (30.6%) and were significantly associated with source of sexual information. Women were more likely to report fearing pain when information was primarily obtained from mass media (OR: 1.34, 95% CI: 1.01-1.81 respectively) whereas they were more likely to fear STDs when information was obtained either from family or friends (OR: 1.57, 95% CI: 1.11-2.23 and OR: 1.57, 95% CI: 1.10-2.24 respectively).

**Table 2: Factors associated with gynaecologist consultation**

	Gynecologist consultation	
	Odds	95% CI
<b>Sources of sexual information</b>		
Family	1.48**	1.11-1.98
Friends	1.07	0.73-1.57
Media	1.14	0.86-1.51
School	1.11	0.82-1.50
<b>Fears preceding FSI</b>		
Bleeding	0.97	0.67-1.41
Pregnancy	1.01	0.75-1.38
STDs transmission	1.63**	1.15-2.31
<b>Age</b>		
16-18	2.41*	1.08-5.38
19 or older	2.65*	1.19-5.89
<b>Experiencing Gynecological problems</b>		
	2.85**	2.01-4.04

\*  $p<0.05$ ; \*\*  $p<0.01$

### *Contraceptive use and health behaviour*

More than half of the women (54.6%) used a contraceptive method during their FSI, with condoms being the most frequently reported

Table 3: Factors associated with the emotional reaction to first sexual intercourse

	Experiencing less pleasure		Experiencing more pleasure	
	Odds	95% CI	Odds	95% CI
<b>Sources of sexual information</b>				
Family	0.56**	0.40-0.80	1.47*	1.05-2.04
Friends	0.83	0.61-1.14	1.13	0.80-1.59
Media	1.34	0.96-1.88	0.84	0.59-1.18
School	0.89	0.57-1.39	0.74	0.47-1.16
<b>Partner's age</b>				
Older	3.36**	2.20-5.13	0.82	0.59-1.14
Younger	2.26*	1.04-4.92	1.03	0.52-2.05
<b>Bleeding after penetration</b>				
Slightly	0.88	0.57-1.38	0.73	0.41-1.30
Heavy	1.86*	1.10-3.15	1.11	0.72-1.70
<b>Feelings preceding FSI</b>				
Stress	0.92	0.68-1.26	0.96	0.70-1.30
Fear	1.38	0.99-1.92	0.95	0.68-1.33
Desire	0.66*	0.47-0.91	1.75*	1.28-2.38
Insecurity	1.46*	1.04-2.04	0.69	0.48-1.00
Shame	1.52*	1.05-2.20	0.75	0.50-1.15
<b>Coitus took place in a comfortable environment</b>				
Painful intercourse	0.27**	0.19-0.38	1.90**	1.28-2.82
Non-use of contraception	2.01**	1.46-2.78	0.65**	0.48-0.88
	1.86*	1.10-3.15	0.76	0.55-1.06

\* p&lt;.05; \*\* p&lt;.01

Table 4: Factors associated with women's reaction to future sexual encounters

	Stress		Fear		Sexual unresponsiveness		Abstinence	
	Odd	95% CI	Odds	95% CI	Odds	95% CI	Odds	95% CI
<b>Age</b>								
16 or younger	1.02	0.41-2.52	4.03**	1.49-	1.71	0.68-4.31	2.20	0.80-6.07
16-18	0.98	0.67-1.44	1.25	10.91	0.62	0.37-1.04	0.60	0.31-1.15
<b>Painful intercourse</b>								
Experiencing pleasure	1.63*	1.09-2.42	2.25*	1.11-4.54	1.31	0.77-2.22	1.46	0.75-2.82
More than expected	0.91	0.56-1.47	1.33	0.58-3.02	0.91	0.42-1.97	0.64	0.20-2.00
Less than expected	1.52	0.99-2.35	2.52**	1.26-5.06	4.45**	2.55-7.77	5.67**	2.85-11.31

\* p&lt;.05; \*\* p&lt;.01

(52.3%). However, a quite high percentage likely to use a form of contraception, when (45.4%) stated that either used nothing or they had relevant information from family or preferred withdrawal. Women were more friends (OR: 2.35, 95% CI: 1.68-3.29 and

OR: 1.63, 95% CI: 1.21-2.19 respectively). Contrary, the odds for non use or use withdrawal were higher when age at first intercourse was 16 yrs or younger (OR: 2.18, 95% CI: 1.13-4.19), information was obtained from the media (OR: 1.61, 95% CI: 1.11-2.32), the sexual partner was older (OR: 1.59, 95% CI: 1.14-2.22) or the partner was sexually experienced (OR: 2.01, 95% CI: 1.26-3.19).

After the onset of sexual activity most women did not consult a gynecologist (62%). Factors associated with increased likelihood to visit a physician were older age at FSI, receiving sexual information from the family, fear of STDs' transmission and experiencing gynecological problems (Table 2).

#### ***Emotional reaction to and regrets about FSI***

About half of the participants reported their FSI to be as it was expected (49.2%) with the remaining percentage almost equally distributed between those having experienced more or less pleasure. Additionally, a 37.2% (n=334) had regrets after FSI mainly for their choice of partner (15.5%) and the timing of the event (15.3%).

The odds of experiencing more pleasure than expected during FSI, were higher ( $p < .05$ ) when women experienced desire before intercourse, prior relevant information was received from the family and the coitus took place in a comfortable environment (Table 3). On the contrary, factors associated with the first intercourse being less pleasant than expected were: feelings of insecurity or shame, the sexual partner being either older or younger than the participant herself, painful intercourse, heavy bleeding following penetration and non-use of contraception (Table 3).

Although, age at sexual initiation did not appear to influence emotional reaction ( $p > .05$ ), early onset was significantly associated with regrets about the place and the timing of intercourse (OR: 2.72, 95% CI: 1.24-5.96 and OR: 3.39, 95% CI: 1.66-6.91 respectively).

Furthermore, regrets about their choice of partner, the place and the timing, were more likely to occur, when the experience was less pleasant than expected (OR: 2.96, 95% CI: 1.96-4.45; OR: 3.27, 95% CI: 2.02-5.29 and OR: 3.24, 95% CI: 2.15-4.88 respectively).

#### ***Impact of sexual initiation***

A 32.7% of the women reported that sexual initiation affected their emotional and behavioural reactions to their future relationships, where they tended to experience stress and fear when age of onset was 16 yrs or younger and FSI was painful and /or unpleasant ( $p < .05$ ). When FSI was less pleasurable than expected, sexual unresponsiveness in or even abstinence from, later sexual encounters were more likely to be reported (Table 4).

#### **Discussion**

Early onset of sexual intercourse has been frequently associated with an adverse impact on young people's sexual health (Cotton et al., 2004; Lammers et al., 2000; Wellings et al., 2001). Despite major cultural differences, a number of surveys identified predisposing factors to an early sexual onset, such as biological factors (e.g. gender, early menarche), environmental / social factors (e.g. parents low education, lack of parental supervision, infrequent church attendance, parental permissive attitudes of premarital sex, peer pressure, media influence), risk behaviours (e.g. substance use, smoking) as well as personality characteristics and attitudes (e.g. personal values, low self-esteem) (Goodson et al., 1997; Paul et al., 2000; Wellings et al., 2001). However, other issues surrounding FSI have been underreported.

The present study is an attempt to augment our current knowledge about sexual initiation with additional information on the conditions of and emotional reaction to first sexual intercourse and its impact on women's later sexual encounters.

#### ***Age and relationship with the partner***

The analysis revealed a mean age at FSI of 18.83 yrs which is in accordance with national level surveys (Papadopoulos, Stamboulides, & Triantafillou, 2002; Ioannides-Kapolou, Mitropoulos, & Agrafiotis, 2001). However, there are inconsistencies between different studies who report slightly younger ages (Ioannides, Agrafiotis, & Ntouma, 1990; Hliaoutakis, 1992). The relation between younger age at sexual onset and early menarche revealed in

our analysis is in agreement with previous data in other countries (Goodson et al., 1997; Paul et al., 2000; Wellings et al., 2001). The significant difference revealed in the timing of FSI within a relationship according to partner's experience, might be indicative of the power that a sexually experienced partner exerts on adolescent girls thus precipitating sexual intercourse.

#### ***Information sources and antecedents of FSI***

Consistent with other studies in Greek population (Papadopoulos et al., Kreatsas, 2003), our findings indicate, that the main sources of teenagers' information about sexual matters were friends, family and the media. That may be attributable to the lack of formally organised school based lessons about sexual health.

Our analysis also revealed that sources of sexual information influence the fears experienced before FSI with fear for STDs being more prevalent when information is obtained from the family. That may be explained on the basis that parents focus more on the negative consequences of sexual intercourse in an attempt to promote safe sexual behaviours.

#### ***Contraceptive use and health behaviour***

Our analysis indicated that a quite high percentage (45%) of the participants reported non-use of contraception or use of withdrawal. Contrary, a number of studies presented much higher percentages of contraceptive use (up to 93%) (Wellings et al., 2001; Tsui & Nicoladis, 2004; Tountas et al., 2004; Narring, Wydler, & Michaud, 2000; Moreau-Gruet, Ferron, Jeannin, & Dubois-Arber, 1996). Our finding may be partly attributable to the fact that we did not control for birth cohort effects on possible age trends regarding contraception use, since it has been shown (Svare et al., 2002) that women belonging to the oldest birth cohorts (before 1970-71) are more likely to report non-use. Similarly to previous reports (Svare et al., 2002; Narring et al., 2000; Moreau-Gruet et al., 1996), the present study showed that a woman's early age at sexual onset as well as partner's older age and sexual experience were associated with greater likelihood of adopting risky sexual behaviours. That may be attributed to young women's lack of

control over sexual initiation due to a combination of their inexperience with a partner's ability to influence their sexual behaviour and attitudes due to his prior sexual experience. However, that is an issue of further investigation. Additionally, we demonstrate that receiving information from the media is associated with the use of withdrawal as contraceptive method during FSI. That may be accounted by the fact that media portrayals usually focus on the positive aspects of sexuality thus encouraging risky sexual behaviour.

Interestingly, data from the present study showed that, the likelihood to consult a gynaecologist or a sexual health professional after FSI, was associated with receiving sexual information primarily from the family. It could be hypothesized that girls from families who initiate discussions on sexuality, are more likely to make mature choices about their sexual life and engage in responsible sexual health behaviours.

#### ***Emotional reaction to and regrets about FSI***

Turk (2005) suggested that a partner's insistence in condom use during FSI leads to more positive feelings about the sexual experience and the partner. Moreover, a number of studies (Sprecher et al., 1995; Weiss, 1983) indicate that an age of 16 yrs or younger at FSI and an older sexual partner are associated with less pleasure. Similarly, we found an association of painful intercourse, non-use of contraception and having an older or younger sexual partner with women experiencing less pleasure than expected. Possibly, the age difference between a woman and her sexual partner at her FSI might be indicative of experiencing less pleasure due to either a younger partner's inexperience or lack of control over the sexual experience when the partner is older.

Women's lack of control over their FSI might also account for our finding that early onset and an unpleasant FSI related to regrets about the sexual partner and the timing of the event.

#### ***Impact of sexual initiation***

Notably, as has been previously suggested (Moore & Davidson, 1997; Magnusson, 1998; Leitenberg & Saltzman, 2003) the current analysis indicates that women with an early onset of sexual intercourse and an unpleasant

FSI, were more likely to react with fear and be sexually unresponsive during later sexual encounters, or even abstain from sexual relationships. Since most of the data available on that area stem from studies of women who have been sexually abused, the exact mechanisms underlying the way FSI influences women's later sexual life are not yet fully understood.

Concluding, it should be noted that generalisability of our findings is restricted due to the self-selected sample employed and the retrospective data used based on recollection of women's memories. Nevertheless, the present study contributed significant information regarding conditions of FSI. It revealed that sources of sexual information significantly influence not only the adoption of responsible sexual behaviours but the formation of feelings preceding sexual initiation; the later may act as a moderating factor in the decision-making process of an early sexual debut.

More importantly, it demonstrated that even when FSI is perceived as voluntary other correlates, such as early sexual initiation and age difference between sexual partners affect women's emotional reaction to first coital experience and their response to future sexual encounters. The findings of this study provide information which can be used in the field of sexual education and prevention, and may be helpful in the development of programs focusing on the promotion of sexual health for adolescents.

## References

- Cotton, S., Mills, L., Succoff, P.A., Biro, M., & Rosenthal, S.L. (2004). Adolescent girls' perceptions of the timing of their sexual initiation: "too young" or "just right"? *Journal of Adolescent Health*, 34(5), 453-458.
- Dickson, N., Paul, C., Herbison, P., Silva, P. (1998). First sexual intercourse: age, coercion, and later regrets reported by a birth cohort. *BMJ*, 316, 29-33.
- Driscoll, A.J., & Kristin, A.M. (1998). Young women's degree of control over first intercourse: an exploratory analysis. *Family Planning Perspectives*, 30(1), 12-19.
- Goodson, P., Evans, A., & Edmundson, E. (1997). Female Adolescents and Onset of Sexual Intercourse: A Theory-Based Review of Research From 1984 to 1994. *Journal of Adolescent Health*, 21, 147-156.
- Hliaoutakis, I. (1992). Adolescents' sexual activity, contraceptive use and abortion in the municipality of Athens. In Sexual Education and Health. Athens: Family Planning Association.
- Ioannides, E., Agrafiotis, D., & Ntouma, A. (1990). AIDS: Knowledge, attitudes, beliefs and practices. Exploratory study in students. Knowledge about sexually transmitted diseases. *Sexual Practices. Elliniki Epitheorisi Dermatologias Afrodisiologias*, 1(Suppl.), 399-401.
- Ioannides-Kapolou, E., Mitropoulos, I., & Agrafiotis, D. (2001). Attitudes and sexual practices of Greek population in avoiding HIV infection: a basis for an intervening policy. *Epitheorisi Ygeias*, September-October, 33-38.
- Koelling, J.C., Stone, S.N., & Buraphacheep-Coggins, W. (2002). Adolescent sexual decisions: Survey of attitudes & behaviours. *Annals of Epidemiology*, 12(7), 506-507.
- Kreatsas, G. (2003). Sexual education in adolescence. In: Kreatsas G. (ed.) *Sexual education and Gender Relations* (pp. 28-46). Athens: Ellinika Grammata.
- Lammers, C., Ireland, M., Resnick, M., & Blum, R. (2000). Influences on adolescents' decision to postpone onset of sexual intercourse: a survival analysis of virginity among youths aged 13 to 18 years. *Journal of Adolescent Health*, 26(1), 42-48.
- Leitenberg, H. & Saltzman, H. (2003). College women who had sexual intercourse when they were underage minors (13-15): age of their male partners, relation to current adjustment, and statutory rape implications. *Sex Abuse*, 15(2), 135-47.
- Magnusson, C. (1998). A follow-up study of adolescent girls with early sexual debut in combination with gynecological problems. *J Psychosom Obstet Gynaecol.*, 19(2), 70-83.
- Masters, W.H., Johnson, V.E., & Kolodny, R.C. (1995). *Human Sexuality*. New York: Harper Collins.
- Moore, N.B., Davidson, J.K. (1997). Guilt about first intercourse: an antecedent of sexual dissatisfaction among college women. *J Sex Marital Ther.*, 23(1), 29-46.
- Moreau-Gruet, F., Ferron, C., Jeannin, A., & Dubois-Arber, F. (1996). Adolescent Sexuality: the gender gap. *AIDS Care*, 8(6), 641-655.
- Narring, F., Wydler, H., & Michaud, P.A. (2000). First sexual intercourse and contraception: a cross-sectional survey on the sexuality of 16-20-year-olds in Switzerland. *Schweiz Med Wochenschr*, 130(40), 1389-1398.
- Papadopoulos, N.G., Stamboulides, P., & Triantafyllou, T. (2002). The psychosocial development and behavior of university students: A nationwide survey in Greece. *Journal of Psychology and Human Sexuality*, 11(4), 93-110.
- Paul, C., Fitzjohn, J., Herbison P., & Dickson, N. (2000). The determinants of sexual intercourse before age 16. *Journal of Adolescent Health*, 27(2), 136-147.
- Sprecher, S., Barbee, A., & Schwartz, P. (1995). "Was it Good For You, Too?": Gender Differences in First Sexual Intercourse Experiences. *Journal of Sex Research*, 32(1), 3-16.
- Svare, E.I., Krüger Kjaer, S., Thomsen, B.L., & Bock, J.E. (2002). Determinants for non-use of contraception at first intercourse; a study of 10,841 young Danish women from the general population. *Contraception*, 66(5), 345-350.
- Tountas, Y., Dimitrakaki, C., Antoniou, A., Boulamatsis, D., & Creatsas, D. (2004). Attitudes and behavior towards contraception among Greek women during reproductive age: a country-wide survey.

- European Journal of Obstetrics & Gynecology and Reproductive Biology*, 116(2), 190-195.
- Tsui, L. & Nicoladis, E. (2004). Losing it: Similarities and differences in first intercourse experiences of men and women. *The Canadian Journal of Human Sexuality*, 13 (2), 95-106.
- Turk, D.R. & Hocking, J.E. (2005). Brief report: The effects of condom insistence on the perceptions of adolescents in first time and repeated occasions of sexual intercourse. *Journal of Adolescence*. Article in Press. Available online 23 February 2005. [www.sciencedirect.com](http://www.sciencedirect.com)
- Upchurch, D.M., Levy-Storms, L., Sucoff, C.A., & Aneshensel, C.S. (1998). Gender and Ethnic Differences in the Timing Of First Sexual Intercourse. *Family Planning Perspectives*, 30(3), 121-128.
- Weiss, D.L. (1983). Affective reactions of women to their initial experience of coitus. *Journal of Sex Research*, 19(3), 209-237.
- Wellings, K., Wadsworth, J., Johnson, A.M., Field, J., Whitaker, L., & Field, B. (1995). Provision of sex education and early sexual experience: the relation examined. *BMJ*, 311, 417-420.
- Wellings, K., Nanchahal, K., Macdowall, W., et al. (2001). Sexual behaviour in Britain: early heterosexual experience. *The Lancet*, 358(9296), 1843-1850.