

Reproductive Health

Social class, gender and psychosocial predictors for early sexual debut among 16 year olds in Oslo

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Background: Variations in early sexual debut among 16 year olds were investigated by social level variables, parental occupation, gender, ethnicity, family structure, family functioning, and individual level variables, future aspirations, academic and social self-perception, and depressed moods. **Methods:** The variations in sexual debut were investigated by examining proportions of 16 year olds reporting their first intercourse before age 16. The data were collected by self-reporting questionnaires administered to in-school-youth, in Oslo. Multivariate logistic regression analyses were used to test for associations. Gender interactions with all variables were tested. **Results:** Overall, 25% reported early debut. Independent effect of social class on differences in proportions in early sexual debut were found. Gender interaction with social class, ethnicity and academic self-perception as they associate to proportions having had early sexual debut, were found. For girls the pattern of social class differences was linear and the highest proportions were found among working classes. For boys the pattern was U-shaped and upper managerial and manual working class youth had similar, higher proportions of early debutants. High scores of parental monitoring, future aspirations and academic self-concept and low scores of depressed moods, are protective factors. While high social self-perception is positively associated with early debut for both genders. **Conclusion:** Early sexual debut varies according to social class, following gender-specific patterns, among 16 year olds in Oslo. The negative association between early debut and academic self-perception are for boys less influenced by other social and individual level factors, than for girls.

Keywords: Adolescence, gender, sexual debut, social class

Previous studies show that sexual debut before age 16 is associated with increased risk of teenage pregnancies^{1–5} and sexually transmitted infections(STI).^{4,6}

The chance of having given birth as a teenager is more than three times higher for those who had their sexual debut before the age of 16 compared to those who did not.^{1,2} Such differences are likely to reflect attitudinal,⁷ social and cultural influences with regard to sexuality.^{8,9} Teenage pregnancy and STI are linked to both social class^{5,6,10–12} and to psychosocial variables,⁹ such as aspects of self-perception,¹³ future aspirations¹⁴ and mental well being,^{9,15} as well as aspects of family function,¹⁶ such as parental monitoring.^{8,16}

There are still some controversies in the literature regarding sexual debut and its association to social class. Although some population studies confirm such associations in multivariate analysis,^{3,5,6} there are Norwegian population studies that question whether such associations are upheld in multivariate analysis, or conclude to the contrary.^{4,17,18} Further insight into

the predictors of early sexual debut among mid-adolescents may enable us to develop focused and adequate programmes to reduce unwanted teenage pregnancies.

Although social class differences in health during youth are reported,^{19,20} adolescence is the time period in life when health potentially may be the least affected by social class,²¹ perhaps with the exception of certain behaviours such as sexual behaviour.²²

Wight and colleagues have outlined a relevant psychosocial theoretical framework for sexual health promotion among youth.⁹ Sexual behaviour is here understood within an overall psychosocial theoretical framework of three levels, the social level, the individual level and the level of interaction between partners. This reflects the theoretical framework for this article. The article is limited to a focus on heterosexual behaviour, although acknowledging that sexual preferences may vary. At the social level, in addition to gender, social class is a main focus. Social class is understood as an indication of inequity in links to health protective resources,²³ which may have different implications for sexual behaviour in various groups of youth.

Gender and sexual behaviour in social contexts has been studied in greater detail in qualitative studies among youth with working class background^{24,25} than in population-based studies with all social classes represented.⁹ In population based studies on sexual debut, the focus is either on differences by social class, demographics, social contexts^{6,26} or individual level psychosocial factors,²⁷ or on gender differences.²⁸ Thus, the interaction between gender and social class and between gender and psychosocial potentially mediating factors are studied to a lesser extent.⁹ In Norway, a relatively egalitarian society, it seems important to assess such potential differences which, if neglected, fails to inform practice. The most relevant confounders or accentuators of social class, from previous studies,

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are ethnicity, family structure⁶ and family function.¹⁶ At the individual level, high academic self-perception and high future aspirations are cognitive factors which may act as protectors of sexual risk behaviour,^{14,29} although mediation with social class may need more careful attention. In addition, relevant key variables which may accentuate or confound associations at the individual level are, social self perception and depressed moods.^{30,31}

The main objective of this study is to examine whether early sexual debut among 16 year olds in Oslo is associated with social and individual level factors such as social class, ethnicity, family structure, parental monitoring, future aspirations, academic self perception, social self- perception and depressed moods. Furthermore we investigate the interaction between these factors and gender.

Methods and subjects

The findings presented are based on data from the *Oslo Youth Survey 1996*. During the spring of 1996, a self-administered questionnaire was handed out to 12100 ninth and tenth graders in secondary school (age 14–16), and to the first year students in upper secondary school (age 16–17). All ordinary public schools ($n = 75$), private schools ($n = 9$), and special schools ($n = 11$) were included in the study. This includes nearly a complete sample of the ninth to tenth grade population. As for the first grade in upper secondary education, the target sample included 90% of the total population. Missing were those who attended school abroad or in other places in Norway, and pupils leaving school after the compulsory 10th grade. Excluded from the sample were students with severe reading impediments, and pupils with serious physical or mental handicap.

The overall response rate, 94.3%, varied from 96% in primary schools, to 83% in private schools. Half of the missing cases were due to lack of consent and the rest were missing because the pupils could not be reached. We excluded questionnaires that contained grossly incomplete data ($n = 25$) and questionnaires filled out by pupils older than 20 years ($n = 30$). From the overall response rate, 94.3%, corresponding to the net sample of 11395 questionnaires obtained, we excluded all those 7698 not 16 years of age. Among the 3697 16 year olds we excluded those not reporting age of sexual debut ($n = 29$), gender ($n = 4$), and those not responding to a full questionnaire ($n = 199$). Some did not receive a full questionnaire either because they did not have sufficient language skills or because they went to special schools, of which 50% were situated outside of Oslo). That is, all 16 year olds attending schools within the municipality of Oslo, receiving the same, full questionnaire and reporting gender, and age of sexual debut were selected for the present analysis ($n = 3469$).

Procedure

Consent was obtained from the municipal school authority in Oslo, which sent a request to all relevant schools. The pupils had to give their oral consent, based on a written description of the project. This was in accordance with the standard procedure established by the Norwegian Data Inspectorate. All eligible students at each school completed the questionnaire at the same time, except those few not present in class during data collection, who completed the questionnaire on a later occasion. The questionnaire consisted of 32 pages, covering a broad range of topics central to the period of adolescence.

Instruments

Dependent variable: The question used to assess timing of sexual debut was phrased in the exact same way as the one used in previous Norwegian population studies⁴: Have you ever had sexual intercourse? (Yes or no). This question is followed by: If

yes, how old were you the first time I was _____ years old. This question does not exclude those having their first sexual intercourse with a partner of same sex. In this study we compared the proportions of 16 year olds who reported early sexual debut, debut before age 16, the minimum age of sexual consent in Norway. Reported debut before the age of 10 is zero. There are very small numbers reporting sexual debut at the ages 10, 11, and 12 (1.8%). WHO defines adolescence as ages 10 to 19 years. Within the normal distribution of youth having early debut, the very few who are within the WHO-defined age of adolescence are included in this analysis.

Independent variables

Social level: Social class as an indicator of social position is based upon the respondents description of (a) mothers' and fathers' occupation and (b) what do your mother/father do at work. This information was classified according to the International Standard Classification of Occupations of 1988, ISCO-88, the official classification standard of the International Labour Organization. The population was then divided into five categories ranging from I (upper managerial) to V (manual working class).

In accordance with Statistics Norway's definition, adolescents with both parents born in a non-western country, were regarded as having minority background ethnicity. In the 16 year old sample, 84.3% were either ethnic Norwegian or Western immigrants. Western immigrants constitute 1.0% ($n = 36$), out of which the majority ($n = 22$), are from other Nordic countries. They were all included among Ethnic Norwegians for the purposes of this study, where ethnicity has been divided into two groups only, Ethnic Norwegian and Minority background. Among youth with minority ethnic background, 15.7%, the largest group, 11.4% ($n = 396$), was from Asia. The largest representation from a single country, 7.1% ($n = 248$), was from Pakistan.

Family structure is presented as six groups according to whether the respondent was living with: both mother and father, equal time with mother or father, single parent household father only, single parent household mother only, with mother or father and new partner or with other.

One aspect of family function is measured by the parental monitoring scale, as developed by Alsaker.³³ This comprised of items/statements concerning openness between parents and the adolescent about where and with whom the young person spends his or her free time, namely; "My parents usually know were I am and what I do in my free time", "My parents know most of my friends who I spend my free time with", "My parents know pretty well who I am together with in my free time", "It is important to my parents to know were I am and what I do in my free time". All items range from one to five, from strongly agree (1) to strongly disagree (5). These items were combined into a scale represented as the sum of the 4 items divided by 4, so that the original scale range is retained. (Internal consistency, Cronbach alpha, $\alpha = .79$)

Individual level

Future aspirations: The participants were asked what education they planned to take. Response categories included six options from higher university degrees to the very basic first ten years, as well as other and not yet decided.

Academic and Social Self Perception: A revised version³⁴ of Harter's Self-Perception Profile for Adolescents (SPPA)³⁵ was used. The self perception variables are each built up around five item response alternatives. Each are answered on a four-point scale ranging from "describes me very poorly" to "describes me very well".

Academic self perception has the following items: "I feel just as smart as others my age", "I am pretty slow in finishing my

school work”, “I do very well in class”, “I have trouble figuring out the right answers in school”, “I feel that I am pretty intelligent” ($\alpha = 65$).

When coding the items, positively worded items are reversed so that the scale ranges from 1 (Describes me very poorly) to 4 (Describes me very well). Scales are represented as the sum of the 5 positively scaled item divided by 5, so that the original scale range is retained.

Social self-perception scaling is performed in the same way, from the following items: “I find it hard to make friends”, “I have a lot of friends”, “I am very hard to like”, “I am popular among peers”, “I feel that I am socially accepted by people my age” ($\alpha = 73$).

Depressed Moods: Kandel & Davies³⁶ six-item measure of degree of depressed mood was used. This measure was originally derived from the Johns Hopkins Symptom Checklist (SCL-90)³⁷,

³⁸ which in turn was modified by Kandel and Davies in 1982. In the present study this was changed back to the original SCL Format, restricting the ratings to the preceding week and applying a 4-point scale, from Very much troubled (4) to not at all troubled (1)³⁹ as response to the following descriptions of states: feeling too tired to do things; having trouble going to sleep or staying asleep; feeling unhappy, sad, or depressed; feeling hopeless about the future; feeling nervous or tense; and worrying too much about things. These items were combined into a scale represented as the sum of the six-items divided by 6, so that the original scale range for depressed moods is retained. ($\alpha = 81$)

Statistical analysis

Pearson's chi square and t-tests was used to test the statistical significance of the differences of early sexual debut in different subgroups. Non-parametric analysis were also performed for the score variables. Multivariate analyses using logistic regression were performed to assess the effects of social class, ethnicity, family structure, monitoring, future aspirations, academic self-concept, social self-concept and depressed moods on the risk of early sexual debut. These analyses were performed by gender. The results are presented as unadjusted and adjusted ORs allowing assessment of the stability of the associations according to the inclusion of the independent variables. Interaction between gender and all other variables was tested, by the multiplicative model, logistic regression.⁵⁶ Those variables not significant at 5% level were excluded from the model. Interaction variables were re-coded to allow a presentation of the interaction results, in a form similar to stratified analyses.⁴⁰

Results

The distribution of all variables is shown in table 1. About one fourth of the youth had their sexual debut before the age of 16. Boys 28% and girls 23% (gender difference $p = 0.001$) among 16 year olds who reported age of debut, 49.8% boys ($n = 1724$) and 50.2% girls ($n = 1741$). Percentage missing information on the variables is evident from table 1.

Bivariate gender differences were found for family structure and future aspirations ($p < 0.001$). A higher proportion of girls (19% versus 13%) were living in single parent mother headed households. A higher proportion of boys (22%) than girls (15%) plan vocational study programme, while 10% of boys and 16% of girls plan to take intermediate university degrees. Gender differences were found for all psychosocial variables. Girls reported higher scores on depressed moods and monitoring ($p < 0.001$) and boys reported higher scores than girls on academic self-perception ($p < 0.001$) and social self perception ($p < 0.01$).

As seen in table 2, the proportion of boys who had their sexual debut before the age of 16 was highest in the two extreme

social class categories. A significantly increasing proportion of early sexual debut with decreasing social class is seen in girls. The proportion of minority girls with early sexual debut was lower than the corresponding figures for boys, and ethnic Norwegian girls. Girls aspiring to higher university or college degrees were less likely than any other groups to have early sexual debut.

Both boys and girls with early sexual debut did have consistently lower academic self than those reporting later or no debut (varying from means 2.76 versus 2.90). They reported lower parental monitoring (3.86 versus 4.13), higher social self (3.29 versus 3.09) and higher levels of depressed moods (2.13 versus 2.01); all comparisons (t-tests) with statistical significance for both genders ($p < 0.001$). Non-parametric analysis performed for the score variables did not influence the results (data not shown).

The combined effect of the recorded independent social level variables on early sexual debut are shown in table 3 (boys) and table 4 (girls). These tables show first the unadjusted figures, then the figures adjusted for social class and ethnicity (Adjusted 1) and then the figures adjusted for all social level variables (Adjusted 2). Figures 1 and 2 show the values when adjusted for all social and individual level variables (Adjusted 3). The U-formed association between early sexual debut among boys and social class remained stable even after adjusting for first ethnicity (Adjusted 1) and later adjusted also for family structure and family function (Adjusted 2). The girls in the higher social classes had a consistently lower OR for early sexual debut compared to the two working class categories. The association was influenced by ethnicity and the differences are accentuated when this was taken into consideration.

The ORs for early sexual debut for both genders declined with increasing monitoring in the family. The ORs for monitoring remained stable for boys and girls when adjusted for all other social level variables.

The associations between future aspirations and early debut remain mainly stable in boys after adjusting for the social level variables. For boys, only the choice of vocational study programme is significantly different from the choice of highest academic future aspirations influence on sexual debut. For girls, in addition, the choice of intermediate university/college degree, as well as the choice of school drop out after 10th grade, all remain significantly different from aspiring to the highest university education.

The effect of academic self-concept remains intact after adjusting for social level variables in boys, but was reduced among the girls when adjusted for monitoring. The ORs associated with social self-perception were unaffected by adjustment for other variables. The gender-specific differences are significant with regard to the effect of social class even after adjustment for both individual and social level variables. The impact of ethnicity was confirmed also after including individual level variables. The importance of academic self is less resistant for girls than for boys, whereas future aspirations with regard to university degrees trend to go in opposite directions.

Tests for gender interactions show significant interactions between gender and social class ($p = 0.002$), between gender and ethnicity ($p < 0.001$) and between gender and academic self-concept ($p = 0.016$). For ethnicity the direction is opposite for boys and girls. For social class there is also different patterns, whereas for academic self, the directions are similar but only significant for boys. (see figures 1 and 2)

Discussion

The results of this study show an increase in the proportion of 16 year olds reporting early sexual debut, compared to the proportions reported by Kraft in 1991.⁴ This constitutes for

Table 1 Descriptive sample characteristics of 16 year old youth (*n* = 3464)

	Boys		Girls			
	<i>n</i>	%	<i>n</i>	%		
Total sample	1724	49.8	1741	50.2		
<i>Sexual debut</i>						
Distribution of sexual debut by age / # years						
≤ 13 ^b	110	6.3	49	2.8		
≤ 14	249	14.5	174	10.0		
≤ 15	482	28.0	401	23.0		
<i>Social level</i>						
Social class ^c						
I Upper managerial	182	11.6	174	10.6		
II Technical/economic intermediate strata	496	31.6	552	33.7		
III Humanistic/social intermediate strata	336	21.4	309	18.9		
IV Non-manual workers	175	11.1	187	11.4		
V Manual workers	381	24.3	415	25.4		
Ethnicity:						
Ethnic Norwegian	1450	84.5	1458	84.1		
Minority ^d	265	15.5	276	15.9		
Family Structure:						
Mother and Father	1175	68.8	1128	65.4		
Equally between mother and father	56	3.3	47	2.7		
Father (F) only	55	3.2	47	2.7		
Mother (M) only	226	13.2	330	19.1		
M or F and new partner (NP)	156	9.1	145	8.4		
Other	41	2.4	29	1.7		
Family function:						
Monitoring (range 1–5)	1712	3.93	0.81	1737	4.19	0.72
Individual level						
Future aspirations						
Univ/college higher degree	491	30.4	530	31.8		
Univ./college lower or intermediate	168	10.4	265	15.9		
High school academic	219	13.9	223	13.4		
Vocational study program	356	22.1	251	15.1		
Other and basics or 10 th grade only	33	2.0	20	1.2		
Do not know	346	21.5	378	22.7		
Academic self -concept (range 1–4)						
1688	2.91	0.54	1726	2.83	0.58	
Social self -concept (range 1–4)						
1688	3.17	0.53	1725	3.11	0.56	
Depressed moods (HSCL) (range 1–4)						
1673	1.94	0.68	1720	2.14	0.70	

a: Valid percent.

b: Those very few 10–12 y (1.8%) included. See text method.

c: Social class by parental occupation based on international ISCO 88, Skogen 1999. See text method.

d: Minority background defined based on Statistics Norway's definition, both parents born in non-western country.

Table 2 Bivariate differences in proportions between those that had Sexual Debut <16 and ≥ 16 , by gender. $n = 3565$, presented as per cent (p chi-square)

	Boys						Girls					
	<16		16		p	≥ 16		16		p		
	n	%	n	%		n	%	n	%			
Total sample	482	28.0	1242	72.0		401	23.0	1340	77.0			
<i>Social level</i>												
Social class												
I	59	32.4	123	67.6	0.010	36	20.7	138	79.3	0.038		
II	124	25.0	372	75.0		118	21.4	434	78.6			
III	88	26.2	248	73.8		64	20.7	245	79.3			
IV	38	21.7	137	78.3		50	26.7	137	73.3			
V	127	33.3	254	66.7		118	28.4	397	71.6			
Ethnicity:												
Norwegian ¹	400	27.6	1050	72.4	0.386	376	25.8	1082	74.2	<0.001		
Minority	80	30.2	185	69.8		22	8.0	254	92.0			
Family Structure:												
Mother and Father (M&F)	293	24.9	882	75.1	<0.001	202	17.9	926	82.1	<0.001		
Equally between M and F	16	28.6	40	71.4		12	25.5	35	74.5			
Father only	18	32.7	37	67.3		15	31.9	32	68.1			
Mother only	73	32.3	153	67.7		104	31.5	226	68.5			
M or F and new partner	56	35.9	100	64.1		48	33.1	97	66.9			
other	20	48.8	21	51.2		14	48.3	15	51.7			
<i>Individual level</i>												
Future aspirations												
Higher univ.-degree	116	23.6	375	76.4	<0.001	91	17.2	439	82.8	<0.001		
University/college	47	28.0	121	72.0		70	26.4	195	73.6			
High school academic	52	23.7	167	76.3		54	24.2	169	75.8			
High school vocational	138	38.8	218	61.2		82	32.7	169	67.3			
Basics, 10 th grade only/other	15	45.5	18	54.5		9	45.0	11	55.0			
Do not know	87	25.1	259	74.9		78	20.6	300	79.4			

boys an increase from 10% to 28% and for girls from 5% to 23%. A recent national survey in the UK found that among 16–19 year olds about 30% of the boys and 26% of the girls had their sexual debut before 16, which is interpreted as a possible trend towards stabilisation of increase in earlier sexual debut among girls.³ Findings from a national longitudinal study in Norway during the 1990s indicate that a proportion of 23% among boys and 22% among girls had their sexual debut¹⁸ before age 16.

There are three main findings in this study. First, at the social level, social class influences early sexual debut, and for girls ethnicity influences early debut. Second, we observed gender interaction with social class, as well as with ethnicity, also when including relevant confounders and accentuators which were not included in previous studies on social class and sexual debut in Norway. Third, at the individual level we found a gender interaction on academic self, and independent effect for both genders on all other psychosocial variables.

The independent effect of social class on early debut in multivariate analysis contradicts the conclusions made by Kraft⁴

and Sundet and colleagues,¹⁷ although Sundet found association between own education later in life and early debut. This study confirmed, however, findings from other western countries such as the UK,^{22,26} Finland,⁵ Sweden,⁴¹ and USA.^{6,42,43} Regarding the difference from Kraft, it may be argued that the present study more accurately measured social class, using parental occupation (youth reported) using the international standard ISCO88, divided into five groups. Previous studies on youth sexual behaviour in Norway have for the most part used youth reported parental education, coded in three groups.^{44,45} Sundet used occupation coded in four groups, but 55% in the youngest age groups could not be ascribed to any occupation. In the present study only 7.5% could not be ascribed to any parental occupation. A recent validation study do show youth reported parental occupation and parental reported occupation as having high correspondence.⁴⁶ A possible limitation in comparing the present study with the studies of Kraft and Sundet is the fact that the present study is not country wide, rather addressing urban youth in Oslo. This is the capital, where social inequities are more

Table 3 The risk for sexual debut before 16 among 16 year old BOYS in Oslo, according to potential predictors of sexual debut, adjusted by conditional logistic regression giving odds ratio (OR) and 95% confidence intervals(CI).

Social level	Unadjusted OR (CI)	Adjusted 1	Adjusted 2
		Adjusted for A and B OR (CI)	Adjusted for A, B, C and (CI)
A Social class			
I	0.96 (0.66–1.38)	0.96 (0.66–1.40)	1.10 (0.75–1.64)
II	0.68 (0.51–0.91)	0.68 (0.51–0.91)	0.71 (0.52–0.97)
III	9.72 (0.52–0.98)	0.73 (0.53–1.01)	0.75 (0.54–1.06)
IV	0.55 (0.37–0.83)	0.54 (0.36–0.81)	0.48 (0.31–0.74)
V	1.0	1.0	1.0
B Ethnicity			
Norwegian (ref.)	1.0	1.0	1.0
Minority	1.08 (0.83–1.41)	1.04 (0.75–1.44)	1.04 (0.73–1.50)
C Family Structure			
Mother and Father (ref.)	1.0	1.0	1.0
Equally M and F	1.12 (0.62–2.02)	1.20 (0.66–2.18)	1.28 (0.69–2.35)
Father only	1.32 (0.75–2.34)	1.42 (0.77–2.63)	1.40 (0.75–2.61)
Mother only	1.39 (1.03–1.86)	1.43 (1.03–1.98)	1.46 (1.04–2.04)
M or F and new P	1.61 (1.14–2.28)	1.67 (1.16–2.42)	1.60 (1.10–0.34)
other	2.94 (1.65–5.26)	2.54 (1.26–5.11)	1.80 (0.83–3.89)
D Family function (one aspect)			
Monitoring	0.65 (0.57–0.74)	0.65 (0.56–0.75)	0.67 (0.58–0.78)
Individual level			
E Future aspirations			
Univ/college Higher d (ref.)	1.0	1.0	1.0
Univ/College Mid/lower d	1.26 (0.85–1.87)	1.34 (0.88–2.04)	1.31 (0.85–2.01)
High School Academic	1.01 (0.69–1.46)	1.09 (0.73–1.61)	1.01 (0.67–1.51)
Vocational Study Program	2.05 (1.52–2.76)	2.39 (1.70–3.35)	2.13 (1.50–3.02)
Other and basics(10th grade)	2.69(1.32–5.51)	2.32 (1.04–5.17)	1.77 (0.76–4.15)
Do not know	1.09 (0.79–1.50)	1.06 (0.75–1.50)	0.97 (0.68–1.39)
F Academic Self Concept	0.58 (0.47–0.71)	0.58 (0.47–0.71)	0.64 (0.51–0.79)
G Social Self Concept	2.12 (1.69–2.64)	2.14 (1.69–2.70)	2.37 (1.82–3.09)
H Depressed moods (SCL)	1.39 (1.20–1.61)	1.25 (1.23–1.71)	1.26 (1.06–1.50)

Adjusted 1 Adjusted for social class and ethnicity.

Adjusted 2 Adjusted for social class, ethnicity, family structure, and family functi (all social level variables).

See figures 1 and 2 for adjusted for both all social level and all individual level variables (Adjusted for all).

apparent than in any other area of Norway. The pattern may be less clear at national level.¹⁸ The larger participation rate in the Oslo study however, may indicate that social inequity has been underestimated previously. Social class may indicate variations in access to health protective resources.²³ This may include unequal access to sexual health protective resources, which may consequently lead to differences in life chances.⁴⁷ Potential social inequities in youth should not be ignored, at the same time as keeping an open mind as to what this means for various groups of individuals, and acknowledging the need to in the future study changes over time.

The second main finding, gender differences. The social class influence on sexual debut changed by gender, moving from

bivariate to multivariate analysis. For boys the group difference decreases. The process of adjustment suggested a mediating effect of individual level variables on social class variables. Social class I seem to be among the greatest risk takers of early debut for boys. For girls the pattern is different. For girls the social class influences are unmasked and increase when adjusted for all other social level variables. The difference from social group V stays significant for social groups I, II and III also when adjusted for all other variables including individual level variables. The findings suggest that for girls, the traditional social power structures in society predicts risk of early sexual debut. That is, social class variations for girls particularly increased risk for early debut among working class girls, which confirms recent

Table 4 The risk for sexual debut before 16 among 16 year old GIRLS in Oslo, according to potential predictors of sexual debut, adjusted by conditional logistic regression giving odds ratio (OR) and 95% confidence intervals(CI).

Social level	Unadjusted OR (CI)	Adjusted 1	Adjusted 2
		Adjusted for A and B OR (CI)	Adjusted for A, B, C and D OR (CI)
A Social class			
I	0.69 (0.45–1.05)	0.51 (0.33–0.79)	0.56 (0.36–0.87)
II	0.72 (0.54–0.97)	0.55 (0.41–0.75)	0.58 (0.42–0.79)
III	0.72 (0.51–1.02)	0.55 (0.39–0.78)	0.49 (0.34–0.71)
IV	0.91 (0.62–1.33)	0.84 (0.56–1.24)	0.77 (0.51–1.17)
V (ref.)	1.0	1.0	1.0
B Ethnicity			
Norwegian (ref.)	1.0	1.0	1.0
Minority	0.23 (1.15–1.35)	0.22 (0.14–0.35)	0.25 (0.15–0.41)
C Family Structure			
Mother and Father (ref.)	1.0	1.0	1.0
Equally M and F	1.58 (0.81–3.09)	1.35 (0.68–2.66)	1.35 (0.68–2.67)
Father only	2.03 (1.09–3.79)	1.65 (0.84–3.25)	1.47 (0.74–2.91)
Mother only	2.13 (1.62–2.80)	1.86 (1.39–2.49)	1.81 (1.35–2.43)
M or F and new P	3.35 (1.62–3.40)	1.78 (1.20–2.61)	1.73 (1.16–2.57)
other	4.00 (2.02–7.89)	6.67 (2.72–16.33)	4.56 (1.74–11.95)
D Family function (one aspect)			
Monitoring	0.69 (0.59–0.80)	0.70 (0.59–0.82)	0.74 (0.62–0.87)
Individual level			
E Future aspirations			
Univ/college Higher d (ref.)	1.0	1.0	1.0
Univ/College Mid/lower d	1.73 (1.22–2.47)	1.63 (1.13–2.36)	1.58 (1.09–2.31)
High School Academic	1.54 (1.65–3.31)	1.47 (0.99–2.18)	1.37 (0.92–2.06)
Vocational Study Program	2.34 (1.65–3.31)	2.09 (1.43–3.05)	1.81 (1.23–2.68)
Other and basics (10th grade)	3.95 (1.59–9.80)	4.10 (1.61–10.43)	3.97 (1.53–10.28)
Do not know	1.25 (0.90–1.76)	1.17 (.82–1.66)	1.10 (0.77–1.58)
F Academic self concept			
0.68 (0.56–0.83)	0.74 (0.60–0.91)	0.83 (0.63–1.03)	
G Social self concept			
2.12 (1.69–2.66)	2.18 (1.71–2.77)	2.25 (1.76–2.88)	
H Depression (SCL)			
1.28 (1.09–1.49)	1.29 (1.09–1.52)	1.20 (1.01–1.43)	

Adjusted 1 Adjusted for social class and ethnicity.

Adjusted 2 Adjusted for social class, ethnicity, family structure, and family function (all social level variables).

See figures 1 and 2 for adjusted for both all social level and all individual level variables (adjusted for all).

findings from the UK³ and USA.⁶ The ethnic differences for girls confirms previous findings among youth in UK²⁶ were minority youth of Asian origin, including Pakistani girls, were less likely to have had early debut than ethnic majority girls.

The third main finding is that psychosocial predictors of early debut are to some extent mediators of effects of social class and structural factors for youth. Previous studies that have linked family structures as well as socioeconomic contexts to risk behaviours in youth, have lately been nuanced by studies that include variables assessing psychosocial aspects of family function.^{16,48} Sweeting and colleagues in Scotland found that family functioning may be equally, if not more important than family structure, as a predictor for youth health and self esteem.⁴⁸ In this study parental monitoring was included as one

aspect of family function. The finding that parental monitoring had an independent effect on early debut supports findings from studies from other countries as well.⁴⁹ A recent study has found that minority girls reported higher monitoring than Ethnic Norwegian girls, while the contrary was found among boys.⁵⁷ In this study parental monitoring seemed to mediate the effect of family structure and social class on early debut, particularly for boys.

The link between self concept and sexual debut^{13,50} has been established, but so far only to a limited degree studied in Norway. In this study, we found that a positive academic self perception is a protective factor, and more robust for boys, in multilevel analysis. The gender interaction found indicates that academic self perception among girls was affected by other

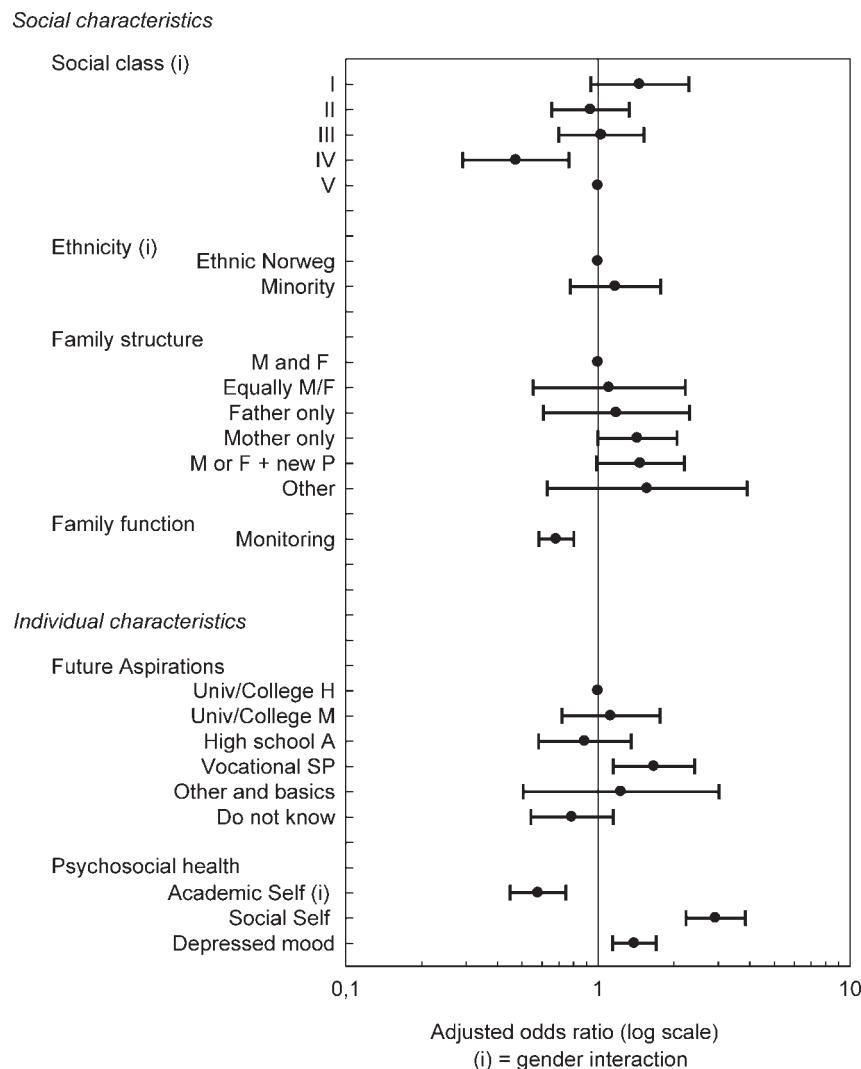


Figure 1 Sexual debut boys.

individual and social level variables related to early debut. Future aspirations showed an independent effect for both genders. Future aspirations may analytically be understood as future self or possible self.⁵¹ Studies have shown that future self is more different than present self among individuals reporting high level of stressors or crisis.⁵¹ Social self-perception, which expresses reported social acceptance among peers and number of friends, increases opportunities of early debut, and reflects that positive aspects of self may be linked to early debut as well.

Association between depressed moods and sexual risk behaviour is previously documented internationally,³⁰ and is supported by the present findings. Several studies also show association between depressed moods and social class in youth.^{19,20} An increase in depression among youth in Europe, including Norway, is recently documented.²⁰ The gender differences in depressed moods⁵² are also well documented. Previous studies that have acknowledged associations between depressed moods and early debut among youth, have perhaps more often emphasized the effects for girls.³⁰ In this study, the association with depressed moods were equally important for boys and girls. In summary, psychosocial factors seem to play a somewhat greater independent role for boys than do the structural factors, while the opposite holds true for girls. This indicates that girls on the one hand experience less reconfirmation and positive validation on their self-development than do boys. This gender difference accentuated the difference by social

class in self-perception and depressed moods. This gives girls an added disadvantage, having to oppose more stringent social class power structures, and gendered power structures,⁹ as they enter the arena of sexual relationships. The fact that a larger proportion of boys than girls are willing to risk early debut may not merely be an indication of higher acceptability of various risks. It may also be an indication that boys, to a greater extent across parental socioeconomic backgrounds, are vulnerable to possibly compensate emotional stressors or lacks in family function by seeking peer acceptance⁹ and alternative access to intimacy.

Gendered power relationships may have different implications in different social relationships.⁹ Qualitative studies among mainly working class heterosexual youth has emphasized conventional gender differences where young women strive to fulfil a heterosexual role they perceive that young men would like them to fulfil,⁵³ and that young men tend to take their dominant role for granted.^{53,54} It is not, in a cross-sectional survey, clear whether the gender patterns may indicate gendered power structures in transition and re-definition. This particular study shows, however, that a gender power structures and social class power structures as interrelated, in their associations with sexual behaviour in youth.

We recognize certain limitations to the study. There might be some small effect of random drop-outs, but there is no reason to assume this has any substantial effect on the results. Sexual

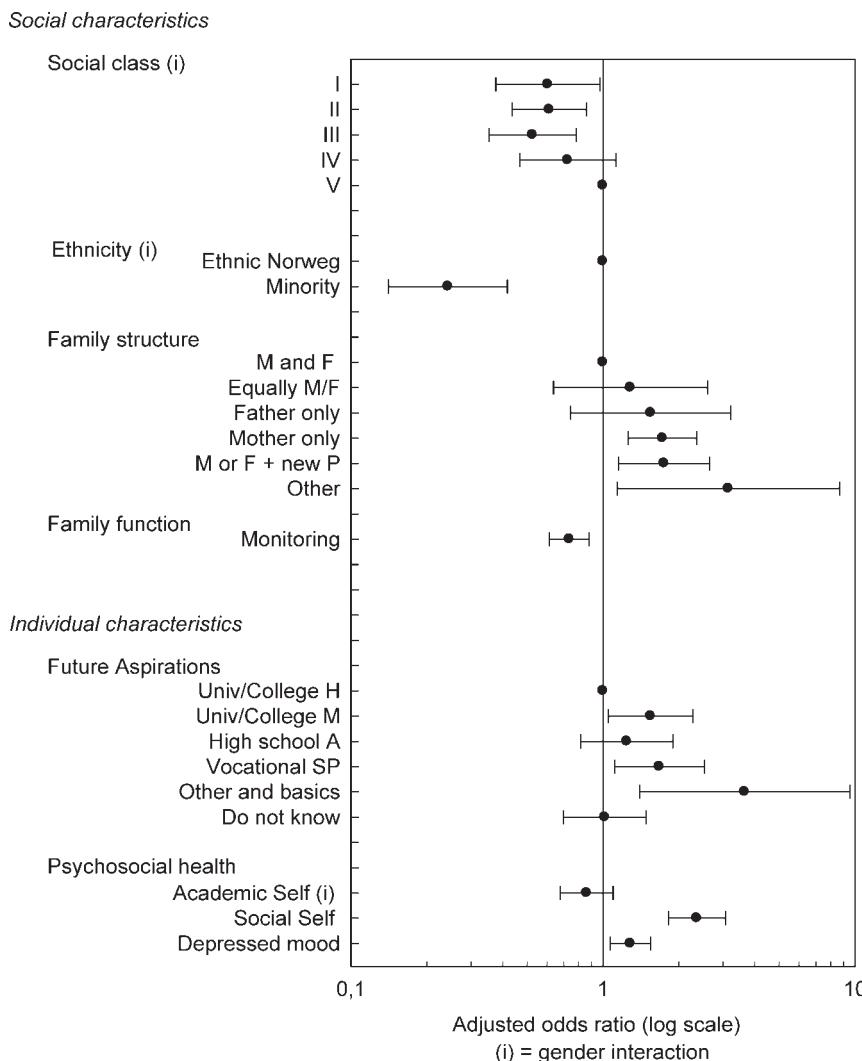


Figure 2 Sexual debut girls.

preferences are not reported on in this study. A recent national study in Norway⁵⁵ found that 3% among 16 year olds reported to have had intercourse with a same sex partner ever. However, there were only 1% that reported to exclusively have had sexual intercourse with a same sex sexual partner. In spite of the limitations of this study, being non-longitudinal, heterosexually focused, and having as single information at the sexual partner-interactional level, early sexual debut, the findings point to areas important to understand better in order to improve strategies for interventions and sexual health promotion among youth.

Present findings imply that in addition to structural level interventions, promotion of psychosocial health among youth may influence sexual health protective behaviour. Our findings imply the need for better understanding of how individual level self-concepts may mediate associations between parental social class and sexual behaviour.

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Key points

- Is there social class variations in early debut among 16 year olds in Norway?
- If so, are there gender differences, and to what extent do individual level variables as self perceptions and depressed moods modify associations for both genders.
- Independent effect of social class on differences in proportions of early sexual debut were found.
- Gender interaction were found with social class, ethnicity and academic self-perception as they associate to proportions having had early sexual debut.
- Implications for public health practice and policy is among others increased awareness of social influences on sexual behaviour in youth.

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