

The Quality of Young People's Heterosexual Relationships: A Longitudinal Analysis of Characteristics Shaping Subjective Experience

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CONTEXT: Research on young people's sexual relationships often overlooks subjective experiences and enjoyment. Perceived quality of sexual relationships may be related to gender, background characteristics, circumstances of first intercourse and subsequent sexual history.

METHODS: Longitudinal data from 13–16-year-olds who participated in randomized trials of school sex education in either Scotland (N=5,356) or England (N=6,269) were used to examine young people's subjective experiences of heterosexual relationships. Logistic regression models tested for associations between selected variables and pressure and regret at first intercourse, pressure and enjoyment at most recent intercourse, and three measures of relationship quality.

RESULTS: Of the 42% of youth who reported having had sex by follow-up, most assessed their first and most recent sexual relationships positively. Greater proportions of females than of males felt pressure at first sexual intercourse (19% vs. 10%), regretted their first time (38% vs. 20%) and did not enjoy their most recent sex (12% vs. 5%). Younger age at first sex was an important correlate of partner pressure and regret at first intercourse (odds ratios, 2.0 each, for those 13 or younger vs. 15–16-year-olds). Negative experiences were associated with less control (e.g., feeling pressure, being drunk or stoned, and not planning sex) and with less intimacy (e.g., sex with a casual partner and less frequent sex). Background social characteristics had limited influence compared with circumstances of first intercourse and subsequent sexual history.

CONCLUSION: Most young people evaluated their early sexual experiences positively. The quality of relationships was enhanced by better communication and greater physical intimacy. For a vulnerable minority, however, early sexual experiences were negative. They could be protected by delaying first intercourse, restricting sexual activity to established relationships and learning skills to improve control in sexual encounters.

Perspectives on Sexual and Reproductive Health, 2008, 40(4):226–237, doi: 10.1363/4022608

Two interrelated biases in the current literature on teenagers' sexual relationships are its foci on public health issues and the negative consequences of sex. These reflect sources of research funding, as well as policymakers' and service providers' professional responsibility to focus on problematic behavior and their interest in doing so. Some argue that this leads to "manufactured risk" that has little to do with public health.¹ A tendency to pathologize young people's sexual behavior can be exacerbated by social class bias,² because working-class teenagers start having sex earlier than other adolescents.³ More generally, the research concentrates on physical sexual health, rather than on emotional and mental well-being.

It is often overlooked that sex is enjoyable for most teenagers and that many adolescents seek sexual relationships expecting them to bring intimacy, social prestige and pleasure.^{4,5} Heterosexual experience is important for positive self-perception,⁶ particularly for males.⁷ Young people with a boyfriend or girlfriend have less social anxiety⁸ and wider friendship networks than others,⁹ and have an opportunity to develop autonomy and to experiment with their identities.⁴

A substantial minority of young people, however, regret their early sexual encounters,^{3,10} and one of the most important predictors of such regret is coercion. In a British national survey, 22% of females and 7% of males aged 16–24 reported that their partner had been "more willing at first sexual intercourse"; the proportions declined dramatically with age at first intercourse.³ Coercion is clearly important to subjective experience, as well as being associated with exposure to STDs,¹¹ depression,¹² other psychological problems¹³ and disempowerment.¹⁴ In addition, stress in romantic relationships is associated with depressive symptoms and other psychological problems.^{6,15}

Theoretical approaches premised on the social construction of sexuality emphasize that the subjective experience of sexual relationships may vary considerably by gender. Interactionists have shown how sexuality is learned primarily from same-sex peers and relatives,¹⁶ whereas feminists highlight systemic power imbalances between genders in heterosexual relationships.¹⁴ Gender differences in expectations of sexual relationships, and in criteria for evaluating them, have been demonstrated in

both qualitative^{14,17} and quantitative research.^{5,18} A stereotypical example comes from a large survey of Swiss 16–20-year-olds: For females, intimacy and fidelity were very important in sexual relationships, whereas physical pleasure was very important for males.¹⁹

From a social constructionist perspective, other structural factors that shape sexual behavior might also shape perceptions of sexual experience. These include social class,^{3,20} ethnicity,²¹ family structure^{22,23} and mother's age.^{20,24} Their influence would probably operate through the emotional climate²⁵ and cultural values of the family and neighborhood.²⁶

The subjective quality of sexual experience may also be affected by the circumstances of sexual encounters, such as the prior relationship with the sexual partner, prior negotiation, contraceptive use and accumulated sexual experience. Young people value long duration,^{9,27} commitment, communication, companionship, intimacy or closeness, and passion^{28,29} in their romantic relationships.

This article uses longitudinal data from two randomized trials of school sex education—the SHARE study in the east of Scotland³⁰ and the RIPPLE study in central and southern England.³¹ Together they provide the largest database on the sexual behavior of 13–16-year-olds in Britain, and extend the existing literature, which comes overwhelmingly from North America. We set out to describe young people's subjective experiences of heterosexual relationships, and examine whether these are patterned by background variables and early sexual experiences. In the future, we plan to analyze data on homosexual relationships.

We hypothesize that the quality of first sexual intercourse is associated with both background characteristics and the circumstances surrounding first intercourse. Also, we hypothesize that the quality of most recent intercourse and current relationships is associated with background characteristics, the quality of first intercourse and subsequent sexual history.

METHODS

Data

We collected the data as part of two cluster randomized trials—SHARE³⁰ and RIPPLE³¹—each of which followed a cohort of young people. All pupils aged 13–14 at participating schools were eligible to participate in Wave 1 of the studies.

Twenty-five schools participated in SHARE. The intended sample was 8,430; in all, 7,616 youth participated at Wave 1 (in 1996–1997), and 5,854 participated at Wave 2, when they were aged 15–16. Wave 1 data were representative of the 1991 Scottish population in terms of parental social class and family composition. The SHARE trial was approved by the University of Glasgow's Ethics Committee for Non-Clinical Research Involving Human Subjects.

Twenty-seven schools participated in RIPPLE.³¹ The intended sample was 9,508; a total of 8,766 youth participated at Wave 1 (in 1997–1998), and 6,656

participated at Wave 2, when they were 15–16 years old. Wave 1 data were representative of the 1991 English population in terms of privately owned accommodation and 1998 General Certificate of Secondary Education qualifications. The RIPPLE trial was approved by the Committee on the Ethics of Human Research at University College London.

At both waves, we administered, in exam conditions, self-completed questionnaires on family background, lifestyle, and attitudes and experiences regarding sexual relationships. Students were given the opportunity to withdraw; parents exercised passive consent and were given the opportunity to withdraw their children. Youth were told to skip any questions that they did not wish to answer. Lower participation at Wave 2 was primarily due to students' leaving school.

Dependent Variables

Three groups of outcomes were reported at Wave 2: quality of first sexual intercourse, quality of most recent sexual intercourse and quality of current relationship with a boyfriend or girlfriend. We defined "sexual intercourse" as "a boy/man putting his penis into a girl/woman's vagina" or "going the whole way."

Quality of first intercourse had two outcomes: pressure and regret. For pressure, respondents were asked whether any pressure had been exerted. Responses ranged from "I put a lot of pressure on her/him" to "she/he put a lot of pressure on me"; SHARE used a seven-point scale, and RIPPLE used a five-point scale. Because few youth reported experiencing any pressure, and because we did not know how respondents distinguished levels of pressure, we constructed a binary variable that contrasted any pressure from partner with no pressure or any pressure from respondent. The regret outcome was derived from the question "Looking back now to the first time you had sexual intercourse, which of these statements applies?" Possible responses were "I wish I'd waited longer before having sex," "I wish I'd not waited so long," "It was at about the right time," "It shouldn't have happened at all" and "Don't know." We created a binary measure, by contrasting "I wish I'd waited longer" and "It shouldn't have happened at all" (indicating regret) with the remaining responses.

Quality of most recent intercourse had two outcomes: pressure and enjoyment. For pressure, we used the same measure as used for first intercourse. The enjoyment outcome was derived from the question "Thinking about the last time you had sexual intercourse, how much do you agree with the following statement: 'I enjoyed it.'" We created a binary measure from a five-point response scale, contrasting lack of agreement (indicated by responses of "unsure," "disagree" or "strongly disagree") with agreement ("strongly agree" or "agree").

Quality of current relationships had three outcomes. Respondents who currently had a boyfriend or girlfriend were asked how much they agreed with the following

statements: “I really enjoy the time we spend together”; “I find it difficult to show my boy/girlfriend that I am feeling affectionate” (SHARE) or “I find it difficult to tell my partner how I feel about them” (RIPPLE); and “I enjoy all our physical contact.” In SHARE, a four-point scale was used (“strongly agree,” “agree,” “disagree” and “strongly disagree”); in RIPPLE, a five-point scale, adding a midpoint (“neither agree nor disagree”), was used. We created binary measures, contrasting the most positive response with the others.

Independent Variables

•*Quality of first intercourse.* Pressure at first intercourse was examined in relation to three groups of independent variables: structural characteristics, immediate social influences and circumstances of first intercourse. The analysis of regret about first intercourse used the same groups plus pressure, which was considered a circumstance of first intercourse that was nested within the regret outcome.

Four structural characteristics were measured. An index of deprivation counted the following attributes: living in publicly subsidized housing, having a mother who left school at 16 or younger, having a father who left school at 16 or younger and having neither parent being employed full-time. For multivariate models, we used a binary measure contrasting a zero score with a score of one or more. Dichotomous measures indicated mother's age (at least 40 vs. 39 or younger) and family structure (living with both biological parents vs. other). Self-identified ethnicity distinguished between white, black, Asian and other (mainly mixed).

Ten immediate social influences were measured. Parental monitoring was based on four four-point items about parental rules concerning going out in the evening; we calculated mean scores and divided them into tertiles.²³ The measure for ease of communication with parents differed for the two samples. For SHARE, ease of communication with parents about sex was measured on a five-point scale, with mean scores for mother and father divided into tertiles; for RIPPLE, ease of communication with parents about private matters was measured on a six-point scale, with mean scores for mother and father divided into tertiles. Religiosity was a binary measure from a single-item with a five-point response, contrasting lack of religious belief with any other answer (“unsure” or various degrees of belief); the wording of the responses was slightly different in the two surveys. Regular substance use referred to use of cigarettes, alcohol or cannabis. Smoking cigarettes or cannabis was measured on a four-point response scale, contrasting the highest response category with any other answer; drinking alcohol was measured on a five-point response scale, contrasting the two highest response categories (“drunk more than once a week” and “drunk once a week”) with the others. Truancy was a binary measure created from a five-point scale of agreement with the statement “When

I get the chance I skip school.” Self-esteem was a mean score of agreement with three items—“I like myself,” “I am a failure” and “Most of the time I am satisfied with the way I look”—divided into tertiles. The last four social influences were cognitions related to sexual communication and condom use. Anticipated ease of communicating with a partner was taken from a single item with five-point response options; we created a binary measure contrasting “very easy” and “easy” with “unsure,” “difficult” and “very difficult.” Anticipated ease of saying “no to something sexual you don't want to do” was a binary measure from a single item with five response options, contrasting “very easy” and “easy” with “unsure,” “difficult” and “very difficult.” Condom self-efficacy was based on three five-point items on ease of getting condoms, suggesting using condoms and using condoms properly; means were calculated and divided into tertiles. Finally, attitude toward condoms was the mean score of two five-point items about the effect of condoms on sexual pleasure, divided into tertiles.

We measured the structural characteristics and immediate social influences at Wave 1, with the exception of parental monitoring, which we measured at Wave 2. SHARE, however, has parental monitoring data at both time points, and monitoring at Wave 1 predicts monitoring at Wave 2.²³

Seven circumstances of first sexual intercourse were reported at Wave 2. Age at intercourse was divided into 13 or younger, 14 and 15–16. Partners' age contrasted same as and younger than respondent with older than respondent. For planning, a binary measure (planned vs. unplanned) was created from five response options: Responses of “I expected it to happen, but not sure when,” “I planned it (but not together)” and “We planned it together” were contrasted with “It just happened” and “It was completely unexpected.” Two dichotomous measures were whether the couple had talked about using contraceptives prior to intercourse and whether the respondent had been “drunk or stoned” at intercourse. A binary measure of contraceptive use was created from responses to a question about protection against pregnancy, which included condom use among various response options. Finally, relationship with partner before intercourse was initially modeled as a three-category variable—casual relationship (not a boyfriend or girlfriend), boyfriend or girlfriend of less than a month and boyfriend or girlfriend of one month or more. The third category, however, had no distinct effect on some outcomes; in those cases, we collapsed this variable into a binary measure (casual relationship vs. boyfriend or girlfriend).

In the analysis of regret, pressure was entered as a three-category item: no pressure, pressure from respondent or pressure from partner.

•*Quality of most recent intercourse.* The model of pressure at most recent intercourse used the three groups of independent variables described for first intercourse

and an additional group. The fourth group consisted of pressure at first intercourse plus seven features of overall sexual history, reported at Wave 2: whether the respondent had ever had oral sex (defined as “mouth touching genitals or private parts”); whether he or she had had more than one partner; frequency of intercourse in last 12 months (seven-point scale ranging from zero to 10 or more times); whether the respondent had always used condoms during sex in the last 12 months, used contraceptives at most recent sex and talked about contraception before first sex with the most recent partner; and the respondent’s relationship with the most recent partner before sex (measured the same way as the analogous measure with regard to first intercourse).

The model of lack of enjoyment at most recent intercourse used the same four groups of independent variables as the model assessing pressure at most recent intercourse, adding regret about recent intercourse, which was considered to be nested within the lack of enjoyment outcome. Pressure was entered as a three-way variable, as for first intercourse.

•**Relationship quality.** For this model, we included the four groups of independent variables used for the analysis of quality of most recent intercourse. Pressure and lack of enjoyment at most recent intercourse were added to the overall sexual history independent variables, as they were considered to be nested within the quality of relationship outcomes.

Analysis

The eligible sample consisted of 11,625 adolescents (5,356 from SHARE and 6,269 from RIPPLE) for whom we had data from both waves. Some 4,119 reported ever having sex; 2,940 had had sex more than once, and of those, 1,833 reported currently having a boyfriend or girlfriend. We excluded those with missing data on outcome measures, leaving 3,760 adolescents who had had sex at least once (the sample used for our analysis of quality of first intercourse); 2,840 had had sex more than once (the sample used for our analysis of most recent intercourse), and of those, 1,813 currently had a boyfriend or girlfriend (the sample used for our analysis of quality of relationship). Among the 9% of respondents excluded from the analysis of quality of first intercourse, males, those not living with both biological parents and those reporting regular substance use at Wave 1 were overrepresented.

We conducted logistic regression to model binary outcomes, using MLwiN version 2.0, which accounted for clustering within schools. Data were weighted to allow for attrition between waves. Only independent variables that had a bivariate relationship with the outcomes at the $p < .01$ level were included in the multivariate analyses. We adopted this conservative approach because of the large modeling samples and large number of comparisons made.

All models were adjusted for study (RIPPLE or SHARE), arm of trial (intervention or control), age at Wave 2 and

TABLE 1. Percentage distribution of adolescents, by selected characteristics, according to study

Characteristic	All (N=11,625)	RIPPLE (N=6,269)	SHARE (N=5,356)
Gender**			
Male	50	51	49
Female	50	49	51
Race/ethnicity***			
White	90	84	96
Asian	2	3	2
Black	1	1	0
Other	7	11	2
Deprivation score***			
0	34	36	31
1	30	31	30
2	25	24	25
3	9	8	10
4	2	1	3
Family structure**			
Both parents	71	72	70
One/no parent	29	28	30
Mother’s age			
≤39	46	46	47
≥40	54	54	53
Total	100	100	100

Distribution is significantly different across studies at $p < .01$. *Distribution is significantly different across studies at $p < .001$. Notes: The SHARE sample comprises Scottish adolescents for whom there were data from Wave 1 (1996–1997) and Wave 2 (two years later). The RIPPLE sample comprises English adolescents for whom there were data from both Wave 1 (1997–1998) and Wave 2 (two years later). Percentages are weighted and may not add to 100 because of rounding. For measure of deprivation, a score of 4 denotes the highest level of deprivation.

gender. We found no association between study or arm of trial and any outcome. For categorical independent variables, we coded a missing response as a dummy variable. For independent variables that were continuous measures, missing item responses were recoded as the mean value. Results are presented with 99% confidence intervals; all associations reported here are significant at $p < .01$.

Each analysis used a two-stage approach: The first model examined structural characteristics and immediate social influences; the second model added circumstances of first intercourse and, where appropriate, aspects of overall sexual history.

RESULTS

Descriptive Analyses

The composition of the RIPPLE and SHARE samples differed somewhat (Table 1). The RIPPLE sample had greater proportions of youth who were male (51% vs. 49%), nonwhite (15% vs. 4%) and living with both parents (72% vs. 70%). The SHARE sample had a greater proportion of adolescents who scored three or four on the deprivation scale (13% vs. 9%).

Overall, 42% of respondents—46% of females and 38% of males—reported ever having had sexual intercourse by Wave 2 (Table 2, page 230). Forty-one percent of females

TABLE 2. Percentage distribution of adolescents, by sexual experience and current relationship characteristics, according to gender

Characteristic	All	Males	Females	Characteristic	All	Males	Females
SEX AND RELATIONSHIP	(N= 11,625)	(N= 5,735)	(N= 5,890)	MOST RECENT SEX (continued)			
Ever had sex***				Used condom***			
Yes	42	38	46	Yes	62	70	57
No	58	62	54	No	38	30	43
Has current boyfriend/girlfriend***				Pressure***			
Yes	34	28	41	None	89	86	90
No	66	72	59	From respondent	4	7	2
Sexual experience/relationship status***				From partner	8	8	7
Never had sex/is not in relationship	48	53	43	Enjoyment***			
Never had sex/is in relationship	10	9	11	Yes	91	95	88
Has had sex/is not in relationship	19	20	17	No	9	5	12
Has had sex once/is in relationship	5	5	5	SEXUAL HISTORY	(N= 2,940)	(N= 1,134)	(N= 1,806)
Has had sex more than once/ is in relationship	18	13	24	Relationship before first sex with most recent partner***			
FIRST SEX	(N= 4,119)	(N= 1,801)	(N= 2,318)	Casual	31	38	27
Age at first sex				Boyfriend/girlfriend for <1 month	33	33	33
≤13	23	21	22	Boyfriend/girlfriend for ≥1 month	36	29	40
14	32	36	34	Discussed contraception before first sex with most recent partner*			
15–16	44	44	44	Yes	42	45	40
Partner's age***				No	58	55	60
Same/younger	42	58	31	Has had multiple partners			
Older	58	42	69	Yes	60	62	59
Relationship before first sex***				No	40	38	41
Casual	29	32	27	Ever had oral sex			
Boyfriend/girlfriend for <1 month	21	21	20	Yes	85	85	85
Boyfriend/girlfriend for ≥1 month	50	47	53	No	15	15	15
Planning of sex**				Frequency of sex in last 12 months***			
Some	55	53	57	0	4	4	4
None	45	47	43	1	7	8	6
Discussed contraception before sex*				2	12	14	11
Yes	58	56	60	3	10	12	8
No	42	44	40	4–6	16	17	16
Drunk/stoned				7–9	8	7	8
Yes	30	31	29	≥10	43	37	47
No	70	69	71	RELATIONSHIP QUALITY	(N= 1,833)	(N= 619)	(N= 1,214)
Used contraceptive				Enjoys time spent together***			
Yes	79	79	78	Strongly agree	70	66	72
No	22	21	22	Agree	28	31	26
Used condom				Neither agree nor disagree†	1	1	1
Yes	71	73	70	Disagree	1	1	1
No	29	27	30	Strongly disagree	0	1	0
Pressure***				Finds it difficult to tell feelings for partner/ show affection‡,***			
None	81	85	79	Strongly agree	4	6	3
From respondent	3	6	2	Agree	8	9	8
From partner	15	10	19	Neither agree nor disagree†	5	6	4
Regret***				Disagree	35	39	33
Yes	30	20	38	Strongly disagree	48	40	52
No	70	80	62	Enjoys physical contact			
MOST RECENT SEX	(N= 2,940)	(N= 1,134)	(N= 1,806)	Strongly agree	62	63	61
Used contraceptive*				Agree	35	34	35
Yes	80	82	78	Neither agree nor disagree†	2	1	2
No	20	18	22	Disagree	2	1	2
				Strongly disagree	0	0	0
				Total	100	100	100

*Distribution is significantly different across genders at p<.05. **Distribution is significantly different across genders at p<.01. ***Distribution is significantly different across genders at p<.001. †For RIPPLE only. ‡For SHARE only. Note: Percentages are weighted and may not add to 100 because of rounding.

and 28% of males reported currently having a boyfriend or girlfriend. More than half of those in a current relationship had had intercourse more than once (although not necessarily with their current partner); this group comprised 18% of all youth, but the proportion was greater among females than among males (24% vs. 13%). Prevalence of intercourse reported at Wave 2 differed by several characteristics (not shown): ethnicity (24% of Asians vs. 42–54% of white black or other youth), deprivation score (41% of youth with a score of zero vs. 55% of those with a score of 3–4); family structure (36% of youth living with both parents vs. 54% of those living with one or no parent) and mother's age (36% of youth with mothers older than 40 vs. 51% of those with mothers 40 or younger).

Most sexually experienced youth reported using a contraceptive at first sex and at most recent sex (79% and 80%, respectively; Table 2). Seventy-one percent had used a condom at first sex; a smaller proportion had used a condom at most recent sex (62%), because of increased pill use. Seventy percent had been neither drunk nor stoned at first intercourse, and 55% had planned or expected it.

Most youth who had had sex (81%) reported no pressure at first intercourse; however, 30% regretted their first time. Eighty-nine percent of youth who had had sex more than once reported no pressure at most recent sex, and 91% reported enjoying their last sex. Adolescents' evaluations of their relationship with a boyfriend or girlfriend were closely related to their level of sexual experience. The vast majority of youth (83–98%) who had had sex more than once and currently had a boyfriend or girlfriend agreed or strongly agreed that they enjoy spending time and having physical contact with their partner, and disagreed or strongly disagreed that they find it difficult to tell their feelings or show affection to their partner. For each of these three aspects of current relationships, there was a clear trend of increasingly positive responses associated with increasing sexual experience, from no sexual experience to kissing with tongues to heavy petting to intercourse (not shown).

Greater proportions of females than of males reported feeling pressure at first intercourse (19% vs. 10%; Table 2), regretting their first intercourse (38% vs. 20%) and not enjoying their most recent time (12% vs. 5%). Reports of pressure from a partner at most recent sex, however, were similar by gender; females tended to be more positive than males about the quality of their relationship. Although there was no gender difference in terms of enjoying all physical contact, females tended to be more positive than males about enjoying everything they did together and finding it easy to express feelings.

Multivariate Analyses

•*Pressure at first and most recent sex.* In multivariate analyses modeling background characteristics and immediate social influences (Table 3, page 232), feeling pres-

sure from a partner at first sex was associated with being female, being a member of "other" racial or ethnic groups, having poor communication with parents and regular drug use (odds ratios, 1.4–2.2). After variables for the circumstances at first intercourse were added, gender remained significant, and older age at Wave 2 became significant (1.03); the other associations from the previous model became nonsignificant. Compared with youth who were 15–16 at first sex, those who were 13 or younger had greater odds of feeling pressure (2.0). Also, having an older partner and not planning intercourse were positively associated with pressure (1.4 and 1.7, respectively). Compared with adolescents whose first sex was with a casual partner, those who first had sex with a boyfriend or girlfriend of more than one month had lower odds of feeling pressured (0.6).

Several interaction terms were significant (not shown). Females who were 13 or younger at first sex were more likely than similar males to report pressure (odds ratio, 2.4). Females whose relationship before first sex was with a boyfriend of less than one month had elevated odds of experiencing pressure (2.0). Adding these interactions to the second model suggested that the overall gender difference in partner pressure is at least partly attributable to females' greater vulnerability at a very young age and in a shorter term relationship.

No background characteristics were associated with pressure at most recent sex in bivariate analysis, so we estimated only one multivariate model (Table 3). Youth who experienced partner pressure at first sex had elevated odds of feeling pressure at most recent intercourse (odds ratio, 1.8). In addition, pressure at last intercourse was negatively associated with frequency of sex in the last year (0.9). And compared with youth who had a casual relationship with their most recent partner, those whose last partner was a boyfriend or girlfriend of more than one month had lower odds of feeling pressure at last intercourse (0.5).

•*Regret about first intercourse.* In the first model of our analysis of regret at first sex (Table 4, page 233), being female, not living with both parents, having a mother aged 39 or younger and being religious were positively associated with feeling regret (odds ratios, 1.2–2.3). Also, youth who anticipated easy partner communication about sex had reduced odds of regretting first sex (0.8). After measures of the circumstances of first intercourse were added, all of these associations remained, except for that with mother's age; in addition, youth who reported low parental monitoring had lower odds than adolescents with high parental monitoring of regretting first sex (0.7). Compared with youth who had first had sex at age 15–16, those who had done so earlier were more likely to feel regret (1.6–2.0). Youth who had not planned to have sex and those who had been drunk or stoned had elevated odds of regretting their first time (2.0 and 1.4, respectively), as did adolescents who had experienced pressure from their partner (4.2). Finally, having a boyfriend or

TABLE 3. Odds ratios (and 99% confidence intervals) from analyses assessing characteristics associated with pressure from partner at first sex and most recent sex

Characteristic	Pressure at first sex (N=3,760)		Pressure at most recent sex (N=2,840)
	Model 1	Model 2	
BACKGROUND			
Age at follow-up interview†	1.02 (0.98–1.05)	1.03 (1.00–1.07)**	0.98 (0.93–1.02)
Gender			
Male (ref)	1.00	1.00	1.00
Female	2.16 (1.65–2.83)***	2.17 (1.63–2.88)***	0.93 (0.64–1.37)
Race/ethnicity			
White (ref)	1.00	1.00	na
Black	0.73 (0.15–3.57)	0.68 (0.14–3.40)	na
Asian	0.48 (0.10–2.38)	0.48 (0.09–2.48)	na
Other	1.63 (1.04–2.55)**	1.57 (0.99–2.50)	na
SOCIAL INFLUENCES‡			
Communication with parents			
Good (ref)	1.00	1.00	na
Medium	1.21 (0.89–1.65)	1.17 (0.85–1.60)	na
Poor	1.39 (1.05–1.82)**	1.21 (0.91–1.60)	na
Regular use of alcohol, cigarettes or cannabis			
No (ref)	1.00	1.00	na
Yes	1.47 (1.12–1.92)***	1.15 (0.87–1.54)	na
FIRST SEXS			
Age			
15–16 (ref)	na	1.00	na
14	na	1.28 (0.91–1.81)	na
≤13	na	1.95 (1.34–2.84)**	na
Partner's age			
Same/younger (ref)	na	1.00	na
Older	na	1.39 (1.04–1.86)**	na
Relationship			
Casual (ref)	na	1.00	na
Boyfriend/girlfriend for <1 month	na	0.88 (0.63–1.24)	na
Boyfriend/girlfriend for ≥1 month	na	0.62 (0.45–0.85)***	na
Planning of sex			
Some (ref)	na	1.00	1.00
None	na	1.70 (1.28–2.27)***	1.13 (0.75–1.69)
Pressure			
None (ref)	na	na	1.00
From respondent	na	na	1.40 (0.56–3.51)
From partner	na	na	1.78 (1.15–2.77)**
SEXUAL HISTORY§			
Frequency of sex in last 12 months			
na	na	na	0.89 (0.81–0.98)**
Relationship before first sex with most recent partner			
Casual (ref)	na	na	1.00
Boyfriend/girlfriend for <1 month	na	na	0.79 (0.48–1.28)
Boyfriend/girlfriend for ≥1 month	na	na	0.51 (0.29–0.87)**

p<.01.*p<.001. †Unit of increase is one month. ‡Assessed at Wave 1. §Assessed at Wave 2. Notes: The following variables were associated with the outcome indicated in bivariate analyses and were included in multivariate analyses, but were not significant for either outcome: study and intervention group, drunk or stoned (both outcomes); truancy, self-esteem, talked about contraception before first sex, contraceptive used at first sex (pressure at first sex); sex with more than one partner, contraceptive used at most recent sex (pressure at most recent sex). na=not applicable. ref=reference group.

girlfriend, rather than a casual partner, was negatively associated with regret (0.8).

Interactions of gender with age at first intercourse and with partner pressure were associated with the likelihood of regret (not shown). Females who had had intercourse

when they were 13 or younger were more likely to report regret than were similar males (odds ratio, 2.2) Young women who reported partner pressure at first intercourse had greater odds than their male peers of regretting their first time (2.3). Adding these interactions to the model suggested that the overall gender difference in regret was attributable to young women's greater vulnerability at a young age and greater susceptibility to partner pressure. •**Lack of enjoyment at most recent intercourse.** In the first model of this analysis, gender was the only variable associated with the outcome: Females had more than twice the odds of males of not enjoying their most recent intercourse (odds ratio, 2.4; Table 4). After characteristics at first intercourse and sexual history were added, this association persisted. Regret at first intercourse and pressure from partner at most recent intercourse were positively associated with not enjoying last sex (2.5 and 5.0, respectively). Having had oral sex, greater frequency of sex in the last 12 months and having a boyfriend or girlfriend, rather than a casual partner, were negatively associated with lack of enjoyment (0.5–0.8). Gender had no significant interactions with other independent variables in this model.

•**Quality of boyfriend/girlfriend relationships.** In the first model, no variable was associated with all three outcomes of relationship quality (Table 5, page 234). Adolescents' odds of expressing less than strong agreement that physical contact and spending time with a partner are enjoyable decreased with age (odds ratios, 0.95 each). Being female was associated with reduced odds of reporting other than strong disagreement that it is difficult to show affection (0.7). Teenagers who anticipated that it would be easy to talk to their partner about sex had reduced odds of expressing less than strong agreement that physical contact is enjoyable, whereas those who anticipated that it would be easy to decline sex had reduced odds of expressing less than strong agreement that spending time with a partner is enjoyable (0.7 each). Youth with a good attitude toward condoms were less likely than those with a poor attitude to report other than strong agreement that physical contact is enjoyable and to have some difficulty showing affection (0.7 and 0.6, respectively). Truancy was positively associated with less than strong agreement that spending time with a partner is enjoyable (1.4).

After characteristics at first intercourse and sexual history were added, results for age and gender were unchanged. Anticipated ease of communicating with one's partner remained associated with enjoyment of physical contact and became a predictor of enjoyment of time spent with a partner (odds ratio, 0.8). Positive attitude toward condoms was associated only with the affection outcome.

No sexual experience variable was associated with all three outcomes. Experience with oral sex and increased frequency of sex in the last 12 months were associated with reduced odds of expressing less than strong agreement that physical contact with a partner is enjoyable

TABLE 4. Odds ratios (and 99% confidence intervals) from analyses assessing characteristics associated with regret at first sex and lack of enjoyment at most recent sex

Characteristic	Regretted first sex (N=3,760)		Did not enjoy most recent sex (N=2,840)	
	Model 1	Model 2	Model 1	Model 2
BACKGROUND				
Gender				
Male (ref)	1.00	1.00	1.00	1.00
Female	2.25 (1.82–2.79)***	2.20 (1.74–2.79)***	2.37 (1.60–3.51)***	2.59 (1.66–4.05)***
Family structure				
Both parents (ref)	1.00	1.00	na	na
One/no parent	1.33 (1.10–1.62)***	1.32 (1.07–1.63)**	na	na
Mother's age				
≥40 (ref)	1.00	1.00	na	na
≤39	1.23 (1.01–1.51)**	1.21 (0.97–1.51)	na	na
SOCIAL INFLUENCES†				
Parental monitoring				
High (ref)	1.00	1.00	1.00	1.00
Medium	1.10 (0.88–1.39)	1.01 (0.79–1.29)	1.10 (0.75–1.61)	1.19 (0.78–1.81)
Low	0.84 (0.65–1.08)	0.69 (0.52–0.90)***	0.76 (0.50–1.18)	0.83 (0.52–1.33)
Religious				
No (ref)	1.00	1.00	na	na
Yes	1.51 (1.12–2.02)***	1.59 (1.15–2.18)***	na	na
Easy partner communication about sex				
No (ref)	1.00	1.00	1.00	1.00
Yes	0.81 (0.67–0.98)**	0.79 (0.64–0.97)**	0.82 (0.58–1.17)	0.87 (0.59–1.27)
FIRST SEX‡				
Age at first sex				
15–16 (ref)	na	1.00	na	na
14	na	1.60 (1.21–2.12)***	na	na
≤13	na	2.02 (1.46–2.80)***	na	na
Relationship before first sex				
Casual (ref)	na	1.00	na	na
Boyfriend/girlfriend	na	0.75 (0.59–0.96)**	na	na
Planning of sex				
Some (ref)	na	1.00	na	1.00
None	na	2.04 (1.61–2.57)***	na	1.11 (0.75–1.64)
Drunk/stoned				
No (ref)	na	1.00	na	na
Yes	na	1.41 (1.12–1.78)***	na	na
Pressure				
None (ref)	na	1.00	na	1.00
From respondent	na	1.35 (0.78–2.35)	na	1.58 (0.59–4.25)
From partner	na	4.20 (3.22–5.47)***	na	1.17 (0.75–1.83)
Regret				
No (ref)	na	na	na	1.00
Yes	na	na	na	2.51 (1.71–3.69)***
SEXUAL HISTORY‡				
Ever had oral sex				
No (ref)	na	na	na	1.00
Yes	na	na	na	0.55 (0.35–0.87)**
Frequency of sex in last 12 months				
na	na	na	na	0.78 (0.71–0.86)***
Relationship before first sex with most recent partner				
Casual (ref)	na	na	na	1.00
Boyfriend/girlfriend	na	na	na	0.45 (0.29–0.70)***
Pressure at most recent sex				
None (ref)	na	na	na	1.00
From respondent	na	na	na	1.89 (0.79–4.47)
From partner	na	na	na	4.98 (3.11–7.99)***

p<.01. *p<.001. †Assessed at Wave 1, except for monitoring. ‡Assessed at Wave 2. Notes: The following variables were associated with the outcome indicated in bivariate analyses and were included in multivariate analyses, but were not significant for either outcome: study and trial group, age at Wave 2, partner's age at first sex (both outcomes); deprivation, mother's age, substance use, truancy, self-esteem, talked about contraception before first sex, contraception used at first sex (regret first sex), condom self-efficacy, contraception used at most recent sex (did not enjoy most recent sex). na=not applicable. ref=reference group.

TABLE 5. Odds ratios (and 99% confidence intervals) from analyses assessing characteristics associated with lower quality of boyfriend/girlfriend relationship

Characteristic	<strong agreement that physical contact is enjoyable		<strong disagreement that it is difficult to show affection		<strong agreement that time spent with partner is enjoyable	
	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
BACKGROUND						
Age at Wave 2†	0.95 (0.92–0.98)***	0.96 (0.93–0.99)**	0.98 (0.95–1.01)	0.99 (0.96–1.03)	0.95 (0.92–0.99)***	0.96 (0.92–0.99)**
Gender						
Male (ref)	1.00	1.00	1.00	1.00	1.00	1.00
Female	1.10 (0.84–1.44)	1.06 (0.79–1.41)	0.66 (0.51–0.85)***	0.68 (0.52–0.90)***	0.76 (0.57–1.02)	0.78 (0.58–1.06)
SOCIAL INFLUENCES‡						
Truancy						
No (ref)	na	na	na	na	1.00	1.00
Yes	na	na	na	na	1.42 (1.02–1.98)**	1.28 (0.90–1.81)
Easy partner communication about sex						
No (ref)	1.00	1.00	1.00	1.00	1.00	1.00
Yes	0.70 (0.53–0.91)***	0.69 (0.52–0.92)**	0.84 (0.65–1.08)	0.82 (0.63–1.07)	0.78 (0.59–1.03)	0.75 (0.56–1.00)**
Easy saying no to something sexual						
No (ref)	1.00	1.00	1.00	1.00	1.00	1.00
Yes	0.90 (0.68–1.18)	0.90 (0.68–1.19)	0.77 (0.59–1.01)	0.79 (0.60–1.05)	0.72 (0.54–0.97)**	0.75 (0.56–1.01)
Attitude toward condoms						
Poor (ref)	1.00	1.00	1.00	1.00	1.00	1.00
Medium	1.01 (0.76–1.36)	1.12 (0.82–1.52)	0.90 (0.67–1.20)	0.94 (0.69–1.26)	1.00 (0.73–1.37)	1.03 (0.75–1.43)
Good	0.69 (0.49–0.96)**	0.75 (0.53–1.06)	0.60 (0.43–0.82)***	0.61 (0.44–0.84)***	0.80 (0.56–1.13)	0.84 (0.58–1.20)
FIRST SEX§						
Drunk/stoned						
No (ref)	na	na	na	1.00	na	1.00
Yes	na	na	na	1.38 (1.02–1.88)**	na	1.22 (0.89–1.68)
SEXUAL HISTORY§						
Ever had oral sex						
No (ref)	na	1.00	na	1.00	na	na
Yes	na	0.46 (0.30–0.71)***	na	0.47 (0.30–0.73)***	na	na
Increased frequency of sex in last 12 months						
na	na	0.83 (0.77–0.90)***	na	0.82 (0.76–0.89)***	na	0.95 (0.88–1.04)
Sex with more than one partner						
No (ref)	na	na	na	1.00	na	1.00
Yes	na	na	na	1.46 (1.06–2.02)**	na	1.31 (0.91–1.88)
Discussed contraception before first sex with most recent partner						
No (ref)	na	na	na	1.00	na	1.00
Yes	na	na	na	0.62 (0.45–0.84)***	na	0.71 (0.52–0.98)**
Enjoyed most recent sex						
Yes (ref)	na	1.00	na	na	na	1.00
No	na	3.01 (1.80–5.05)***	na	na	na	1.93 (1.17–3.18)***

p<0.01. *p<0.001. †Unit of increase is one month. ‡Assessed at Wave 1. §Assessed at Wave 2. Notes: Analytic sample included 1,813 youth who reported having sex more than once. The following variables were associated with the outcome indicated in bivariate analyses and were included in multivariate analyses, but were not significant for any outcome: study and intervention group (all outcomes); condom self-efficacy and regret at first sex (enjoyment of physical contact with partner); planning first sex and relationship before first sex with most recent partner (ease of showing affection and enjoyment of spending time with partner); and deprivation, parental monitoring, age at first sex and pressure at most recent sex (enjoyment of spending time with partner). na=not applicable. ref=reference group.

(odds ratios, 0.5 and 0.8, respectively) and with expressing less than strong disagreement that it is difficult to show affection (0.5 and 0.8, respectively); youth who had talked about contraception before first intercourse with their most recent partner were less likely than others to have some difficulty showing affection and to less than strongly agree that spending time with a partner is enjoyable (0.6 and 0.7, respectively). Having been drunk or stoned at first sex and having had sex with more than one partner were positively associated with difficulty expressing affection (1.4 and 1.5, respectively). Adoles-

cents who did not enjoy their most recent sex were more likely than others to not strongly agree that physical contact and spending time with a partner are enjoyable (3.0 and 1.9, respectively). These models showed no significant gender interactions.

DISCUSSION

To our knowledge, this study is the most comprehensive analysis of young people's evaluation of their early sexual relationships on a large scale in Britain. We hope that it partially redresses the biases of research funding and

professional interests that lead people to focus on negative aspects of young people's sexual relationships reflected in the current literature.

According to our findings, young people's evaluations of their heterosexual experiences by age 16 are generally positive. For most outcome measures, more than three-quarters assessed their sexual relationships positively, although one-third regretted first intercourse.

Some important caveats to this positive overview, however, need to be mentioned. First, young women had twice the odds of young men of rating their experiences of intercourse negatively, and teenagers with younger mothers and those not living with both biological parents were more likely than others to regret first intercourse. The reasons are unclear, but may relate to sexual relationship values within those families.³² Background variables, such as deprivation, and more immediate social factors had limited influence on the quality of sexual experience in the full models. However, even if independent variables lose significance in a multivariate analysis, they may still influence outcomes by operating through more proximate variables. It is therefore worth noting that deprivation, black or "other" ethnicity, truancy, drug use, low self-esteem, anticipated difficulty communicating with a partner, poor attitude toward condoms and anticipated difficulty in saying no to something sexual were all associated with one or more negative outcomes at the bivariate level.

Second, older age at first intercourse was strongly associated with better relationship quality. Young women who first had intercourse at an early age, or in a casual relationship, were particularly likely to report lower quality outcomes.

The contextual factors associated with negative first intercourse experiences—younger age, older partner, casual partner, lack of planning, substance use and pressure (for regret)—may be linked to a lack of control. This is in keeping with Welling and colleagues' concept of limited "sexual competence," which is strongly associated with younger age at first intercourse.³ Similarly, the most important characteristic associated with not enjoying most recent sex was pressure. In contrast, intimacy appeared to improve quality: Delaying intercourse within a relationship was associated with less pressure at both first and most recent intercourse, and having sex with a boyfriend or girlfriend, rather than a casual partner, was associated with greater enjoyment of most recent sex. Young women appeared particularly vulnerable to the effects of less control and intimacy at first intercourse.

Young people's sexual histories were more important than background characteristics in shaping their evaluation of most recent sexual experiences and current relationships with boyfriends or girlfriends. Some evidence suggested that negative experiences at first intercourse patterned subsequent quality of sexual relationships. Further investigation of our findings showed that in some respects (such as the association between partner pres-

sure at first and most recent intercourse), this depended on the partners' being the same on both occasions. Even with a change of partner, however, regret at first intercourse remained associated with lack of enjoyment of most recent intercourse.

Condom or other contraceptive use did not have an independent effect on young people's assessment of their relationships, although control at intercourse (e.g., planning sex and absence of partner pressure) is associated with contraceptive use.³³ This fits with earlier findings from SHARE that condom use did not affect regret about first intercourse,¹⁰ and suggests that physical health risks are less important for quality of experience than emotional risks, as indicated by control and intimacy.

The quality of relationships with boyfriends or girlfriends was positively associated with physical and emotional intimacy, but we cannot assess causality. We cannot be sure that recent sexual experiences were with the current partner, but it seems likely in most cases. Youth tended to feel more positive about the quality of their relationship the more often they had sex in the last year and if they had had oral sex, enjoyed most recent intercourse and communicated with their partner about contraception. This is consistent with the literature showing that adolescents are more positive about both oral and vaginal sex if in a committed relationship rather than a casual one.³⁴ Furthermore, having had more than one sexual partner was associated with greater difficulty in showing affection in one's current relationship. Despite the literature on gendered constructions of sexuality,^{5,14,16-19} these associations between intimacy and perceived relationship quality were not significantly stronger for females than for males.

Our findings broadly support the concept of interactional competence, seen to be crucial to positive outcomes in sex, which develops through childhood, sexual socialization, interaction between sexual partners and reflection on sexual experiences.²⁵ Although other factors should be considered, our findings emphasize the importance of early sexual experiences over prior childhood influences for the quality of sexual experience.

Limitations

Several limitations to this analysis need to be mentioned. Although we used weights to counteract the effects of differential attrition between waves, the selection of samples with complete outcome information for modeling purposes presents a further risk of bias. This was of most concern for the sample reporting first intercourse, because comparisons of youth included and excluded suggested a risk of overestimating the effect of gender and of underestimating the effect of family structure and substance use on quality of first intercourse. The measures of quality of current relationships had ceiling effects, and our measure of pressure could refer to anything from verbal coaxing to physical force. Longitudinal analysis was limited because the data on circumstances of first

intercourse and sexual history were collected at Wave 2, along with the outcome measures. We do not know the duration of youths' current relationships with their boyfriends or girlfriends, and which, if any, sexual experiences occurred within these relationships. The analysis cannot differentiate between the social variations in how sex and relationships are experienced and the social variations in how they are reported. Given public debate about young people's early sexual behavior, those having sex may have been disinclined to acknowledge negative consequences. Furthermore, it may be demeaning to evaluate a current relationship negatively, although with hindsight, this might become one's settled view. Finally, Likert-type scales are a crude way to assess subjective experiences, and ideally, analyses of these quantitative data should be based on young people's own criteria for evaluating their experiences; however, qualitative data on this are scarce.

Conclusion

Overall, it seems that most young people who become sexually active at age 15–16 have a positive experience with sex. The quality of their relationships seems to be enhanced through depth—that is, better communication and greater physical intimacy with a noncasual partner. Those who have less control in their sexual encounters are more likely to have negative experiences; females younger than 14 and those with casual partners are particularly vulnerable at first intercourse. Although some background characteristics are associated with regret about first intercourse, the quality of youths' most recent sexual intercourse and current relationship with a boyfriend or girlfriend is shaped primarily by their sexual history.

Our findings suggest that teenagers should be encouraged to delay first intercourse and restrict it to established relationships. Intensive sexual health interventions should target the highly vulnerable minority who are likely to have first intercourse at a young age or in a situation where they lack control or intimacy—although they may be difficult to identify. This problem, and that of stigmatization, might be avoided with drop-in clinics that young people can access according to their perceived needs. However, targeted approaches alone are not the answer.³⁵ Research is needed to clarify who benefits most (if at all) from populationwide approaches to develop assertiveness, negotiation, planning and communication skills to delay premature sexual intercourse, improve control of sexual encounters and help maintain longer term relationships.

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Acknowledgments

The authors thank the fellow researchers on the SHARE and RIPPLE trials who are not coauthors, in particular, Ann Oakley and Gillian Raab, and our administrators and fieldworkers for their conscientious work. Both trials were funded by the UK Medical Research Council.

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