

Doing More Good than Harm? The Effects of Participation in Sex Research on Young People in the Netherlands

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Abstract Ethical guidelines for research with human participants stress the importance of minimizing risks and maximizing benefits. In order to assist Institutional Review Boards (IRBs) and researchers to make more informed risk/benefit analyses with regard to sex research among adolescents, the current study examined the effects of participation in sex research among 899 young people (15–25 years old). Participants completed three questionnaires on a wide range of sexuality-related measures. They also completed scales measuring their levels of distress, need for help, and positive feelings due to their research participation. In general, negative effects of research participation seemed limited, while benefits of participation appeared substantial. Several differences with regard to sociodemographic characteristics were found (e.g., females experienced more distress than males and younger or lower educated participants experienced more positive feelings). In addition, victims of sexual coercion reported more distress and need for help due to their participation, but also experienced more positive feelings. No significant differences were found in relation to experience with sexual risk behaviors (e.g., experience with one-night-stands).

Several limitations of the study were discussed, as were implications for future research. Overall, the findings caution IRBs and researchers against being overly protective regarding the inclusion of young people in sex research.

Keywords Institutional Review Board · Sex research · Research participation · Research effects · Harm · Benefits

Introduction

Ethical guidelines for research with human participants stress the importance of minimizing potential harm for participants while maximizing the anticipated benefits (American Psychological Association, 2002; National Institutes of Health, 1979; World Medical Association, 2008). Institutional Review Boards (IRBs) determine whether the potential risks for participants are justified and if potential harm is outweighed by the anticipated benefits of the study.

IRBs' and researchers' decisions regarding social or psychological research proposals and protocols seem, due to a lack of sufficient empirical data, mostly based on worst-case scenarios, assumptions, and anecdotes (DePrince & Freyd, 2004; Gunsalus et al., 2007; Newman & Kaloupek, 2004; Oakes, 2002; Rosenbaum & Langhinrichsen-Rohling, 2006; Rosnow, Rotheram-Borus, Ceci, Blank, & Koocher, 1993; Wagener et al., 2004; Walker, Newman, Koss, & Bernstein, 1997). An early study by Ceci, Peters, and Plotkin (1985) showed that IRBs' decisions regarding social and psychological research were also based on sociopolitical concerns. Notably, this study found that proposals on neutral topics (e.g., job discrimination based on height) were more often approved than studies on more sensitive topics (e.g., job discrimination based on gender). In addition to potentially problematic sociopolitical influences,

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another problem is that IRBs and researchers can under- or overestimate the risks of social and behavioral science research (Oakes, 2002).

In the absence of empirical data regarding the effects of participation in sex research on young people, research regarding adolescents and sexuality might be an area in which judgments based on political, cultural, religious or emotional grounds can easily influence the decision of IRBs and researchers. These actors may be hesitant, both with respect to including adolescents who can be seen as a vulnerable population (Flicker & Guta, 2008) as well as in asking questions on sexual topics, which are commonly considered as private and sensitive (Lee & Renzetti, 1990).

Issues regarding subjective decisions and common sense risk–benefit analyses can be solved by providing objective, empirical data about the effects of research participation (Gunsalus et al., 2007; Mustanski, 2011; Newman & Kaloupek, 2004; Oakes, 2002). Unfortunately, even regarding research participation in general, only a few studies have been conducted (DePrince & Freyd, 2004; Kassam-Adams & Newman, 2002; Oakes, 2002; Rosenbaum & Langhinrichsen-Rohling, 2006; Ybarra, Langhinrichsen-Rohling, Friend, & Diener-West, 2009). Jorm, Kelly, and Morgan (2007) concluded in their systematic review of participant distress in psychiatric research that participation overall yielded more positive than negative effects. Langhinrichsen-Rohling, Arata, O'Brien, Bowers, and Klibert (2006) investigated whether participating in research on sensitive issues (e.g., suicidality, drug use, and abusive experiences) was upsetting for adolescents. The majority of participants reported no distress at all and they considered the studies interesting. Young people who had experience with these sensitive behaviors were somewhat more distressed. Ybarra et al. (2009) recently studied the impact of completing self-report questionnaires on violence among young adolescents. The majority of the participants were not upset and agreed that questions like this should be asked to young people. Several studies examined the effects of trauma research (e.g., domestic violence, sexual abuse, injuries or suicidality). These studies confirmed previous findings: participants mostly reported low levels of distress and negative consequences (Cromer, Freyd, Binder, DePrince & Blecker-Bleuse, 2006; DePrince & Freyd, 2004; Edwards, Kearns, Calhoun, & Gidycz, 2009; Griffin, Resick, Waldrop, & Mechanic, 2003; Johnson & Benight, 2003; Newman, Walker, & Gefland, 1999; Ruzek & Zatzick, 2000; Walker et al., 1997).

Trauma-related studies focusing on victims of severe sexual abuse can shed some light on the potential effects of participation in sex research. Trauma-related studies focused on whether participants with a history of (severe) sexual victimization were upset, or more upset than non-victims, when questions were asked about the (abusive) sexual experiences. However, while informative, these studies were conducted with quite homogeneous samples and did not establish whether certain subgroups of victims of sexual abuse are more vulnerable than others to

the potential negative effects of research participation (e.g., younger individuals or persons from socially marginalized communities, such as ethnic minorities) (e.g., Fisher, Kornetsky, & Prentice, 2007; Newman & Kaloupek, 2004). Most trauma-related studies only included women (Griffin et al., 2003; Johnson & Benight, 2003; Newman et al., 1999; Savell, Kinder & Young, 2006; Walker et al., 1997) or students (e.g., Cromer et al., 2006; Edwards et al., 2009; Rojas & Kinder, 2007). In addition, most trauma studies only focused on the effects of asking questions about (severe and enduring) sexual abuse. These studies did not include questions about other sexual (risk) behaviors, such as numbers of sexual partners or types of sexual experiences, as commonly included in sexual (health) research among young people. Asking questions about these sexual topics might be distressing in itself. For example, sexuality is a sensitive, private topic and talking about these private behaviors and thoughts might be upsetting for young people. Often, explicit (adult) language is used, which might also be confronting and disturbing for young people. In addition, surveys of sexual topics deal with behaviors or thoughts that are taboo or regarded as risk behaviors. Recently, Mustanski (2011) examined the reactions of LGBT youth in answering questions about their sexual behavior. The majority of the participants reported that they were comfortable with the question, while 11.1% of the LGBT youth indicated that they felt uncomfortable.

The Current Study

Persisting high rates of sexually transmitted infection (STI) (Gavin et al., 2009), sexual victimization and perpetration (Barter, McCarry, Berredge, & Evans, 2009; Gavin et al., 2009; Young, Grey, & Boyd, 2009), and adolescent pregnancies (Gavin et al., 2009; Organisation of Economic Co-Operation and Development, 2008; Singh & Darroch, 2000) among young people warrant and require further research on their sexual health. It seems therefore important to examine empirically the effects of participation in sex research on young people. This can assist IRBs and researchers in making more informed risk–benefit analyses. Unfortunately, data on the effects of participation in sex research are, to our best knowledge, scarce.

The current study examined the effects of asking questions about various sexual topics in a large-scale sexuality study in a diverse sample of Dutch adolescents. The research questions guiding the current study were: (1) What are the levels of distress, need for help, and positive feelings resulting from participation in a self-report questionnaire study on sexuality; (2) Do negative and positive effects differ between various sociodemographic subgroups with regard to gender, age, educational level, ethnicity, religiosity, and sexual orientation; (3) Do negative and positive effects differ between participants who have experience with different forms of sexual victimization (e.g., verbal manipulation, situational abuse and sexual violence) and adolescents who have no such experiences; and (4)

Do negative and positive effects differ between participants who have experience with sexual risk behaviors (e.g., a high number of sexual partners, sexual experience with casual partners) and participants who have no such experiences?

Method

Participants

The sample consisted of 889 sexually experienced young people in The Netherlands. More females (74.0%) than males (26.0%) participated. The participants were between 14 and 26 years old ($M = 18.70$, $SD = 2.52$), and were roughly equally distributed among different educational levels (48.6% lower educational level, 51.4% higher educational level). Young people from non-Western ethnic backgrounds made up 11.4% of the sample. The majority (67.5%) of the participants did not consider religion of personal importance. Almost one fifth (18.8%) of the sample reported sexual experience with a same-sex partner.

Procedure

This study was part of a survey of the sexual behaviors and experiences of adolescents and young adults in The Netherlands. A non-random sample of participants was recruited advertisements in youth media (e.g., websites, mailing lists, TV programs, and magazines) and on electronic blackboards of several vocational schools. The ads invited participants to visit the website of the study, called "Speak up now!" (in Dutch), and complete an on-line questionnaire regarding their good and their bad sexual experiences. In addition to the questionnaire, the website also contained background information about the survey, contact information of the research team, and a list of care providers with whom the participants could get in touch with if they experienced a need for help due to their experiences or their research participation.

Random sampling was not undertaken, as the study sought to include only sexually active young people 15–25 years old. A random sample of sexually active young people aged 15–25 years can only be recruited by randomly sampling from all young people aged 15–25 years. However, as those who are sexually active make up only a proportion of young people aged 15–25 years, random sampling would require identifying, contacting, and screening large numbers of potential participants, which would not be cost-effective. Also, a random sample would include low numbers of homo- or bisexual young people who are at increased risk for sexual health problems, including experiencing or enacting sexual coercion and engaging in behaviors that pose a higher risk for STI. Instead, the study aimed at including sufficient members of subgroups of young people to enable comparative analyses according to key sociodemographic characteristics, including gender, age, educational level, ethnicity,

religiosity and sexual orientation. Ads were strategically published to promote the inclusion of lower educated, ethnic minority and homo- or bisexual young people in particular.

Three different on-line questionnaires were completed by the participants. The study had a cross-sectional design, but three separate questionnaires were used to decrease the burden on the participants and to be able to base questions about the most prevalent scenarios of sexual coercion in the third questionnaire on the information provided in response to the second questionnaire, which contained detailed questions regarding experiences with sexual coercion. At the end of the first questionnaire, participants were asked whether they were willing to complete two more questionnaires. Participants indicating that they wanted to continue their participation were asked for their e-mail address. Email addresses were stored separately from the data. All data and email addresses were stored on a secured server and were only accessible to the research team. No monetary reimbursement was provided for participation; instead, 10 iPod's Nano, 1 iPod Touch, and 10 gift certificates of 50 euro each were raffled among participants. Informed consent was obtained online from the participants. The study protocol was exempt from formal medical-ethical approval under prevailing laws of The Netherlands.

One month after completing the first questionnaire, participants who provided an e-mail address received a link to the second questionnaire; after 6 months, they received a link to the third questionnaire (which contained the questions regarding the effect of research participation). Of the participants receiving a link ($N = 2,936$), 46.8% completed the second questionnaire ($n = 1,375$) and 30.3% completed the third questionnaire ($n = 889$).

The sample for the present study consisted of the 889 participants who completed the third questionnaire. In comparison to participants completing only the first questionnaire, participants who also completed the third questionnaire more often were women (74.0 vs. 69.6%, $\chi^2(1, N = 889) = 7.96$, $p = .01$), were slightly older ($M = 18.70$ vs. $M = 18.51$, $t(888) = 2.21$, $p = .03$), had higher educational levels (51.4% vs. 37.3%, $\chi^2(1, N = 889) = 75.37$, $p < .001$), more often had Western ethnic backgrounds (88.6 vs. 82.3%, $\chi^2(1, N = 889) = 24.27$, $p < .001$), and more often reported same-sex sexual experiences (18.8 vs. 14.1%, $\chi^2(1, N = 889) = 17.97$, $p < .001$). There were no significant differences with regard to the level of the importance of religion between participants completing only the first and also the third questionnaire (67.5 vs. 69.7%, $\chi^2(df = 1, N = 889) = 1.91$). In addition, the participants completing the third questionnaire did not differ on other independent measures included in the current study, such as experience with verbal manipulation (52.8 vs. 52.6%, $\chi^2(1, N = 765) < 1$), experience with situational abuse (20.0 vs. 21.3%, $\chi^2(1, N = 765) < 1$), experience with sexual violence (12.7 vs. 13.7%, $\chi^2(1, N = 765) < 1$), experience with any form of victimization (58.3 vs. 58.6%, $\chi^2(1, N = 765) < 1$), reporting more than average number of sexual

partners (35.9 vs. 37.4%, $\chi^2(1, N=889) < 1$), and experience with casual sex (49.4 vs. 50.3%, $\chi^2(1, N=899) < 1$).

The first questionnaires consisted of a range of measures pertaining to sociodemographics, background and (sexual) behaviors, sexual motives and attitudes, and sexual and relational communication skills. The second questionnaire consisted of measures pertaining to sexual coercion and violence. The third questionnaire consisted of measures pertaining to the evaluation of various scenarios of potentially unwanted sexual behaviors and experiences. At the end of the third questionnaire, participants were asked a series of questions about the potential effects of their research participation. More information on the specific instruments used in the current study can be found in Kuyper, de Wit, Adam, Woertman, and van Berlo (2010). The specific measures used in the current study are described in more detail below.

Measures

Independent Variables

Sociodemographics Gender indicated whether participants identified as male or female.

Age¹ was measured by asking participants their age in years. On basis of this question, participants were divided into two subgroups: younger than 18 years or 18 years and over.

Educational level was assessed by three questions. The first question examined whether participants were still in school, college, or university or not. If yes, they were asked about their current educational achievement. If they had finished or quit school, college or university, they were asked about the highest level of educational they had completed. On the basis of their answers, participants were divided into two subgroups: higher educational level (finished or still studying at university, college or pre-university education) and lower educational level (finished or still studying at other, lower [vocational] educational levels).

Ethnicity was coded by three items regarding the country in which the participant was born, the country in which their mother was born, and the country in which their father was born. Participants were divided into two subgroups: Dutch or Western participants who were born in the Netherlands or another Western country and of whom both parents were also born in the Netherlands or another Western country, and non-Western participants who were born in a non-Western country, or of whom one or both parents were born in a non-Western country.

Religion¹ was measured by asking what religion currently meant to participants in their lives, with responses given on a five-point scale (1 = means nothing; 5 = means a lot). Participants were divided into two subgroups: those for whom religion was unimportant (scores 1 and 2) and those for whom it was somewhat to very important (scores 3 through to 5).

Sexual orientation was assessed by a behavioral indication. Participants were asked the gender of their sexual partners (1 = only men; 2 = mostly men, sometimes women; 3 = equally often men and women; 4 = mostly women; 5 = only women). Taking the gender of the participant into account, responses were recoded into a dichotomous variable indicating whether participant (also) had sexual experience with a same-sex partner or not.

Sexual Victimization Three different forms of sexual victimization were measured by the Sexual Experience Survey (SES; Koss et al., 2007), which is known for its good reliability and validity. The SES was adapted for the young, partly lower educated, Dutch sample.² It was examined whether participants had experienced sexual victimization since their 14th birthday. Answers were given on a 3-point scale (1 = never; 2 = once; 3 = more than one). Based on the responses, answers were combined into a dichotomous measure indicating whether participants' had experienced a specific type of sexual victimization or not. Experiences regarding the three separate forms of sexual coercion (verbal manipulation, situational abuse, sexual violence) were also combined into one overall measure, indicating whether participants had had experienced *any form of sexual victimization* since their 14th birthday.

Verbal manipulation was examined by three items that indicated whether participants had had sex they did not want to have because their partner verbally manipulated them. The specific items were: "Someone kept insisting or nagging to have sex with me while I did not want to," "Someone became angry, was displeased or said unkind things to have sex with me while I did not want to," and "Someone lied, threatened to end the relationship or threatened to spread rumors to have sex with me while I did not want to."

¹ Age, religion, and number of sexual partners were originally measured with continuous scales. The items were dichotomized to enhance comparability across the different independent variables and ensure more clarity to the reader. Analyses were also run with the original continuous variables and no different results were found.

² The original SES was adapted in several ways, due to cultural and language differences and the fact that the current study used a young sample that also consisted of adolescents from lower educational level. The revision was based on feedback from a pilot group of young people, the advisory board of the study, and an expert in youth communication. The revision was made in collaboration with the author of the original scale (M. P. Koss, personal communications, November 19, 2008; November 24, 2008; January 5, 2009). The short version of the SES was used, but two items from the long version were also included. Several extensive items were either shortened or split into separate items. The "attempt" items were excluded. The phrase "while I did not want to" was added to the questions regarding verbal pressure. Following the suggestion of Price and Byers (1999), the response options "never," "once," and "more than once" were used instead of the original response options "0/1/2/3/3+."

Situational abuse was assessed by one item and indicated whether participants had had sex because their partner took advantage of a situation in which they were intoxicated (“Someone abused me when I was drunk to have sex with me”).

Sexual violence was examined by four items which indicated whether a partner had used severe or criminal forms of pressure in order to have sex with the participant. The specific items were: “Someone forced me to take drugs or drink alcohol to have sex with me,” “Someone threatened to hurt me or my loved ones to have sex with me,” “Someone used force or violence to have sex with me,” and “Someone worked together with other people as a group to have sex with me.”

Sexual Risk Behavior *Number of sexual partners*¹ was assessed by one item asking how many different sexual partners the participants had had in their life. Participants were divided into two subgroups: participants with an average and below average number of sexual partners, and participants with an above average number of sexual partners.

Sex with casual partners was examined by one item asking participants whether they ever had had sex with a casual partner (e.g., a one-night-stand).

Dependent Variables

Three potential effects of research participation were assessed. All answers were given on a 5-point scale (1 = totally disagree; 5 = totally agree).

Distress was assessed with three items. The specific items were: “The questions gave me bad thoughts about things that happened to me,” “The questions made me feel down,” and “The questions made me sad.” A higher score indicated more distress. Internal consistency of the items was good (Cronbach’s alpha = .82) and item scores were averaged.

Need for help was examined by two items that asked participants whether they had experienced a need for help or support due to the questions (“I felt a need for help due to the questions” and “I went looking for help due to the questions”). A higher score indicated a higher need for help. Internal consistency of the items was good (Cronbach’s alpha = .82) and item scores were averaged.

Positive feelings were assessed with four items assessing whether the participants gained anything positive from participating in the study (“I liked it that I was able to give my opinion,” “I found it a relief to share my experiences,” “I think it is important that surveys like this are carried out,” and “I think it is important that young people can speak up about their opinions on sexuality”). A higher score meant that participants derived more positive feelings from their participation. Internal consistency of the items was sufficient (Cronbach’s alpha = .70) and item scores were averaged.

Statistical Analyses

Levels of distress, need for help, and positive feelings were examined by calculating percentages. Mean scores, cross-tabulations, and correlations were used to inspect the balance of and associations between potential negative and positive effects. Differences in experienced effects between various sociodemographic or sexual behavior subgroups were explored using multivariate analyses of variance (MANOVAs). In case of a significant overall effect of a sociodemographic or sexual experience variable on the effect measures, separate univariate analyses of variance (ANOVAs) were performed for distress, need for help, and positive feelings to establish on which measure of experienced effects the groups differed. A significance level of $p = .05$ was used for all analyses. Data analyses were conducted with SPSS (Version 19).

Results

Reported Levels of Distress, Need for Help, and Positive Feelings

As can be seen in Table 1, one in four participants reported distress (e.g., feeling down or sad), but only 3.5% of the sample experienced a need for help. In contrast to these negative effects of research participation, the vast majority (96.5%) of participants reported positive feelings due to their participation. Correlation analyses showed that experiencing distress or a need for help did not exclude deriving anything positive from participation, as would be indicated by negative correlations between distress or need for help, and positive feelings. The positive correlation between distress and positive feelings demonstrated that participants who experienced distress due to the questions were also more likely to experience positive feelings ($r = .10$, $df = 887$, $p < .01$). The absence of a correlation between need for help and positive feelings showed that participants who felt a need for help did not report more or less positive feelings ($r = .00$, $df = 887$). As was to be expected, there was a significant positive correlation between experiencing distress and need for help ($r = .49$, $df = 887$, $p < .001$).

To examine the balance of positive and negative experienced effects, mean scores were calculated. These showed that both the mean score for distress ($M = 1.94$) and need for help ($M = 1.35$) (both indicating, on average, disagreement with statements about the negative effects and need for help) were lower than the mean score for positive feelings ($M = 3.89$) (which indicated that, on average, participants agreed with statements about the positive consequences).

Further inspection of the data was conducted to examine whether “negative balances” (costs exceeding benefits) existed on an individual level. Four participants reported agreement

Table 1 Prevalence of experienced effects of participation in the study ($N = 889$)

	% (Totally) agree
Distress	
The questions gave me bad thoughts about things that happened to me	16.5
The questions made me sad	7.8
The questions made me feel down	16.5
(Totally) agree with at least one distress item	26.7
Need for help	
I felt a need for help due to the questions	2.4
I went looking for help due to the questions	1.9
(Totally) agree with at least one need for help item	3.5
Positive feelings	
I liked it that I was able to give my opinion	75.9
I found it a relief to share my experiences	28.7
I think it is important that surveys like these are carried out	89.2
I think it is important that young people can speak up about their opinions on sexuality	93.1
(Totally) agree with at least one positive feeling item	96.5

with at least one distressing item, while not reporting any positive feelings (.4% of the total sample). Two participants reported experiencing a need for help without any positive feelings (.2% of the sample).

Differences Between Sociodemographic Subgroups

Table 2 shows the differences in effects of research participation by sociodemographic characteristics of participants. The overall MANOVAs for gender, Wilks' lambda = .98, $F(3, 885) = 4.73$, $p < .01$, partial $\eta^2 = .02$; age, Wilks' lambda = .99, $F(3, 885) = 3.43$, $p = .01$, partial $\eta^2 = .01$; education, Wilks' lambda = .97, $F(3, 885) = 10.47$, $p < .001$, partial $\eta^2 = .03$; and religion, Wilks' lambda = .99, $F(3, 885) = 3.30$, $p = .02$, partial $\eta^2 = .01$, were significant, indicating differences in at least one type of experienced effect of research participation between men and women, younger and older participants, lower and higher educated participants, and participants who considered religion to be important or not. The MANOVA for ethnicity yielded a marginally significant effect regarding differences in experiences related to research participation between Western and non-Western participants, Wilks' lambda = .99, $F(3, 885) = 2.32$, $p = .07$, partial $\eta^2 = .01$. The MANOVA for sexual orientation was not significant, Wilks' lambda = .99, $F(3, 885) < 1$, partial $\eta^2 = .01$.

Separate ANOVAs for levels of distress, need for help, and positive feelings showed which experienced effects of research participation differed between the subgroups. Women experienced more distress due to the questions than men. Younger

participants reported more often that they derived positive feelings from their research participation than their older peers. Two differences were found between participants of lower and higher educational achievement: higher educated participants less often reported that they needed help, but also experienced lower levels of positive feelings. Religious participants experienced more positive feelings than participants who considered religion unimportant. The marginally significant statistical effect suggested that participants of non-Western backgrounds tended to experience more distress due to the questions than young people from Western backgrounds.

Differences Between Sexual Victimization Subgroups

Table 2 also displays the differences in experienced effects between participants who had experienced different types of sexual victimization and participants who did not report such experiences. The MANOVAs for verbal manipulation, Wilks' lambda = .92, $F(3, 761) = 22.28$, $p < .001$, partial $\eta^2 = .08$; situational abuse, Wilks' lambda = .98, $F(3, 761) = 5.06$, $p < .01$, partial $\eta^2 = .02$; sexual violence, Wilks' lambda = .92, $F(3, 761) = 21.09$, $p < .001$, partial $\eta^2 = .08$; and any of these forms of sexual victimization, Wilks' lambda = .91, $F(3, 761) = 25.03$, $p < .001$, partial $\eta^2 = .09$, were significant. ANOVAs showed a fairly consistent picture: adolescents who had experience with sexual victimization reported more distress and need for help, but these participants also derived more positive feelings from their participation. The only exception was being a victim of situational abuse. Participants with this experience reported more distress due to the questions, but did not report a higher need for help or more positive feelings.

Differences Between Sexual Risk Behavior Subgroups

Table 2 also shows the results of the analyses of potential differences between participants who did and did not have experience with sexual risk behaviors. The MANOVAs for number of sexual partners, Wilks' lambda = .99, $F(3, 885) = 1.85$, $p > .10$, partial $\eta^2 = .01$; and sexual experience with casual partners, Wilks' lambda = .99, $F(3, 885) = 2.13$, $p = .09$, partial $\eta^2 = .01$; both yielded the same results: no significant differences between adolescents with or without experience with these sexual risk behaviors were found.

Discussion

The current study examined the effects of participation in sex research on young people, using data from a large-scale study on sexual coercion among young people in The Netherlands. Overall, the negative effects of participation in this study appeared to be limited, while the benefits of participation seemed substantial. On an individual level, the balance between "avoiding

Table 2 Differences in experienced effects of participation in the study for sociodemographic, sexual victimization, and sexual risk behavior subgroups ($N = 889$)

	<i>N</i>	Distress					Need for help					Positive feelings				
		<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	η^2	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	η^2	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	η^2
Sociodemographic characteristics																
Gender																
Male	231	1.76	.86	12.02	<.01	.01	1.33	.63	.75	ns	.00	3.83	.74	2.34	ns	.00
Female	658	2.01	.96				1.36	.61				3.90	.64			
Age																
<18	352	1.98	.95	1.10	ns	.00	1.37	.63	.24	ns	.00	3.97	.68	9.45	<.01	.01
18/18+	537	1.92	.94				1.35	.61				3.83	.66			
Education																
Lower level	431	1.98	.98	1.03	ns	.00	1.43	.68	15.02	<.001	.02	3.97	.69	14.01	<.001	.02
Higher level	456	1.91	.92				1.28	.54				3.81	.65			
Ethnicity																
Western	788	1.92	.94	^a			1.34	.59	^a			3.88	.67	^a		
Non-Western	101	2.16	.98				1.46	.76				3.95	.66			
Religion																
Not important	619	1.91	.91	3.19	ns	.00	1.35	.59	.11	ns	.00	3.85	.67	7.29	.01	.01
Important	270	2.02	1.02				1.36	.66				3.98	.67			
Sexual orientation																
No same-sex partner	720	1.93	.94	^a			1.35	.60	^a			3.88	.67	^a		
Same-sex partner	169	2.00	.96				1.35	.66				3.91	.65			
Sexual victimization																
Verbal manipulation																
Never	361	1.67	.80	61.41	<.001	.07	1.24	.54	20.03	<.001	.03	3.84	.65	7.15	.01	.01
At least once	404	2.18	.98				1.44	.65				3.97	.67			
Situational abuse																
Never	612	1.88	.91	12.29	<.001	.02	1.33	.60	.58	ns	.00	3.89	.66	2.81	ns	.00
At least once	153	2.17	1.01				1.38	.64				3.99	.66			
Sexual violence																
Never	688	1.86	.87	44.78	<.001	.06	1.30	.56	24.47	<.001	.03	3.86	.64	16.69	<.001	.02
At least once	97	2.51	1.14				1.62	.81				4.16	.75			
Any form of victimization																
Never	319	1.61	.77	69.96	<.001	.08	1.23	.50	19.01	<.001	.02	3.83	.65	7.78	.01	.01
At least once	446	2.16	.98				1.42	.66				3.96	.67			
Sexual risk behavior																
Number of partners																
(Below) average	570	1.90	.92	^a			1.32	.57	^a			3.90	.68	^a		
Above average	318	2.02	.98				1.40	.66				3.86	.66			
Casual partner																
Never	450	1.90	.92	^a			1.32	.58	^a			3.93	.68	^a		
At least once	439	1.99	.97				1.38	.65				3.85	.66			

^a The overall MANOVA was not significant; therefore, separate ANOVAs were not conducted

harm” and “doing good” seemed to be disrupted for only a small fraction of the participants.

Differences in experienced effects of research participation were found between sociodemographic subgroups. More women than men were distressed by the questions. A potential expla-

nation for this gender difference might be that women are generally less permissive towards sexuality than men (Ahrold & Meston, 2010; Petersen & Hyde, 2010), and might therefore be more distressed by answering questions about sexuality-related topics. Another difference with regard to sociodemographics

was that young people with lower educational backgrounds reported experiencing a higher need for help due to the questions. An explanation for this difference might be that lower educated adolescents are, in general, less likely to seek help from specific mental health services (e.g., a psychologist) when experiencing emotional or mental health problems (Vanheusden et al., 2008). It could be that they reported a higher need for help because they did not previously seek help with the problems they experienced with sexuality-related experiences (e.g., sexual victimization). Differences between sociodemographic groups in positive effects were also found: more younger participants, participants of lower educational backgrounds, and participants who considered religion important reported deriving positive feelings from their participation. Younger participants and participants of lower educational levels might be more likely to derive positive feelings from their participation because of their limited possibilities of joining research projects. Most studies are carried out using student samples, excluding young people from lower educational backgrounds and, often, focus on participants of 18 years and older, since younger individuals are seen as too vulnerable to participate (Flicker & Guta, 2008).

Victims of several types of sexual coercion reported higher levels of distress and need for help due to their research participation. This is in line with previous studies focusing on domestic violence and severe sexual abuse (e.g., Cromer et al., 2006; DePrince & Freyd, 2004; Griffin et al., 2003; Langhinrichsen-Rohling et al., 2006). It makes sense that young people who have had negative sexual experiences have more bad thoughts about what happened in their past when being asked about their sexual experiences, and that they feel more distressed or in need of help due to the questions. Importantly, however, these young people also derived more positive feelings from their research participation than adolescents who reported no experience with sexual victimization. Explanations for these higher levels of positive feelings among victims might be that their participation gives them a sense of purpose, empowerment, self-awareness or self-acknowledgement (Johnson & Benight, 2003; Jorm et al., 2007). There were no significant differences in effects of research participation of participants whose sexual behavior is often regarded as “risky” by sexual health professionals (e.g., a higher number of sexual partners or having had experiences with one-nights-stands), and participants who did not report such potential sexual risk behavior.

Although a minority of participants reported feelings of distress or experiencing a need for help due to participation in the study, it is important that these negative experienced effects of research participation are taken seriously. Ybarra et al. (2009) encouraged researchers to include questions about research participation so that participants who were distressed could easily be detected and provided with care.

Without wanting to dismiss the potential negative effects of participation in sex research on young people, questions can be asked about the meaning of the levels of distress and need for

help that were reported. For example, ethical guidelines regarding minimizing harm are often interpreted as avoiding negative effects that exceed levels of distress experienced in daily life or during routine medical or psychological examinations (Becker-Blease & Freyd, 2006; DePrince & Freyd, 2004; Ybarra et al., 2009). Young people who experience distress or a need for help due to their participation in sex research might also experience distress when being confronted with sexuality issues in daily life (e.g., in conversations with peers, movies, TV-shows, video games, magazines). It is also not examined whether the experienced levels of distress exceed those experienced during other routine examinations. Furthermore, there are uncertainties regarding the dynamics of the reported distress and need for help. The negative feelings raised by the questions could be a transitory state. It is not surprising that young people feel sad or down directly after answering questions about negative experiences like sexual violence, but feeling distressed is not the same as being (psychologically) harmed (Becker-Blease & Freyd, 2006; DePrince & Freyd, 2004; Widom & Czaja, 2005; Ybarra et al., 2009), and these feelings might quickly fade away. A note of caution can also be made regarding the positive feelings derived from sex research participation. For example, the Office for Human Research Protections (OHRP) in the United States pointed out that feelings of benevolence derived from research participation should be not considered as benefits for the participants (OHRP, 2010).

The current study had several limitations. The main limitations were related to the sample and recruitment strategy. The study did not recruit a random sample of young people. Instead, the study oversampled participants with lower educational backgrounds and homosexual/bisexual participants to enable comparative analyses by these and other sociodemographic characteristics. Also, more women than men participated in the study. A more gender-balanced sample is desirable in future studies.

Furthermore, the sample consisted of self-selected participants who were recruited with ads asking them to speak up about their good and bad sexual experiences. This (self) selection may have resulted in a bias towards higher levels of positive feelings derived from participation in the study, since young people who considered the study unimportant or did not care about being able to share their experiences or give their opinion might not have enrolled in the study or not completed (all) questionnaires. Selection bias might also have influenced the negative feelings derived from participation, but it is less clear in which direction. Walker et al. (1997) suggested two options: people who are more upset about the topic might not participate (resulting in an underestimation of negative effects) or individuals who are less touched by the topic participate less (resulting in an overestimation of negative effects).

In addition to the potential effects of self-selection, the response rate of participants in the study who also completed the third questionnaire was limited (30.3%). There is no doubt that

this low response rate is a major limitation of the current study that should be avoided in future studies. However, it is important to note that low response rates are more often a problem in the Netherlands. Response rates in the Netherlands tend to be lower than in other Western countries and they seem to decline during the recent years (de Leeuw & de Heer, 2001; Stoop, 2005). Other large-scale sexuality studies in the Netherlands report equally low, or lower, response rates (e.g., 28% in a recent population study of sexual health of Bakker & Vanwesenbeeck, 2006; 20% in a recent population study of sexual health of Bakker et al., 2009; 24% in a representative youth study of sexual health of de Graaf, Meijer, Poelman, & Vanwesenbeeck, 2005).

The response was also not random, as reflected in differences in sociodemographics of participants completing the different questionnaires. Women, older participants, and young people of higher educational levels were significantly more likely to continue with the study. However, only the difference with respect to education seemed substantial, with 51.4% of the present study reporting higher educational level compared to 37.3% in the original sample. As higher educated participants less often reported that they needed help and reported lower levels of positive feelings derived from their research participation, this may have contributed to an underestimation of the levels of need for help and positive feelings due to their research participation. Participants who did not complete and participants who did complete the third questionnaire did not differ on the other independent measures such as the various types of sexual victimization experiences or sexual risk behaviors.

In addition to limitations related to the sample and recruitment a further limitation of the current study was the lack of a comparison group. Future studies might benefit from adding measures assessing potential effects of participation to surveys of other health issues (e.g., on mental or physical health problems), collect information on experiences related to routine medical or psychological examinations, or administer a short questionnaire after sexuality-related activities (e.g., watching a documentary on sexual violence). This would enable researchers to put the reported levels of distress, need for help, and positive feelings into perspective and examine the specific risk and benefits of participation in sex research.

Despite the limitations and remaining questions, the current study showed that young people were not severely distressed by participating in sex research, and actually gained benefits from it. This helps to caution researchers and IRBs in being overly protective and overly sensitive towards sex research among young people, and overemphasizing their vulnerability. An overly sensitive attitude might even send the wrong message of considering young people incompetent to join sex research and undermine their agency. As Widom and Czaja (2005) point out, the ethical principle of respect even demands that vulnerable groups like young people have the right to join research projects, and ethical principles warn against the exclusion of specific groups from the

benefits that scientific research has to offer. Ultimately, young people might also experience negative effects (e.g., not feeling like being heard or being represented, and no development in scientific knowledge on their sexual health) from *not* participating in sex research.

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