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What Youth Think About Participating in Research About Exposure to Self-directed Violence

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ABSTRACT

Purpose: To help reduce suicide and other forms of self-harm, research with youth and their exposure to self-directed violence is critical. Yet, we know little about how participants feel about taking part in a survey that asks about such exposure. The present article aims to understand the survey experience of youth and young adult participants in a study about exposure to self-directed violence.

Methods: A total of 990 participants, aged 13–23 years, were recruited through study advertisements on Facebook and Instagram between November 27, 2020, and December 4, 2020. Data for this cross-sectional study were collected in the United States.

Results: A total of 37.6% of participants felt somewhat upset from their survey experience, and 14.9% were upset or extremely upset with the highest levels of upset reported by cisgender sexual minority girls and gender minority youth. Lower odds of saying one's contributions were valuable were noted for cisgender sexual minority boys and gender minority youth compared to cisgender heterosexual boys, as well as youth who reported exposure to self-directed violence. Eight in 10 youth felt it was important to ask questions about self-directed violence exposure in surveys.

Conclusions: The research and practitioner communities should be particularly mindful of highrisk populations and identify innovative ways to better support and encourage their voice in research, as well as highlight the value of their participation. The results provide some guidance for those conducting research with youth on this topic.

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IMPLICATIONS AND CONTRIBUTION

Youth report a wide range of emotions after participating in survey research about exposure to selfdirected violence, with higher levels of being upset reported by sexual and gender minority youth. Findings suggest researchers should take steps to help facilitate the well-being of youth participants during the survey process.

Self-directed violence (SDV), that is, anything a person does intentionally that can cause injury to one's self, including death [1], is a significant public health issue despite voluminous prevention and intervention strategies directed at both the at-risk individual and gatekeepers. To more effectively move the needle to reduce SDV, continued research with youth is critical. Concern raised by some about the potential harm that involving youth in sensitive research may present serves as a barrier, however [2].

As a means of addressing ethical concerns in research, one study involving a national sample of youth, aged 10-17 years, reported that 4.5% were 'upset' about questions querying violence exposure. Less than 1%, (0.8%) were "pretty" or "a lot" upset; 0.3% said they would not participate again [3]. An online

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Table 1

Feeling upset by survey questions about self-directed violence by demographic characteristics (N = 990)

Construct	n	Not at all upset $(n - 471) n (\%)$	Somewhat upset $(n - 372) n (\%)$	Upset–extremely upset $(n - 147) n (\%)$	p value
		(II = 47 I) II (%)	(II = 572) II (%)	(II = 147) II (%)	
Age					
13-17 years	666	318 (47.7)	247 (37.1)	101 (15.2)	.87
18–23 years	324	153 (47.2)	125 (38.6)	46 (14.2)	
Race ^a					
White	750	345 (46.0)	294 (39.2)	111 (14.8)	.15
Black	83	43 (51.8)	26 (31.3)	14 (16.9)	.47
Asian	91	48 (52.7)	30 (33.0)	13 (14.3)	.56
Native American	25	11 (44.0)	12 (48.0)	2 (8.0)	.45
Mixed race	103	44 (42.7)	43 (41.7)	16 (15.5)	.57
Hispanic/Latino ethnicity (any race)	177	86 (48.6)	68 (38.4)	23 (13.0)	.75
Sexual and gender identity					
Cisgender heterosexual boys	192	118 (61.5)	48 (25.0)	26 (13.5)	<.001
Cisgender sexual minority boys	231	113 (48.9)	97 (42.0)	21 (9.1)	
Cisgender heterosexual girls	232	113 (48.7)	83 (35.8)	36 (15.5)	
Cisgender sexual minority girls	163	71 (43.6)	65 (39.9)	27 (16.6)	
Gender minority (transgender	172	56 (32.6)	79 (45.9)	37 (21.5)	
boys and girls, gender diverse youth)					
Family income					
Higher than average	203	105 (51.7)	72 (35.5)	26 (12.8)	.16
Similar to average	504	239 (47.4)	190 (37.7)	75 (14.9)	
Lower than average	208	86 (41.3)	82 (39.4)	40 (19.2)	
Not sure	75	41 (54.7)	28 (37.3)	6 (8.0)	
Status in school					
Middle school (6-8 grade)	153	59 (38.6)	65 (42.5)	29 (18.9)	.19
High school (9-12 grade)	557	278 (49.9)	203 (36.5)	76 (13.6)	
High school graduate (not enrolled)	58	28 (48.3)	19 (32.8)	11 (19.0)	
Dropped out	21	6 (28.6)	11 (52.4)	4 (19.1)	
Higher education (trade or college)	201	100 (49.7)	74 (36.8)	27 (13.4)	

Note: Row percentages are displayed in this table.

^a Multiple responses were possible.

survey of youth, aged 10–15 years, asked questions about exposure to and victimization and/or perpetration of violence: 23% said they were upset by these questions [4]. Those who were younger and exposed to direct and indirect violence were more likely to be upset. In both studies, the authors conclude that the risk of distress was no greater than that posed by everyday life events.

Research suggests that asking participants about suicide does not increase risk of suicidal ideation or behaviors [5]. Less is known about how participants feel about taking part in a survey that asks about exposure to SDV, knowing someone who has died by suicide, attempted suicide, experienced suicidal ideation, or nonsuicidal self-injury. Because lifetime exposure to suicidal behavior is associated with trauma symptoms, suicide ideation, and thoughts of self-harm among youth [6] and is a particularly strong predictor of depression in comparison with interpersonal violence [7], understanding the impact of participating in research on this topic is important for informing the development of future surveys that are sensitive to the feelings of participants. Moreover, it is possible that some youth may be more affected than others: youth with sexual and gender minority (SGM) identities experience elevated rates of suicidal behavior [8] and associated risk factors including depression [9,10], substance use [9,11-13], and peer victimization [14,15] because of discrimination and structural inequalities [16,17]. Responding to questions about SDV exposure may amplify these disparities.

To address these noted gaps, we aim to better understand the survey experience of youth when the content is focused on exposure to SDV. Specifically, we will examine the following:

- (1) The characteristics of participants who report being (a) somewhat and (b) extremely upset about exposure to SDV survey items compared with those not upset.
- (2) The characteristics of participants who (a) disagreed and (b) agreed that their contribution to the survey was valuable.
- (3) The characteristics of participants who strongly agreed it was important to ask people questions about exposure to SDV in a survey.

Methods

The Exploring Your YOU-niverse Study is a series of independent national surveys of adolescents and young adults. The most recent survey was designed to understand exposure to SDV and included an over-sample of SGM youth. A cohort of 1,031 youth and young adults (aged 13–23 years) was recruited between November 27, 2020, and December 4, 2020. Table 1 provides details of the demographic characteristics of the sample.

Participants were recruited through advertisements on Facebook and Instagram that encouraged youth and young adults to 'have their voice heard' and 'make a difference.' Study aims were not mentioned to reduce self-selection bias based on interest in a particular topic. Those interested clicked on the online advertisement, which linked them to a secure survey website. This first page provided a study description and screening questions to determine eligibility. Youth who were eligible (i.e., 13–23 years of age, living in the United States, English speaking) then provided informed assent before continuing with the main survey. A waiver of parental permission was granted because

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Table 2

Likelihood of being upset by psychosocial characteristics and experience

Construct	% of somewhat upset youth versus not at all upset			% of upset-extremely upset versus not at all upset				
	Unadjusted		Adjusted		Unadjusted		Adjusted	
	RRR (95% CI)	p value	RRR (95% CI)	p value	RRR (95% CI)	p value	RRR (95% CI)	p value
Demographic								
Age	0.98 (0.93, 1.03)	.36	-		0.95 (0.88, 1.01)	.12	-	
White race	1.38 (1.00, 1.90)	.05	1.44 (1.02, 2.04)	.04	1.13 (0.73, 1.73)	.59	1.13 (0.71, 1.80)	.61
Black race	0.75 (0.45, 1.24)	.26	-		1.05 (0.55, 1.97)	.89	-	
Mixed race	1.27 (0.81, 1.98)	.29	1.29 (0.80,2.08)	.29	1.19 (0.65, 2.17)	.58	1.03 (0.53,1.99)	.92
Hispanic ethnicity	1.00 (0.70, 1.42)	.99	-		0.83 (0.50, 1.37)	.47	-	
Sexual and gender identity								
Cisgender heterosexual boys	Ref		Ref		Ref		Ref	
Cisgender sexual minority boys	2.11 (1.37, 3.25)	.001	1.97 (1.27, 3.05)	.003	0.84 (0.45, 1.58)	.60	.75 (0.39, 1.43)	.39
Cisgender heterosexual girls	1.81 (1.16, 2.80)	.008	1.81 (1.16, 2.83)	.009	1.45 (.82, 2.55)	.20	1.44 (.81, 2.58)	.22
Cisgender sexual minority girls	2.25 (1.40, 3.62)	.001	2.08 (1.27, 3.40)	.003	1.73 (0.93, 3.19)	.08	1.35 (0.71, 2.56)	.36
Gender minority youth (transgender boys and girls, gender diverse youth)	3.47 (2.15, 5.60)	<.001	2.90 (1.75, 4.79)	<.001	3.00 (1.65, 5.43)	<.001	2.10 (1.12, 3.95)	.02
Low income	1.27 (0.90, 1.78)	.17	1.12 (.79, 1.59)	.53	1.67 (1.09, 2.58)	.02	1.30 (.82, 2.05)	.26
Psychosocial								
Social support	0.99 (0.95, 1.02)	.48	1.01 (0.97, 1.05)	.69	0.93 (0.89, 0.97)	.001	0.96 (0.91, 1.01)	.11
Depressive symptoms	1.03 (1.00, 1.07)	.04	.98 (.94, 1.03)	.47	1.14 (1.09, 1.20)	<.001	1.10 (1.03, 1.17)	.006
Subjective well-being	0.96 (0.93, .99)	.003	0.97 (0.93, 1.01)	.09	0.92 (0.88, .95)	<.001	0.99 (0.94, 1.05)	.74
Experience								
Exposure to SDV	1.63 (1.13, 2.36)	.01	1.26 (0.85, 1.88)	.25	1.98 (1.14, 3.45)	.01	1.30 (0.73, 2.34)	.37
Resources								
Having someone to go to for advice	0.78 (0.57, 1.06)	.11	0.86 (0.62, 1.21)	.39	0.70 (0.47, 1.05)	.09	1.00 (0.64, 1.56)	.99
Knowledge of crisis/hotline	1.12 (0.85, 1.47)	.43	-		.98 (.68, 1.43)	.93	-	

Note: Unadjusted *p* values are from chi-square tests; adjusted *p* values are from a multinomial logistic regression analysis. Mixed race was controlled for in the adjusted model given those who identify as such were more likely to be nonresponders to this dependent variable.

Cl = confidence interval; Ref = reference category; RRR = relative risk ratio; SDV = self-directed violence.

requiring parental consent could potentially place youth in situations where their sexual experiences and/or sexual attraction could be unintentionally disclosed to their parents. Appropriate mechanisms were in place to protect the children, such as localized referrals to mental health supports.

Participants were given a \$5 incentive as an Amazon gift code for completing the survey. Ineligible people were directed to a web page that included links to general resources for youth. To promote a diverse sample, demographic quotas were identified. Once the targeted number of participants in a particular group had been achieved, subsequent youth in this group who were otherwise eligible were deemed ineligible. The protocol was reviewed and approved by Pearl Institutional Review Board.

Measures

Exposure to SDV. Participants were asked about exposure to other people's suicide attempts, suicidal ideation, and non-suicidal self-injury [18,19]:

- "Has someone close to you ever tried to kill him or herself on purpose (like by shooting or cutting him or herself or taking too many pills or drugs)?";
- (2) "Now thinking of situations where someone was thinking about, considering, or planning to kill themselves. Has someone close to you ever thought about killing themselves but did not make an attempt?"; and
- (3) "Now thinking of situations where someone was hurting themselves on purpose without wanting to die, like cutting or burning. Has someone close to you ever hurt themselves on purpose without wanting to die, as far as you know?"

A positive response to any of these three types of exposures was coded as exposure (1) versus no exposure (0).

Feeling upset over questions about SDV. Participants were asked how the survey questions about "people I know who have tried to hurt themselves" made them feel. Response options ranged from 1 (not at all upset) to 5 (extremely upset). Responses were coded into three groups: (1) not at all upset, (2) somewhat upset, and (3) upset or extremely upset. For those who said they were at all upset, an open-end follow-up question asked what was upsetting.

Feeling like contributions are valuable. Participants were asked how much they agreed with the following statement: "I feel my participation in this survey was valuable". Response options were captured on a 5-point Likert scale and coded into two variables reflecting those participants who (1) disagreed or strongly disagreed versus all others and (2) agreed or strongly agreed versus all others.

Importance of asking questions about SDV. Participants were asked how much they agreed with the following statement: "it is important to ask people my age questions like these". Response options ranged from 1 (strongly disagree) to 5 (strongly agree) and were dichotomized at one standard deviation above the mean and higher based on the skewed distribution of the data with positive scores indicating stronger agreement that these questions should be asked.

Resources. Youth were asked, "Do you have someone you can go to for advice if you are worried about a friend or family member hurting themselves on purpose?" (yes/no/not sure). We also

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Table 3

Psychosocial characteristics and experience related to appraisal of feeling like one's survey contributions were valuable...or not

Construct	% of disagree or strongly disagree versus all other				% of agree-strongly agree versus all other			
	Unadjusted		Adjusted		Unadjusted		Adjusted	
	OR (95% CI)	p value	Or (95% CI)	p value	OR (95% CI)	p value	OR (95% CI)	p value
Demographic								
Age	1.01 (0.96, 1.05)	.78	_		0.99 (0.95, 1.04)	.79	_	
White race	1.43 (1.05, 1.94)	.03	1.15 (0.79, 1.67)	.48	0.74 (0.55, 0.99)	.05	0.88 (0.62, 1.25)	.49
Black race	0.62 (0.37, 1.02)	.06	0.69 (0.40, 1.21)	.20	2.00 (1.27, 3.14)	.003	1.73 (1.04, 2.86)	.03
Mixed race	0.93 (0.61, 1.43)	.75	0.89 (0.56,1.43)	.64	1.02 (.67, 1.55)	.93	1.00 (0.63,1.57)	.99
Hispanic ethnicity	0.78 (0.55, 1.10)	.16			1.25 (.90, 1.74) .19			
Sexual and gender identity								
Cisgender heterosexual boys	Ref		ref		ref		Ref	
Cisgender sexual minority boys	2.29 (1.51, 3.48)	<.001	1.93 (1.25, 2.99)	.003	0.49 (0.33, 0.74)	.001	0.58 (0.38, 0.87)	.009
Cisgender heterosexual girls	1.12 (0.72, 1.73)	.61	1.01 (0.64, 1.61)	.95	0.94 (0.64, 1.39)	.77	0.98 (0.66, 1.45)	.92
Cisgender sexual minority girls	2.09 (1.33, 3.29)	.001	1.61 (1.00, 2.61)	.05	0.78 (0.51, 1.20)	.26	0.93 (0.59, 1.45)	.74
Gender minority (transgender	3.45 (2.21, 5.37)	<.001	2.20 (1.37, 3.53)	.001	0.44 (0.29, 0.69)	<.001	0.63 (0.39, 1.01)	.05
boys and girls, gender diverse youth)								
Low income	1.40 (1.03, 1.91)	.03	1.03 (0.74, 1.43)	.87	1.00 (0.73, 1.37)	.99	-	
Psychosocial								
Social support	0.93 (0.90, 0.96)	<.001	0.96 (0.93, 1.0)	.05	1.06 (1.03, 1.10)	.001	1.03 (0.99, 1.06)	.19
Depressive symptoms	1.11 (1.07, 1.15)	<.001	1.01 (0.96, 1.06)	.65	0.97 (0.94, 1.00)	.05	1.07 (1.02, 1.12)	.004
Subjective well-being	0.90 (0.88, 0.93)	<.001	0.94 (0.91, 0.98)	.004	1.09 (1.06, 1.12)	<.001	1.10 (1.06, 1.14)	<.001
Experience								
Exposure to SDV	8.92 (4.98, 15.97)	<.001	7.59 (4.09, 14.10)	<.001	0.42 (0.30, 0.59)	<.001	0.51 (0.36, 0.73)	<.001
Resources								
Having someone to go to for advice	0.61 (0.46, 0.81)	.001	0.81 (0.59, 1.12)	.20	1.41 (1.05, 1.90)	.02	1.08 (0.78, 1.49)	.65
Knowledge of crisis/hotline	1.15 (0.88, 1.49)	.31	-		1,04 (0.80, 1.35)	.79	-	

Note: Unadjusted p values are from chi-square tests; adjusted p values are from logistic regression analyses. Mixed race was controlled for in the adjusted model given those who identify as such were more likely to be nonresponders to these dependent variables. Cl = confidence interval; OR = odds ratio; Ref = reference category; SDV = self-directed violence.

asked whether they knew of a specific place, like a hotline or crisis center, that they could share with someone they think may want to hurt themselves on purpose (yes/no).

Psychosocial characteristics

An adapted measure of social support [20] had eight items, three referring to an adult family member, four referring to friends, and one referring to a special person. The original scale has 12 items; the present study focused more specifically on friends and family. Response options ranged from (1) very strongly disagree to (4) very strongly agree. Items were combined to reflect a total social support score with higher values indicating more support (Mean = 23.3, standard deviation = 4.09). Sufficient internal reliability was noted ($\alpha = 0.82$).

Depressive symptoms. Using the Modified Depression Scale [21], participants were asked to report the frequency of six symptoms in the past month. Total scores were sums of the 5-point Likert scale items, with response options ranging from never (1) to always (5); higher scores represented more depressive symptomatology. Reliability for the scale was acceptable ($\alpha = 0.79$).

Subjective well-being was measured using seven items that assessed general life satisfaction from a strength-based perspective [22]. Total scores were the sum of the 4-point Likert scale items; higher scores represented better subjective well-being. Reliability was excellent ($\alpha = 0.89$).

Demographic characteristics. Age was dichotomized to reflect adolescents (aged 13–17 years) and young adults (aged 18–23 years). Self-reported household income was measured as: lower than average, about average, and higher than average. Youth

reported their race and ethnicity. Sexual and gender identity and sex assigned at birth were used to categorize respondents as (1) cisgender heterosexual male, (2) cisgender sexual minority male, (3) cisgender heterosexual female, (4) cisgender sexual minority female, and (5) gender minority. Gender minority youth were not further stratified by sexual identity because only 2.3% (n = 4) identified as heterosexual.

Data analysis

Missing data were generally low and never greater than 5% and, in all cases, replaced with the item mean for sum scores and symptom absent for dichotomous measures. There were some differences among those who did and did not answer the three main study outcomes (i.e., upset, value of participation, and importance of SDV research): nonresponders were less likely to report SDV exposure and more likely to identify as mixed race. As such, these were controlled for in all multivariate analyses, regardless of the level of significance at the bivariate level.

The research questions around our main outcomes of interest varied, and thus, the regression analyses were specifically planned based on what we felt was important to know and share about these constructs. To address Research Question (RQ) 1, demographic characteristics were compared across the three levels of feeling upset: not at all upset, somewhat upset, and upset/extremely upset using chi-square statistics. We then conducted a series of unadjusted multinomial logistic regressions to examine how participants with varying levels of feeling upset compared with those who were not upset across demographic and psychosocial characteristics (e.g., depressive symptoms), exposure to SDV, and SDV resources with feeling somewhat upset (vs. not at all upset) and feeling upset/extremely upset (vs.

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Table 4

Psychosocial characteristics and experience related to appraisal of importance of asking questions about exposure to SDV

Construct	Strongly agree important to ask questions about SDV in surveys						
	Unadjusted		Adjusted				
	OR (95% CI)	p Value	Or (95% CI)	p Value			
Demographic							
Age	1.05 (1.01, 1.10)	.03	1.04 (0.99, 1.09)	.08			
White race	1.00 (0.75, 1.34)	.98	_				
Black race	1.01 (0.64, 1.58)	.97	_				
Mixed race	0.72 (0.48, 1.09)	.12	0.71 (0.47,1.09)	.12			
Hispanic ethnicity	1.15 (0.83, 1.59)	.40	_				
Sexual and gender identity							
Cisgender heterosexual boys	ref		ref				
Cisgender sexual minority boys	0.88 (0.59, 1.29)	.50	0.81 (0.55, 1.21)	.31			
Cisgender heterosexual girls	1.23 (0.84, 1.81)	.29	1.22 (0.83, 1.80)	.32			
Cisgender sexual minority girls	1.45 (0.95, 2.20)	.09	1.23 (0.79, 1.90)	.36			
Gender minority (transgender boys and girls, gender diverse	1.32 (0.87, 2.00)	.19	1.11 (0.72, 1.72)	.64			
youth)							
Low income	1.16 (0.86, 1.58)	.33	_				
Psychosocial							
Social support	1.02 (0.99, 1.05)	.20	_				
Depressive symptoms	1.03 (1.00, 1.07)	.03	1.04 (1.00, 1.07)	.04			
Subjective well-being	1.01 (0.98, 1.03)	.64	_				
Experience							
Exposure to SDV	1.57 (1.11, 2.20)	.01	1.44 (1.00, 2.06)	.05			
Resources							
Having someone to go to for advice	1.44 (1.08, 1.91)	.01	1.49 (1.10, 2.00)	.009			
Knowledge of crisis/hotline	1.29 (1.00, 1.66)	.05	1.20 (0.92, 1.56)	.18			

Note: Unadjusted *p* values are from chi-square tests; adjusted *p* values are from logistic regression analyses. Mixed race was controlled for in the adjusted model given those who identify as such were more likely to be nonresponders to this dependent variable.

CI = confidence interval; OR = odds ratio; Ref = reference category; SDV = self-directed violence.

not at all upset) as the comparison groups (Table 2). Then, a series of qualitative open-ended responses about why participants were upset were content coded to describe the source of their distress. Principles of content coding were applied with firstlevel codes developed by the second author and a research assistant, who both then split up the coding of all responses [23]. To address RQ2, unadjusted and adjusted odds ratios examined disagreeing (vs. all other) and agreeing (vs. all other) that one's contribution to the survey was valuable across demographic, psychosocial, SDV exposure, and resource variables using logistic regressions (Table 3). Finally, to address RQ3, the unadjusted odds of youth agreeing/strongly agreeing (vs. all other responses) that it was important to ask survey questions about SDV exposure were assessed across the same characteristics and were measured using a series of logistic regression analyses (Table 4). For each multivariate analysis, unadjusted variables significant at $p \leq .10$ or lower were included in the final parsimonious model.

Results

Varying levels of feeling upset resulted from the survey experience

Nearly half of youth (47.6%) said the survey questions about exposure to SDV did not make them at all upset, 37.6% were somewhat upset, and 14.9% were upset or extremely upset. Differences by degree of upset were noted based on sexual and gender identity: higher levels of upset were reported by cisgender sexual minority girls and gender minority youth (Table 1). No significant differences were observed by other demographic characteristics.

Table 2 shows the unadjusted and adjusted multinomial logistic regression models estimating participant feelings of

being upset. After accounting for all other influential factors identified in the unadjusted models, the relative odds of being somewhat upset were 1.97 times higher for cisgender sexual minority boys, 1.81 for cisgender heterosexual girls, 2.08 for cisgender sexual minority girls, and 2.90 for transgender boys and girls and non-binary youth, collectively referred to as gender minority youth, than those for cisgender heterosexual boys. Adjusted odds of feeling upset/extremely upset were significantly higher for gender minority youth in comparison to cisgender heterosexual boys. Furthermore, for every one-point increase in depressive symptomatology, there was a 1.10-fold increase in relative risk of feeling upset/extremely upset about the SDV questions. Although exposure to SDV was related to being both somewhat upset/extremely upset in the unadjusted models, this became nonsignificant in the multivariate models.

Questions about SDV exposure elicit different emotions and memories

Overall, 447 of the 519 (86%) participants who said they were at least somewhat upset wrote responses to the open-ended question about what was upsetting. The most frequent response was that the survey brought up difficult or bad memories (n = 238, 53.2% of those who answered the question), for example, "being reminded of dark times", "remembering the pain my friends felt during those times", and "just the return of memories of those times and what I was feeling while they happened". Participants also noted that taking the survey spurred self-reflection, including thinking about one's own mental health and struggles (n = 89, 20.9%). One participant noted, "honest look at my own life", whereas another wrote, "thinking 6

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Table 5

Recommendations for future research on youth exposure to self-directed violence

1.	Attach clinical response protocols to research on self-directed violence.
2.	Include resources inclusive of sexual and gender minority youth and their experiences within research protocols.
3.	Provide resources that support participants' need for more information about ways they can help.
4.	Provide contexts in survey items to make sure the questions do not induce guilt or lead participants to think there was more they could do.
5.	Include questions about distress as a result of participation.
6.	Include reminders throughout the survey that their participation is important to bolster the value youth place on their opinions and experiences.

about my personal mental health and realizing that I do not have too many people close to me to talk to".

In addition, a number of participants noted that suicide was a 'heavy topic' and it can be hard to think about young people wanting to harm themselves (n = 69, 15.4%). Participants remarked, "they're just sensitive topics to discuss" and "the constant use of the term 'hurting themselves'". A smaller number of participants noted feeling negatively about themselves (n = 12, 2.7%) or feeling they had not done enough to help (n = 37, 8.3%). One participant stated, "the fact that I didn't do enough of the right things". Another said, "thinking about how I could have helped more". A third participant shared, "just thinking about how I couldn't help my friend". Some participants also noted that suicide is a private topic and that it was difficult to report about someone else's story: "It's someone else's personal life that's not mine to share, even if it's anonymous".

SGM youth were less likely to feel their contributions to the study were valuable

There was a range of responses about feeling like one's contribution to the study was valuable: 37.5% agreed/strongly agreed, 37.4% disagreed/strongly disagreed, and the remaining participants felt neutral (25.1%). Several factors were significantly related to disagreeing that one made a valuable contribution to the study (Table 3). Cisgender sexual minority boys, cisgender sexual minority girls, and gender minority youth were more likely than cisgender heterosexual boys to disagree that their contribution was valuable. Knowing someone with SDV was related to 7.59 increased odds of not feeling like one's participation was valuable. Social support and subjective well-being were inversely related to feeling like their participation was valuable.

Agreeing that one's contributions were valuable was lower for cisgender sexual minority boys and gender minority youth than that for cisgender heterosexual boys. Youth exposed to SDV were less likely to feel like they made a valuable contribution. On the other hand, Black youth were more likely than non-Black to agree that their contributions were valuable; this was also true for youth with higher depressive symptoms and subjective wellbeing.

Most youth felt it was important to be asking questions about SDV

Eight in 10 youth (79.6%) said they agreed (31.6%) or strongly agreed (48.0%) that it was important to ask questions about SDV

exposure in surveys; only 2.8% somewhat or strongly disagreed (Table 4). For every one-point increase in depressive symptomatology, there was a corresponding 1.04 increased odds of strongly agreeing that it is important to ask questions about SDV in surveys. Youth with SDV exposure and those with access to someone they could go to for advice if they were worried about a friend or family member hurting themselves on purpose were also more likely than those who did not endorse those items to agree it is important to ask these types of questions in surveys.

Discussion

Findings from this national sample of adolescents and young adults provide some guidance for those conducting research with youth about exposure to others' SDV. Almost 1 in 7 participants reported feeling upset or extremely upset over the questions about exposure to SDV. This does not necessarily mean that these youth will have persistent and long-term impact as a result of their participation; nonetheless, steps in the survey process need to be taken to mitigate potential distress. In the present study, we included a clinician experienced in telehealth who recontacted participants who provided responses suggesting follow-up may be needed. This clinician provided local resources via text messaging, telephone conversations, and email. All participants also were provided with confidential, free hotline resource numbers, websites, and chat lines at the end of the survey. Additional recommendations can be found in Table 5.

Feeling extremely upset from survey questions about SDV was overwhelming reported by gender minority youth. Survey questions can trigger memories of one's emotionally difficult experiences. The finding that youth with higher depressive symptoms were more likely to be extremely upset over the survey experience further supports this idea. Moreover, previous studies suggest that SGM youth have higher rates of co-occurring SDV exposure and personal history with SDV [8,24]. It is possible that the greater likelihood of exposure to others' SDV, combined with a higher likelihood of depressive symptomatology, is driving part of this relationship for gender minority youth. Findings do suggest that survey protocols need to include provisions for subgroups of youth who are more likely to endorse the outcome of interest and, therefore, emotional impact of the survey questions.

It is noteworthy that a number of respondents in the survey felt upset because they felt like they did not do or know enough to help. Implementation of prevention programs to help youth better access resources to not only help themselves but also support friends should be included as a central element of gatekeeper training [25,26]. This finding also has implications for how we ask questions on surveys. In the current survey, we purposefully used language to indicate that helping may not have been possible to not trigger guilt or suggest that a specific response was 'right'. The literature on bystander intervention related to interpersonal violence has not examined this as a possible iatrogenic effect of surveys. Current findings emphasize the importance of framing survey questions in a way that do not induce guilt or lead participants to think that there was more they should have done.

Study findings also document the striking disparities between youth who did and did not feel like their contribution was valuable. In general, youth with more marginalized identities based on gender and sexual minority status felt less like their contribution mattered. Researchers and other professionals who work directly with youth need to do more to bolster the value these youth place on their opinions and, perhaps, themselves. Adding narrative about this in surveys may be helpful—including text reminding participants of why we want to hear from them or providing examples of how information gained in the past has been used. In this way, researchers need to interact more with participants to message purpose and uses of research. On the other hand, youth with exposure to SDV were seven times more likely than those not exposed to disagree that their contributions were valuable. Given that SDV-exposed youth have elevated levels of depressive symptoms [7], this may reduce their ability to see value in their contributions. Furthermore, youth exposed to SDV may be sensitized to how difficult it is to help, and that perception may carry over to their views of the role of research as well.

At the same time, it is encouraging that most youth (8 in 10) felt it was important to ask questions about SDV in surveys. This suggests that youth are aware of the importance of this topic and feel it is helpful to have their voices heard in research. In all human subject research, we must weigh the potential risks of participation with the benefits. The results of these analyses suggest youth often feel the benefits outweigh the risks in surveys about exposure to SDV.

Limitations

Although the sample is national and therefore geographically diverse, it is not necessarily nationally representative. Although survey aims were not included during recruitment to reduce selection bias, as with most research, aims were included as part of the assent/consent process and thus may have introduced some selection bias at this stage based on decisions to participate. The data are cross-sectional, which limits our understanding of how distress over survey experience may persist overtime.

Conclusions

This national study of almost 1,000 13- to 23-year-olds across the United States provides a critical look into the impact that asking questions about one's exposure to SDV has on their survey experience. Findings suggest that survey questions need to be written to be sensitive to the variety of experiences of participants, and protocols need to be in place for those who provide responses that suggest distress.

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