



# Teen Dating Violence: Youths' Knowledge and Experience of Unhealthy Relationships

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## Abstract

**Purpose** Teen dating violence (TDV) is an underrecognized significant public health concern. Research is needed to understand where youth learn about or are exposed to information about TDV and the nature of youths' knowledge. This study examines sources of information where youth passively learn about TDV, demographic differences in the incidence of TDV, and perceived changes in knowledge of TDV after attending a TDV prevention program.

**Method** Data were extracted from a program evaluation of “*In Their Shoes*.” Knowledge and experiences of TDV were assessed after attending the program. Participants included 1,361 youth in grades 7th – 12th (49.1% female, 58.7% White).

**Results** Findings were consistent with literature indicating inter-individual differences in TDV incidence, with females and older youth at higher risk. Youth reported receiving information about TDV primarily from parents and caretakers, and this effect was moderated by age, with older youth relying more on media (the internet, social media, TV) than younger youth.

**Conclusions** The current study fills a gap in knowledge concerning where youth receive information on TDV. Findings highlight differential experiences of unhealthy relationships by gender, age, and race and help emphasize the need to address gender disparities and inclusivity in prevention efforts. Attending “*In Their Shoes*” was associated with increases in knowledge on recognizing patterns of unhealthy relationships, steps to take to remove oneself from an unhealthy relationship, and helping friends remove themselves from an unhealthy relationship. School-based randomized trials are needed.

**Keywords** Teen dating violence · School-based prevention program · Sources of information · Unhealthy relationships · Youth

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For the last two decades, teen dating violence (TDV) has been acknowledged as a pressing societal issue and has recently been identified as an underrecognized, significant public health concern (Centers for Disease Control and Prevention [CDC], 2022; Howard et al., 2007; Murray & Azzinaro, 2019). TDV is broadly defined as physical, psychological, sexual abuse, harassment, and stalking in the context of romantic or consensual relationships among individuals aged 12–18 (National Institute of Justice, 2017). Reports estimate that approximately 20% of adolescents have experienced physical dating violence and 33% experience non-physical (i.e., mental or verbal) dating violence (see Storer et al., 2015; Wincentak et al., 2017). Rates of nonphysical abuse are higher when also accounting for perpetration; approximately two-thirds of adolescents who are currently or recently involved in dating relationships have reported experiencing or perpetrating psychological violence (Mumford et al., 2020). Indeed, research indicates that up to one

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in five adolescents have reported being victims of physical and/or sexual violence, with one in eight adolescents in dating relationships admitting to committing such violence (Development Services Group, Inc., 2022; Mumford et al., 2020). The prevalence of TDV among youth is particularly concerning, as adolescents who are victims of TDV may report experiencing serious injuries, report poor mental and/or physical health, engage in “high risk” behaviors such as substance use and sexual risk, and continue the cycle of dating violence in their adult relationships (Banyard & Cross, 2008; CDC, 2022; Exner-Cortens et al., 2013; Howard et al., 2007; Howard et al., 2013; Teten Tharp et al., 2017).

Some evidence suggests that youth may differentially experience dating violence based on age, gender, race, and other cultural factors, though findings are often mixed or contradictory. For example, it has been suggested that aggressive behavior towards dating partners tends to reach its highest point during early adolescence and declines with age (see Capaldi & Langhinrichsen-Rohling, 2012); however, a meta-analysis including teens aged 13.9–18.3 years showed that older teens reported higher rates of sexual TDV and age had no effect on the report of physical TDV (Wincentak et al., 2017). Some research indicates that females experience more instances of dating violence compared to males. Data from the CDC Youth Risk Behavior Survey and the National Intimate Partner and Sexual Violence Survey found that one in eleven female teens, compared to one in fourteen male teens, reported experiencing physical dating violence in the last year (CDC, 2020). In a sample of 88,219 adolescents, Fix et al. (2021) identified that 10% of girls and 7% of boys report experiencing physical TDV, and more than twice as many girls (13%) reported experiencing sexual TDV compared to boys (6%). However, in a sample of 2,655 students, Taylor and Mumford (2016) found no differences in victimization or perpetration of sexual dating violence between adolescent girls and boys. Furthermore, evidence suggests racial disparities in TDV victimization. Among US high school students, TDV victimization is nearly double among Black students compared to White students, and a larger proportion of Hispanic students (11.4%) report experiencing physical TDV compared to White, non-Hispanic students (7.6%) (see Murray & Azzinaro, 2019). Furthermore, Fix et al. (2021) identified that 13% of Native North American, 12% of Hawaiian/Pacific Islander, and 11% of multiracial youth reported experiencing physical TDV compared to 7% of White youth. Youth with intersecting social identities may also have increased risk of TDV (Fix et al., 2021). For example, cultural minority girls and youth from disadvantaged neighborhoods have reported higher rates of both experiencing and perpetrating physical TDV (Wincentak et al., 2017).

Given the effect of TDV on youths’ mental health, physical health, academic achievement, and its association with the

development of high-risk and aggressive behaviors, several school-based programs have been established to address this public health issue (De La Rue et al., 2017). Many school-based TDV prevention efforts focus on person-level changes, such as increasing awareness, changing attitudes about relationships, promoting positive behaviors, and reducing aggressive behaviors (De La Rue et al., 2017; Lee & Wong, 2020). While short-term success is observed in these programs, more promising results come from interventions that address violence and gender attitudes in the school, community, and society (Whitaker & Savage, 2014). Such interventions may integrate concepts founded in the human rights capability approach, which is centered on recognizing human dignity, promoting pursuit of freedom and opportunity, and addressing structural injustices (Nussbaum, 2007; Sen, 1999). A human rights capability approach in TDV programming may provide a human-centered perspective on promoting well-being and reducing the incidence of violence while accounting for diverse individual experiences of those affected by TDV (Strenio, 2020; Whitaker & Savage, 2014). An example of applying a human rights capability approach to TDV programming includes shifting the focus from addressing the consequences of TDV to fostering an environment where youth prevent power imbalances and control, as well as improve their understanding of equal rights, respect, and dignity among all individuals. Youth perspectives and critical thought, often lacking in TDV research, can give insight into the ways youth conceptualize well-being, bodily integrity, and protection against violence within their socio-ecological contexts (Geurts et al., 2024). Furthermore, implementing this approach in a school-based setting, where youth form and practice relationships, may achieve relevancy and sustainability by helping youth feel supported in their social environments within the school while supporting existing school efforts (Debnam & Temple, 2021; Flaspohler et al., 2012; Longworth et al., 2024; Weems et al., 2015).

Theoretically, knowledge is an internal factor that can influence attitudes and perceived behavioral control (Ajzen, 2020; Fosnot & Perry, 1996; Genner & Süß, 2017; Smetana et al., 2015), and how, where, and what youth learn about healthy and unhealthy relationships may be protective or increase risk depending on the source and type of information received. Unfortunately, the nature of youths’ knowledge as well as where and how youth learn about TDV is not well understood. Several theories guide explanations for how youth learn to identify and prevent TDV. Constructivist learning theory emphasizes the active learning process, where youth build upon their foundational knowledge of TDV through their own experiences and by asking questions (Fosnot & Perry, 1996). Socialization theory posits that social groups and society (such as parents, teachers, peers, and media) play a fundamental role in shaping youths’ understanding of TDV

through lessons, discussion, and shared experiences (Gener & Süß, 2017; Smetana et al., 2015). Current research on where youth learn about TDV emphasizes help-seeking trends and active information-seeking about TDV, showing differences across age, gender, and culture or ethnic background (see Alleyne-Greene et al., 2014; Elias-Lambert et al., 2014; Ocampo et al., 2007). For example, evidence suggests youth who seek information or help regarding teen dating violence differ in where they seek information, with younger adolescents seeking help from parents compared to older adolescents who a) seek help from peers and b) are less likely to seek school or health professional help (Alleyne-Greene et al., 2014; Elias-Lambert et al., 2014). While the literature provides some data on where youth seek (i.e., construct) information on TDV, there are gaps in knowledge about where youth learn to identify and prevent TDV in general (i.e., passively learn through socialization). Some evidence in both predominantly White (McCurdy et al., 2021) and culturally diverse (Cala & Soriano-Ayala, 2021) samples of youth suggests that youth may learn more about healthy and unhealthy relationships from parents and caretakers, though where and how youth are passively socialized regarding TDV is not well known. Thus, there is a need to broaden our understanding of where youth are more generally exposed to these concepts.

Using data collected as part of an evaluation of the modified “*In Their Shoes*” TDV prevention program, we had the opportunity to add to the existing literature on youths’ sources of information on TDV. Parents/caregivers, teachers, friends, and media (the internet, social media, TV) are common sources of information for youth, and we explore how often youth report receiving information about TDV from these sources. Based on previous literature, youth receive the most information about healthy and unhealthy relationships from parents and caretakers (McCurdy et al., 2021). Thus, we hypothesize that youth will receive more information about TDV from parents and caretakers compared to teachers, friends, and social media. Furthermore, we contribute to the existing literature on how youth differentially experience TDV based on demographic characteristics. Based on the existing literature, we hypothesize that females will report greater occurrences of experiencing unhealthy relationships, older teens will report more occurrences of experiencing unhealthy relationships compared to younger teens, and cultural minority youth will report greater instances of TDV (CDC, 2020; Wincentak et al., 2017). Given that this study was conducted as part of a program evaluation, and no systematic evaluation of the “*In Their Shoes*” program exists, we also report if youth perceived increases in their knowledge of TDV after attending the program.

## Method

### Participants

Demographic information of the sample is presented in Table 1. Data are from eight public middle and high schools in both urban and rural Iowa ( $n = 1361$ ). Most students ( $n = 1026$ ) were enrolled in schools ( $n = 3$ ) where 53.6% to 76% of students were eligible for free or reduced lunch. As part of a statewide effort to educate youth, the Iowa Attorney General’s Office partnered with the Iowa Health and Human Services and our team to facilitate the well-being of Iowa’s youth and provide life-skills programming to middle and high schools. Eight schools invited our team to deliver the “*In Their Shoes*” program (details of this delivery described further below) to Family and Consumer Sciences classes, Health classes, or related courses. The grades receiving “*In Their Shoes*” ranged from grade 7 to grade 12, and students’ ages ranged from 12 to 18 years. Gender was nearly equally distributed between males and females. Students were majority White (58.7%) and in 7th–8th grade (59.2%). For the current data, the delivery of “*In Their Shoes*” took place between the years 2018–2020.

### Measures

A post-program survey was created for program evaluation purposes. The current study includes data from two editions of the post-program survey. The first edition of the survey was delivered in 2018–2019 ( $n = 1049$ ) and the second edition of the survey was delivered in 2020 ( $n = 312$ ). Differences in survey editions are described below and in Section A in the Supplement.

### Unhealthy Relationship Experiences

On both Survey Edition 1 and Survey Edition 2, to capture youths’ relationship experience/dating status, youth identified “Dated but not now,” “Currently dating,” or “Never dated before.” Youth reported their experiences with TDV by responding “Never,” “Previously,” “Currently,” and/or “Not Sure” to the statement “I have been in an unhealthy/abusive relationship.”

### Sources of Information

Survey Edition 2 included questions about sources of information, asking students to rate on a 4-point Likert scale (“Not much,” “A little,” “Somewhat,” “A lot”) how often they receive information on TDV from the following options:

**Table 1** Demographics by Survey Edition

Demographic	Total Sample <i>n</i> (missing) (%)	7th-8th Grade 2018–2019 (%)	9th-12th Grade 2018–2019 (%)	7th-8th Grade 2020 (%)	9th-12th Grade 2020 (%)
<b>School</b>					
School 1	<b>551</b>	99.7	0.3	100.0	0.0
School 2	<b>302</b>	0.0	100.0		
School 3	<b>173</b>	100.0	0.0		
School 4	<b>11</b>	0.0	100.0		
School 5	<b>43</b>	0.0	100.0		
School 6	<b>17</b>	0.0	100.0		
School 7	<b>69</b>	15.6	84.4		
School 8	<b>195</b>	0.0	100.0	70.9	29.1
<b>Grade</b>					
<b><i>n</i></b>	<b>1208 (153)</b>	<b>557</b>	<b>428</b>	<b>158</b>	<b>65</b>
7	38.6	55.0		100.0	
8	20.6	45.0			
9	10.8		30.4		
10	8.7		24.5		
11	13.0		21.5		100.0
12	8.4		23.6		
<b>Gender</b>					
<b><i>n</i></b>	<b>1337 (24)</b>	<b>555</b>	<b>428</b>	<b>157</b>	<b>65</b>
Male	49.4	51.0	48.8	46.5	50.8
Female	49.1	47.6	49.8	52.2	49.2
Other	1.5	1.4	1.4	1.3	0.0
<b>Race</b>					
<b><i>n</i></b>	<b>1328 (308)</b>	<b>562</b>	<b>427</b>	<b>150</b>	<b>65</b>
White	58.7	51.1	66.3	39.3	83.1
Black	7.4	10.8	2.8	11.3	4.6
Asian/Pacific Islander	3.5	5.9	2.8	0.7	1.5
Native American	2.3	1.4	0.7	11.3	0.0
Hispanic/Latino	13.9	16.4	21.3	0.7	0.0
Multi-ethnic/Other	6.7	9.4	5.2	6.7	7.7
Not Listed	7.5	5.0	0.9	30.0	3.1
<b>Ethnicity</b>					
<b><i>n</i></b>	<b>1246 (115)</b>	<b>109</b>	<b>105</b>	<b>64</b>	<b>3</b>
Hispanic	23.9	8.7	8.4	5.1	0.2
<b>Relationship Status</b>					
<b><i>n</i></b>	<b>1352 (9)</b>	<b>424</b>	<b>425</b>	<b>154</b>	<b>65</b>
Currently dating	23.8	17.1	32.3	15.2	36.9
Dated but not now	51.1	50.9	44.4	45.6	50.8
Never dated before	30.4	32.0	23.4	36.7	12.3
Missing	0.7	0.0	0.0	2.5	0.0

Survey Edition 1 = 2018–2019; Survey Edition 2 = 2020. Participants self-reported demographic data. A change in Survey Edition 2 included adding a question for ethnicity, e.g., “Are you of Hispanic or Spanish origin?” This change was to correct a mistake in Survey Edition 1, where “Hispanic/Latino” was categorized as an option for race. Percentages may not equal 100 due to rounding. Totals across survey editions may not equal the sample total due to missing data

“parent/caretaker,” “teacher,” “friend,” “media,” or “other classes.” For purposes of the survey, “teacher” referred to instructors of courses where “*In Their Shoes*” was typically

delivered (e.g., Family and Consumer Sciences, Health) while “other classes” referred to classes where “*In Their Shoes*” was not typically delivered (e.g., Social Studies).

## TDV Knowledge Assessment

To capture youths' knowledge on how to recognize TDV and remove themselves or help others remove themselves from unhealthy relationships, on Survey Edition 1, students answered "Before/After this presentation, I was able to recognize unhealthy patterns/abuse in relationships" and "Before/After this presentation, I knew some steps to remove myself from an unhealthy relationship or help a friend get out of an unhealthy relationship" on a Likert scale of 1–3 ("Not at all," "Somewhat," "A lot"). During program development, preliminary analysis of responses on the first edition of the survey (2018–2019) indicated that youth showed interest in presenting what they learned about preventing TDV among peers. Thus, for Survey Edition 2 (2020), a new Likert scale with a rating system of 1–4 was used ("Not much," "A little," "Somewhat," "A lot"), wording on questions was edited to be more precise about identifying steps and rights for the self and for peers, and two additional questions were added: "Before/After this presentation, I was able to recognize unhealthy patterns/abuse in relationships," "Before/After this presentation, I knew some steps to take to remove myself from an unhealthy relationship," "Before/After this presentation, I knew some steps to take to help a friend get out of an unhealthy relationship," and "Before/After this presentation, I know how my partner/friends deserved to be treated in a relationship."

## Procedures

The program was delivered as a partnership between participating schools and The Child Welfare Research and Training Program (CWRTP) at Iowa State University (see Lee et al., 2020; McCurdy et al., 2021; Weems et al., 2020). The Iowa State University Institutional Review Board (IRB) determined this study was 'exempt' in accordance with federal regulations (45CFR46.102 and 21CFR56). All procedures performed involving human participants were in accordance with the ethical standards of the institutional and/or national research committee (ISU IRB number 19–327). Students provided assent before participation and survey responses were anonymous. Guided by the human rights capability approach, our team delivered a modified TDV program. The original program, "*In Their Shoes*" (Washington State Coalition Against Domestic Violence, 2017), is a simulation designed to teach school-age youth how to be aware of and respond to TDV, identify effective communication strategies to engage with peers about dating violence, identify supportive resources, and engage in self-reflection about youths' own relationships. The modifications to the program included adding four activities developed by our team. The additional activities were designed to teach youth to identify healthy and unhealthy characteristics in relationships,

identify how certain characteristics are examples of respect or imbalance of power and control, understand the continuum of healthy to dangerous relationships, reflect on past and current friendly or romantic relationships, and communicate with peers about unhealthy relationships (see Section B in the Supplement for more information). Program delivery lasted approximately 75 to 80 min. Facilitators asked teachers to prepare students for a simulation that may be sensitive in nature by priming them for topics on healthy and unhealthy relationships. School counselors were requested to be present in the event of strong emotional responses. The simulation delivery took place in designated locations within schools (classrooms, media center/library, etc.). Sessions of simulations may have included students from one grade or students from multiple grades. Differences in grades attending a single simulation were due to classroom composition or the schools' request. "*In Their Shoes*" and the additional activities developed by our team were presented in the following order: "teen dating violence simulation," "power and control wheel," "spectrum activity," "step to the line activity," and "snowball activity." Most activities are based on the "teen dating violence simulation" (i.e., "*In Their Shoes*"), where youth play the role of one of a selection of teen characters who have experienced physical abuse, emotional abuse, sexual abuse, or psychological abuse, including homophobia, pregnancy, sexting, or stalking. Additional details of the program are supplied in the supplement. Program delivery lasted approximately 75 to 80 min as class time permitted. Study authors were not fully independent of the intervention; the authors CFW, JNM, HLR, RE, JAL, and KG conceived of the intervention and evaluation design, BHM was responsible for original draft preparation, BHM and CFW performed independent data analysis, and authors MGL, RE, JAL, and KG were involved with intervention delivery/data collection. The program was delivered, and assessments were collected by members of the research team (Authors MGL, RE, JAL, & KG). Data analysis and study design were conducted independent of the intervention and data collection team (by Authors BHM, JNM, HLR & CFW). Additional details of our general CWRTP partnership approach for this work are in Weems et al. (2020)

## Data Analyses

All data were analyzed with SPSS version 28 (IBM, 2020). For determining differences across sources of information, a repeated measures analysis of variance (RM ANOVA) was used to determine within-subjects effects. To test for moderating effects of gender, grade, and race, three separate RM ANOVAs were conducted to test for between-subjects effects of gender, grade, and race. Any significant interactions were decomposed using a series of one-way ANOVA pairwise comparisons with Bonferroni corrections. When

Mauchly's Test of Sphericity indicated a violation of the assumption of sphericity and equal variances could not be assumed, degrees of freedom were modified via the Greenhouse–Geisser procedure. Paired-samples *t* tests were conducted for analyses of pre- and post-ratings of self-reported knowledge. Pre- and post-knowledge questions from the two survey versions were analyzed separately due to their differing Likert scales (see Measures section for details). To assess youths' experiences of unhealthy relationships, chi-square tests of independence were used to determine differences in TDV experiences across gender, grade, and race. Adjusted residuals (AR), which take into account the sample size and marginal totals, are reported to indicate whether the observed frequency is greater (positive) or fewer (negative) than the expected frequency. Adjusted residuals with absolute values greater than 1.96 are significant at the 0.05 level. To maximize available data, cases were excluded from an analysis only if they had missing data for the specific variables involved in that analysis (i.e., pairwise deletion of cases; IBM, 2020). For example, if a participant did not respond to the question "After this presentation, I know how my partner/friends deserved to be treated in a relationship," their data would be excluded from that analysis, but their responses to other survey items would still be included where their data were complete.

## Results

### Preliminary Data Analysis

After data cleaning (i.e., removal of students who did not provide consent to participate in the study and duplicate data entries), the sample for 2018–2019 was reduced to 1002, and the sample for 2020 was reduced to 359. Due to a sample size of less than 2, we were unable to analyze data regarding Hispanic/Latino and Asian/Pacific Islander subgroups on 2020 survey responses. Examination of the study variables indicated non-normal distribution for responses to "After this presentation, I know how my partner/friends deserved to be treated in a relationship" ( $M = 3.66$ ,  $SD = 0.70$ , Kurtosis = 4.52). Given the nature of the variables (e.g., Likert scales), parametric analyses were supplemented with non-parametric alternatives.

### Aim One: Where Do Youth Learn about TDV?

When testing our hypothesis that youth receive more information about TDV from parents and caregivers compared to teachers, friends, media, and other classes, results indicated an overall significant effect of source of information [ $F(3.57, 966.56) = 37.18$ ,  $p < 0.001$ ] (Table 2). Follow-up tests indicated that youth received significantly more

information about TDV from parents and caregivers compared to teachers ( $p < 0.001$ ), media ( $p < 0.01$ ), and other classes ( $p < 0.001$ ). Comparisons also indicated that youth received more information from teachers compared to other classes ( $p < 0.001$ ). Further, youth reported receiving more information from friends compared to teachers ( $p < 0.001$ ), media ( $p < 0.05$ ), and other classes ( $p < 0.001$ ) and reported receiving more information from media compared to other classes ( $p < 0.001$ ).

We explored whether the sources of information where youth learn about TDV were moderated by gender, grade, or race. When examining grade as a moderator, results indicated a significant main effect of source of information [ $F(3.59, 508.37) = 6.26$ ,  $p < 0.001$ ] and a significant source of information  $\times$  grade interaction [ $F(3.53, 508.37) = 2.99$ ,  $p < 0.05$ ]. Due to the restriction to two groups for grade (7th and 11th grade) in Survey Edition 2, post-hoc independent samples *t* tests were supplemented to test for differences across sources of information. Results determined that 11th graders were more likely to receive information about TDV from media compared to 7th graders ( $p < 0.01$ ). When examining race as a moderator, results determined no significant main effect of sources of information [ $F(3.58, 913.86) = 1.18$ ,  $p = 0.32$ ] but found a significant source of information  $\times$  race interaction [ $F(21.50, 913.86) = 2.94$ ,  $p < 0.001$ ]. Pairwise comparisons determined that youth who identified as Native American reported receiving less information about TDV from a parent/caregiver compared to youth who identified as Black ( $p < 0.001$ ), multiethnic/other ( $p < 0.05$ ), White ( $p = 0.05$ ), or youth whose race was not listed ( $p < 0.05$ ). Further, youth who identified as White reported receiving more information about TDV from media compared to youth who identified as Black ( $p < 0.05$ ) or youth whose race was not listed ( $p < 0.05$ ). Results determined no source  $\times$  gender interaction. Non-parametric alternatives are described and presented in the Supplement (Section C).

### Aim Two: Do Youths' TDV Experiences Differ by Demographic Characteristics?

We sought to understand youths' experience with unhealthy relationships and whether there were differences across gender, grade, and race. When assessing if there were any associations between unhealthy/abusive relationship experiences and gender, chi-square tests determined there was a statistically significant difference in whether youth ever experienced an unhealthy relationship by gender (Table 3). Pairwise comparisons showed that females were significantly more likely than males to report previously experiencing an unhealthy relationship ( $p < 0.05$ ). Males also reported never experiencing an unhealthy relationship more than females ( $p < 0.05$ ).

**Table 2** Comparisons of Means (Standard Deviations) for Sources of Information on Teen Dating Violence (Survey Edition 2)

Demographic	Source				
	Parent/ Caretaker	Teacher	Friend	Media	Other Classes
Total N	301	298	290	293	280
Total Mean/SD	2.62(1.11) <sub>T,M,OC</sub>	2.10(.97) <sub>P,F,OC</sub>	2.48(1.04) <sub>T,M,OC</sub>	2.28(1.06) <sub>P,F,OC</sub>	1.80(.95) <sub>P,T,F,M</sub>
<b>Grade (n)</b>					
7th (158)	2.65(1.08)	2.11(.96)	2.39(1.01)	1.97(1.03) <sup>11th</sup>	1.75(.98)
11th (19)	2.63(1.07)	2.21(1.13)	2.00(.94)	2.53(.77) <sup>7th</sup>	2.00(.94)
<b>Gender (n)</b>					
Male (141)	2.57(1.12)	2.17(.93)	2.40(1.04)	2.26(1.02)	1.92(.99)
Female (151)	2.68(1.09)	2.08(1.02)	2.55(1.04)	2.30(1.09)	1.70(.89)
Other (6)	2.83(1.17)	1.67(1.21)	2.67(1.03)	3.00(1.27)	1.67(1.21)
<b>Race (n)</b>					
White (169)	2.61(1.05)	2.07(.98)	2.60(1.06)	2.47(1.05)	1.81(.92) <sup>B,NL</sup>
Black (22)	3.24(.94) <sup>NA</sup>	2.10(.94)	2.42(1.07)	1.71(.90)	1.45(.76) <sup>W</sup>
Native American (20)	1.90(1.02) <sup>B,MEO,NL</sup>	2.45(1.05)	2.47(1.07)	2.45(1.05)	2.21(1.08)
Multietnic/ Other (12)	3.08(1.24) <sup>NA</sup>	2.17(1.03)	2.36(.92)	2.27(1.10)	1.55(.82)
Not Listed (65)	2.76(1.10) <sup>NA</sup>	2.09(.83)	2.34(.96)	2.02(1.03)	1.88(.99) <sup>W</sup>

Students rated on a 4-point Likert scale (1 = “Not much,” 2 = “A little,” 3 = “Somewhat,” 4 = “A lot”) how often they receive information on TDV from various sources. For each column indicating the source, subscript letters indicate significant ( $p < .05$ ) within-group differences for Total Mean/SD and the following sources: <sub>P</sub>=Parent/Caretaker, <sub>T</sub>=Teacher, <sub>F</sub>=Friend, <sub>M</sub>=Media, <sub>OC</sub>=Other Classes; Superscript numbers indicate significant ( $p < .05$ ) between-groups differences of the following superscripted demographics: <sup>7th</sup>=7th grade, <sup>11th</sup>=11th grade, <sup>W</sup>=White, <sup>B</sup>=Black, <sup>NA</sup>=Native American, <sup>MEO</sup>=Multi-ethnic/Other, <sup>NL</sup>=Not Listed

**Table 3** Unhealthy Relationship Experiences x Gender

I have been in an unhealthy/ abusive relationship (n, %)		Gender	
		Male	Female
Yes (207, 16.0)	% within gender	9.8	22.3
	% within “Yes”	30.4	69.6
	[adjusted residual]	[-6.1]	[6.1]
No (944, 73.1)	within-group diff	F	M
	% within gender	80.3	65.8
	% within “No”	55.0	45.0
Not Sure (141, 10.9)	[adjusted residual]	[5.9]	[-5.9]
	within-group diff	F	M
	% within gender	9.9	11.9
Missing (69, 5.1)	% within “Not Sure”	45.4	54.6
	[adjusted residual]	[-1.2]	[1.2]
	within-group diff		
		$\chi^2(2, N = 1292) = 42.25, p < .001, (V = .18)$	

Sample includes students who reported “Never dated before” but identified experiencing an unhealthy relationship. Students who indicated “Previously” or “Currently” experiencing an unhealthy relationship were recoded to “Yes.” Youth who identified as “Other Gender” were excluded due to cell counts <5. For each column indicating gender, subscript letters indicate significant within-group differences for column proportions and the following gender: <sub>M</sub>=Male, <sub>F</sub>=Female. Percentages may not equal 100 due to rounding

To determine if there were any associations between unhealthy/abusive relationship experiences and gender, chi-square tests determined there was a statistically significant difference (Table 4). Pairwise comparisons showed that youth in 7th grade were more likely to never experience an unhealthy relationship compared to youth in 8th grade ( $p < 0.05$ ), 9th grade ( $p < 0.05$ ), 11th grade ( $p < 0.05$ ), and 12th grade ( $p < 0.05$ ). However, proportionally more youth in 7th grade also reported previously experiencing an unhealthy relationship compared to youth in 9th grade ( $p < 0.05$ ), 10th grade ( $p < 0.05$ ), 11th grade ( $p < 0.05$ ), and 12th grade ( $p < 0.05$ ). Further, 8th graders reported experiencing an unhealthy relationship less than 11th graders ( $p < 0.05$ ) but more often than 12th graders ( $p < 0.05$ ) and youth whose grade was missing ( $p < 0.05$ ).

When examining unhealthy relationship experiences by race, chi-square tests determined a statistically significant difference (Table 5). Pairwise comparisons showed that youth who identified as White reported never experiencing an unhealthy relationship more than youth who identified as Black ( $p < 0.05$ ), Hispanic/Latino ( $p < 0.05$ ), and youth whose race was not listed ( $p < 0.05$ ). White youth also reported previously experiencing an unhealthy relationship more than youth who identified as Black ( $p < 0.05$ ) and Hispanic/Latino ( $p < 0.05$ ).

**Table 4** Unhealthy Relationship Experiences x Grade

I have been in an unhealthy/ abusive relationship (n, %)		Grade					
		7th	8th	9th	10th	11th	12th
Yes (170, 14.4)	% within grade	8.2	11.6	18.5	18.3	25.4	25.3
	% within "Yes"	22.4	17.1	14.1	11.2	20.6	14.7
	[adjusted residual]	[-4.8]	[-1.4]	[1.4]	[1.2]	[3.9]	[3.2]
	within-group diff	<sub>9th,10th,11th,12th</sub>	<sub>11th,12th</sub>	<sub>7th</sub>	<sub>7th</sub>	<sub>7th,8th</sub>	<sub>7th,8th</sub>
No (886, 74.9)	% within grade	84.2	73.9	66.2	76.9	63.0	59.6
	% within "No"	44.0	20.8	9.7	9.0	9.8	6.7
	[adjusted residual]	[5.9]	[-0.4]	[-2.4]	[0.5]	[-3.4]	[-3.7]
	within-group diff	<sub>8th,9th,11th,12th</sub>	<sub>7th</sub>	<sub>7th</sub>		<sub>7th</sub>	<sub>7th</sub>
Not Sure (127, 10.7)	% within grade	7.6	14.5	15.4	4.8	11.6	15.2
	% within "Not Sure"	27.6	28.3	15.7	3.9	12.6	11.8
	[adjusted residual]	[-2.8]	[2.1]	[1.8]	[-2.0]	[0.3]	[1.5]
	within-group diff						
Missing (178, 13.1)		$\chi^2(10, N=1183)=63.87, p<.001, (V=.16)$					

Sample includes students who reported "Never dated before" but identified experiencing an unhealthy relationship. Students who indicated "Previously" or "Currently" experiencing an unhealthy relationship were recoded to "Yes." For each column indicating grade, subscript letters indicate significant within-group differences for column proportions and the following grade: <sub>7th</sub>=7th grade, <sub>8th</sub>=8th grade, <sub>9th</sub>=9th grade, <sub>10th</sub>=10th grade, <sub>11th</sub>=11th grade, <sub>12th</sub>=12th grade. Percentages may not equal 100 due to rounding

**Table 5** Unhealthy Relationship Experiences x Race

I have been in an unhealthy/ abusive relationship (n, %)		Race				
		White	Black	Hispanic	Multiethnic/ Other	Not Listed
Yes (200, 6.3)	% within race	21.2	6.2	6.6	14.9	8.1
	% within "Yes"	80.5	3.0	6.0	6.5	4.0
	[adjusted residual]	[5.9]	[-2.8]	[-3.8]	[-0.4]	[-2.3]
	within-group diff	<sub>B,H</sub>	<sub>w</sub>	<sub>w</sub>		
No (889, 2.5)	% within race	66.9	86.6	84.1	69.0	83.8
	% within "No"	57.3	9.4	17.2	6.7	9.3
	[adjusted residual]	[-5.6]	[3.2]	[3.8]	[-0.8]	[2.6]
	within-group diff	<sub>B,H,NL</sub>	<sub>w</sub>	<sub>w</sub>		<sub>w</sub>
Not Sure (137, 1.2)	% within race	12.0	7.2	9.3	16.1	16.1
	% within "Not Sure"	66.4	5.1	12.4	10.2	5.8
	[adjusted residual]	[1.1]	[-1.3]	[-0.9]	[1.5]	[-1.0]
	within-group diff					
Missing (135, 9.9)		$\chi^2(8, N=1226)=48.08, p<.001, (V=.14)$				

Sample includes students who reported "Never dated before" but identified experiencing an unhealthy relationship. Students who indicated "Previously" or "Currently" experiencing an unhealthy relationship were recoded to "Yes." Youth who identified as "Asian/Pacific Islander" or "Native American" were excluded due to cell counts <5. For each column indicating race, subscript letters indicate significant within-group differences for column proportions and the following race: <sub>w</sub>=White, <sub>B</sub>=Black, <sub>H</sub>=Hispanic, <sub>MEO</sub>=Multiethnic/Other, <sub>NL</sub>=Not Listed. Percentages may not equal 100 due to rounding

### Supplemental Aim: Did Youth Perceive Increases in their Knowledge After Program?

Paired-samples *t* tests were conducted to compare differences in pre- and post-ratings on survey responses to

questions regarding youths' knowledge of topics related to unhealthy relationships. As shown in Table 6, there were significant differences in the ratings with students indicating they increased their knowledge across all outcome variables in both survey years. Additional analyses are



presented in detail in the supplement and suggest some variation by gender and race in the size of the effect. Perceived changes in knowledge were evident across sub-groups.

## Discussion

Findings add to the understanding of the nature of youths' knowledge about TDV, as well as where and how youth are passively socialized on topics of dating violence. Overall, youth in middle and high schools report nuanced differences in sources of information about TDV. Findings indicated that parents and caregivers were the greatest sources of information about TDV, followed by friends, media, teachers, and other classes. These findings align with previous research on parents and caretakers as the main source of information on unhealthy relationships (McCurdy et al., 2021). Furthermore, youth reported receiving less information about TDV from other classes (e.g., classes unrelated to Family and Consumer Sciences, Health, etc.), suggesting that TDV is not a topic that teachers of other courses engage in with their students. Given that teachers and other classes were the least common sources of information, school-based TDV prevention programs may consider focusing additional efforts on educating teachers to effectively communicate about healthy and unhealthy relationships. Understanding barriers that prevent teachers from engaging with TDV topics could inform strategies to better integrate TDV education within schools. Additionally, since friends also serve as a significant source of information, school-based TDV prevention programs may aid in promoting a more positive school climate and broaden the understanding of equal rights and respect among peers.

Differences emerged in sources of information by race, highlighting disparities in access to information. For

example, our findings indicated Native American youth report receiving less information about TDV from parents/caretakers; the factors underlying this finding may be attributed to differing cultural norms, communication patterns, or systemic factors and must be carefully considered in future programming. Previous research also found an age difference in where youth seek sources of information about TDV, with younger adolescents seeking information from parents and older adolescents seeking more information from peers and less from school (Alleyne-Greene et al., 2014; Elias-Lambert et al., 2014). Interestingly, age differences emerged in our study for sources of information; however, rather than differing across types of sources, our results indicated a difference in the amount of information received by a source: media. Media has recently shown to be a promising tool to deliver important information about sexual violence; for example, a study found that adolescent males (aged 15–19) who were exposed to short social media videos on sexual violence (via TikTok) had higher knowledge of consequences and perceived severity of sexual violence compared to controls (Nicolla et al., 2023). Our findings indicate that older youth access media as a source of information more than younger youth. Extant literature does not typically report how often youth access sources of information such as the Internet for topics surrounding dating violence (Bundock et al., 2018). Thus, this finding adds to the existing literature by probing media as a source of information about TDV by age group.

The study also adds to the literature on TDV experiences. The current findings are consistent with the extant literature on gender differences in teen dating violence, with females disproportionately reporting experiencing dating violence compared to males (CDC, 2020; Fix et al., 2021). Recognizing this gender disparity allows for targeted intervention and tailored education of TDV programs for youth. Notably, the current literature regarding gender differences in TDV typically focuses on older adolescents, with few reporting

**Table 6** Means, Standard Deviations, and Comparisons of Knowledge Ratings

Study variable	pre		post		<i>t</i>	<i>df</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
<i>Survey Edition 1 (2018–2019)</i>								
Able to recognize unhealthy relationship patterns	2.16	0.63	2.70	0.55	−26.10	998	<.001	0.66
Know the steps to remove myself <i>or friends*</i> from an unhealthy relationship	2.12	0.59	2.66	0.52	−25.35	987	<.001	0.66
<i>Survey Edition 2 (2020)</i>								
Able to recognize unhealthy relationship patterns	3.00	0.92	3.52	0.77	−12.09	353	<.001	0.80
Know the steps to remove myself from an unhealthy relationship	2.82	0.98	3.39	0.88	−12.71	345	<.001	0.84
Know the steps to remove my friends from an unhealthy	2.85	0.95	3.41	0.78	−11.99	332	<.001	0.86
Know how my partner/friends deserve to be treated	3.41	0.83	3.66	0.70	−6.32	333	<.001	0.71

\**Note.* Knowledge to remove self and friends was presented as a single question in Survey Edition 1

on the experiences of middle-school-aged youth (Taylor & Mumford, 2016). While much of the literature on gender differences in TDV focuses on older adolescents, it is equally important to consider when prevention efforts are introduced. TDV prevention programs typically target youth in 8th grade and older (Lee & Wong, 2020; Taylor et al., 2015). Our data adds to this by including youth in 7th grade ( $n=466$ , 34.6% of the total sample). Our findings indicated that 7th graders report not only dating experience, but experience with unhealthy relationships. Thus, providing TDV programming to youth as early as 7th grade may be critical in preventing the occurrence of TDV.

Finally, this study provides very preliminary data assessing perceived changes in knowledge. Exposure to the curriculum was associated with perceived increases in knowledge on steps to take to help remove a friend from an unhealthy relationship, and findings highlighted gender differences in knowing the steps to remove oneself or a friend from unhealthy relationships, where females rated higher than males on post-knowledge. Our preliminary findings are consistent with some literature that finds females are likely to learn more in TDV intervention programs than males (Taylor et al., 2010). A meta-analysis of 23 school-based interventions shows that programs have been effective in increasing knowledge of TDV; however, rates of TDV perpetration and victimization are not significantly improving, and there is a call to address the role of bystanders (De La Rue et al., 2017). Continued efforts of TDV education using a capability approach may foster environments where youth prevent power imbalances and control both in their personal relationships and among peers.

Additionally, this study contributes to the literature on TDV programming by assessing youth who do not fall into traditional categories of male or female and their experiences with TDV. Notably, however, this sample of youth was small, and extra care should be taken in drawing conclusions from the current findings regarding non-traditional gender identities in youth. Youth who do not identify as either male or female show unique challenges with violence (Earnshaw et al., 2016; Goldblum et al., 2012; Peng et al., 2019). Emerging literature shows that gender-nonbinary adolescents may be at higher risk for different forms of violence (Earnshaw et al., 2016; Goldblum et al., 2012; Peng et al., 2019). TDV programs should address the needs and vulnerabilities of LGBTQ+ youth (Kattari et al., 2021) and consider youth who do not identify as male or female in program development and implementation.

Although this study makes an advance in knowledge surrounding TDV, it is not without limitations. The main limitations include generalizability and the non-controlled design. The sample was composed of community school youth with limited diversity, thus limiting generalizability to broader populations. Second, responses to all surveys were

gathered retrospectively. Though retrospective surveys may limit conclusions compared to true pre-post designs, retrospective surveys provide unique advantages in program evaluation (for example, just one assessment is needed, protecting time for the intervention) Blome & Augustin, 2015; Pratt et al., 2000). Retrospective surveys also capture change in perceived understanding that would not be apparent. For example, pre-knowledge may be overestimated before an intervention (Moore & Tananis, 2009) and the intervention may provide participants with information that enables them to more accurately assess their pretest level of understanding (Howard et al., 1979; Pratt et al., 2000). When possible, future evaluations should carefully implement a true pre-post follow-up design. Notably, our comparisons of knowledge gained for the sample were limited due to two separate iterations of the survey; there were no significant increases in knowledge for the 2020 edition of the survey, likely due to the smaller sample size. Finally, the data were collected as part of a program evaluation and not collected for research purposes, thus, no fidelity measures of the program were captured.

In summary, our findings were consistent with literature indicating inter-individual differences in TDV incidence, with females and older youth at higher risk. Youth reported receiving information about TDV primarily from parents and caretakers, and this effect was moderated by age, with older youth relying more on media (the internet, social media, TV) than younger youth. Preliminary findings indicated exposure to “*In Their Shoes*” was associated with increases in knowledge that varied across groups, with girls reporting greater increases in knowledge compared to boys. Due to the interactive nature of the vignettes of teen dating violence within “*In Their Shoes*,” youth may form better conceptual understanding through active learning and increased engagement, thus improved ability to apply learned concepts to real-world situations. The current findings may aid in further development of TDV prevention programs, indicating a need to focus education efforts to incorporate human-centered perspectives that promote well-being, increase engagement with TDV curricula, and develop programming that accounts for the diverse individual experiences of those affected by TDV.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s10896-025-00841-0>.

**Authors' Contributions** CFW, JNM, HLR, RE, JAL, and KG conceived of this study and methodology; MGL, RE, JAL, and KG collected data. BHM, MGL, and KG participated in data curation; formal analysis was performed by BHM and CFW; BHM was responsible for the original draft preparation; BHM, CFW, and JNM contributed to review and editing; funding was acquired by CFW, JNM, and HLR; CFW and JNM provided resources and supervision.

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**Data Availability** Data are available upon request by email to the corresponding author.

### Declarations

The Iowa State University Institutional Review Board (IRB) determined this study was ‘exempt’ in accordance with federal regulations (45CFR46.102 and 21CFR56). All procedures performed involving human participants were in accordance with the ethical standards of the institutional and/or national research committee (ISU IRB number 19–327) and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. Students provided oral consent before participation and survey responses were anonymous. The authors declare they have no financial interests. Data are available upon request. This work was funded through the Child Support Contract between Iowa State University and the Iowa Department of Health and Human Services Child Support Services for work conducted by the Child Welfare Research and Training Project. Contract number BOC-24–003, Carl Weems PI. The content is that of the authors and does not necessarily reflect the opinions, findings, and conclusions of any funding source or agency.

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