

Intimate partner violence among Australian 18–19 year olds

Supplementary materials

October 2023

OUTCOME MEASURES

At age 18–19 (Wave 8; 2018) the LSAC K cohort respondents who had indicated having been in a romantic relationship since age 16 (i.e. had reported ‘going out’ with someone at ages 16–17 or 18–19) were asked a series of questions relating to intimate partner violence and abuse in the 12 months prior to their interview. Using an adapted version of the 15-item Composite Abuse Scale (short form),¹ three forms of abuse and/or violence were measured: emotional, physical and sexual.

Respondents were presented with the following stem, ‘We would like to know if you experienced any of the actions listed below from any current or former partner or partners. If it ever happened to you, please tell us how often it usually happened in the past 12 months’ and asked to respond to each of following statements using the scale: 1 = Not in the past 12 months; 2 = Once; 3 = A few times; 4 = Monthly; 5 = Weekly; 6 = Daily/almost daily.

Emotional abuse items

- Blamed me for causing their violent behaviour
- Tried to convince my family, children or friends that I am crazy or turn them against me
- Followed me or hung around outside my home
- Threatened to harm or kill me or someone close to me
- Harassed me over the phone, by text, email or using social media
- Told me I was crazy, stupid or not good enough
- Tried to keep me from seeing or talking to my family or friends
- Kept me from having access to a job, money or financial resources

Physical violence items

- Shook, pushed, grabbed or threw me
- Used or threatened to use a knife or gun or other weapon to harm me
- Choked me
- Hit or tried to hit me with a fist or object, kicked or bit me
- Confined or locked me in a room or other space

1 Ford-Gilboe, M., Wathen, C. N., Varcoe, C., MacMillan, H. L., Scott-Storey, K., Mantler, T. et al. (2016). Development of a brief measure of intimate partner violence experiences: The Composite Abuse Scale (Revised) – Short Form (CASR-SF). *BMJ Open*, 6(12), e012824. [dx.doi.org/10.1136/bmjopen-2016-012824](https://doi.org/10.1136/bmjopen-2016-012824)

Sexual abuse items

- Made me perform sex acts that I did not want to perform
- Forced or tried to force me to have sex

In the current analyses, participant responses to the 15-items were dichotomised as either exposure to violence or abuse in the last 12 months or no exposure. Further, four indicators of violence were calculated, one overall measure of exposure, labelled 'Any violence or abuse' and one each for emotional, physical and sexual forms of violence.

PREDICTOR MEASURES

Supportive friendships

Respondents' support from friends was examined at age 16–17 years (Wave 7; 2016) using an adapted version of the Peer Attachment Sub-Scale from the Inventory of Peer and Parental Attachment.² Using the response scale: 1 = Almost always true; 2 = Often true; 3 = Sometimes true; 4 = Seldom true; 5 = Almost never true; respondents were instructed that 'The next questions are about how you get on with friends. For each statement, choose the number that best describes you and your friends.' Items included:

- My friends sense when I'm upset about something.
- My friends encourage me to talk about my difficulties.
- I tell my friends about my problems and troubles.
- If my friends know something is bothering me, they ask me about it.

Higher scores indicated that the respondent considers the statement to be less true of his/her peers. Total scores were divided into quartiles and a categorical variable was created with those scoring in the top 25% of the distribution coded as low support, those with scores in the middle (i.e. 50%) coded as moderate support, and those scoring in the lowest 25% of the distribution coded as high support.

Trust and communication with parents

At age 16–17 years (Wave 7; 2016), the LSAC K cohort respondent's level of trust and communication with their parents was measured. Drawing on the People in My Life measure,³ respondents were provided with a series of statements about their relationship with their parents and asked, 'For each of these statements, choose the best answer for you.' Items included:

- My parents accept me as I am.
- My parents understand me.
- I trust my parents.
- I can count on my parents to help me when I have a problem.
- My parents pay attention to me.
- I talk with my parents when I have a problem.
- If my parents know that something is bothering me, they ask me about it.
- I share my thoughts and feelings with my parents.

Response options included: 1 = Almost never or never true; 2 = Sometimes true; 3 = Often true; 4 = Almost always or always true. Total scores ranged from 8 to 32, with higher scores indicating increased frequency of the application of each statement to study child. Respondents with scores in the lower third of the distribution (scores 23 and below) were coded as having 'lower' trust and communication with parents.

2 Armsden, G. C., & Greenberg, M. T. (1987). The Inventory of Parent and Peer Attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, 16(5), 427–454. doi.org/10.1007/BF02202939

3 Ridenour, T. A., Greenberg, M. T., & Cook, E. T. (2006). Structure and validity of People in My Life: A self-report measure of attachment in late childhood. *Journal of Youth and Adolescence*, 35(6), 1037–1053. doi.org/10.1007/s10964-006-9070-5

COVARIATE MEASURES

Sex

The study child's sex was captured with a variable coded '0' for female (48.9%), and '1' for male (51.1%).

Parental education

Parents' highest level of education (either parent) when the K cohort respondents were aged 16–17 years (Wave 7, 2016) were included in the analyses. Three categories representing level of educational attainment were generated: 1 = 'Year 12 or lower'; 2 = 'Diploma or certificate'; 3 = 'University degree'.

Cumulative financial hardship

For the LSAC K cohort, financial hardship was measured⁴ at each wave of data collection, providing information on the financial stress of the study child's family from ages 4–5 years (Wave 1) to 18–19 years (Wave 8). Across the waves, the primary caregiver (Parent 1) was asked to respond 'Yes' or 'No' to the following question, 'Over the last 12 months, due to shortage of money, have any of the following happened?'

- You could not pay gas, electricity or telephone bills on time.
- You could not pay the mortgage or rent payments on time.
- You went without meals.
- You were unable to heat or cool your home.
- You pawned or sold something because you needed cash.
- You sought assistance from a welfare or community organisation.

Using the financial hardship data from when the K cohort were aged 4–5 years (Wave 1, 2004) to 18–19 years (Wave 8, 2018), an indicator of cumulative financial hardship was derived using a count of the number of times financial hardship was experienced between Waves 1 and 8.

Area-level disadvantage

Area-level disadvantage was used as an indicator of socio-economic status. Specifically, linked census data indicating the percentage of people who completed year 12 in the respondent's neighbourhood was used. A variable was generated with three categories: 0 = 0%–45%; 1 = 46%–64%; and 2 = 65% or more completed year 12 in the linked area. The cut-off points used to categorise this variable aimed to separate approximately the top and bottom 20% of the distribution.

Parent ratings of anger or hostility in relationship

Anger or hostility in Parent 1's (i.e. the parent that knows the study child best) relationship with their partner was examined using data from when the K cohort respondents were aged 4–5 years (Wave 1, 2004) to 16–17 years (Wave 7, 2016). Specifically, the primary caregiver was asked, 'How often is there anger or hostility between you and your partner?' Response options included: 1 = Never/almost never; 2 = Rarely; 3 = Sometimes; 4 = Often; 5 = Always/almost always. Respondents were categorised as either having experienced 'No anger or hostility' (i.e. reporting never/almost never or rarely across waves) or 'Experienced anger or hostility' (i.e. reporting either sometimes, often, or always/almost always at any point between Wave 1 and Wave 7).

4 Measure adapted from:
Bethel, J., Green, J. L., Nord, C., Kalton, G., & West, J. (2005). *Early Childhood Longitudinal Study, Birth Cohort (ECLS-B): Methodology report for the 9-month data collection (2001-02). Volume 2: Sampling*. NCES 2005-147. National Center for Education Statistics.
Taylor, J. (2006). Life chances: Including the children's view. *Australasian Journal of Early Childhood*, 31(3), 31–39. doi.org/10.1177/2F183693910603100306
Bray, J. R. (2001). *Hardship in Australia: An analysis of financial stress indicators in the 1998–99 Australian Bureau of Statistics Household Expenditure Survey* (FaHCSIA Occasional Paper 4). ssrn.com/abstract=1729046

Parental experience of childhood abuse

When the K cohort respondents were aged 16–17 years (Wave 7, 2016), both parents were asked about their personal experience of childhood abuse using a measure created for LSAC.⁵ Parent 1 and Parent 2 were instructed to think about their family situation growing up and asked, 'During your childhood, did you experience any of the following?' A series of statements were then presented requiring either a Yes or No response:

- You were verbally abused, ridiculed or humiliated by a parent.
- You received frequent beatings or too much physical punishment (e.g. hitting, smacking).
- You were sexually abused by someone in your family living in the household.
- You were sexually abused by someone in your family not living in the household.

Respondents who indicated 'yes' to any of the relevant statements were coded as 1 = Experienced childhood abuse. Respondents who selected 'no' across all the relevant statements were coded as 0 = No childhood abuse.

Parents childhood exposure to domestic violence

Parent 1 and 2's exposure to domestic violence during their childhood was also measured when the K cohort was aged 16–17 years (Wave 7, 2016). Using a measure created for LSAC, both parents were asked, 'During your childhood, did you experience any of the following?' and presented with a series of statements requiring a Yes or No response:

- Your father physically abused your mother (punched, hit, kicked, etc.).
- Your mother physically abused your father (e.g. punched, hit, kicked, etc.).
- Your father verbally abused your mother (e.g. ridiculed, humiliated, etc.).
- Your mother verbally abused your father (e.g. ridiculed, humiliated, etc.).

Parent respondents who indicated 'yes' to any of the violence statements were coded as 1 = Childhood exposure to domestic violence. Any respondent that selected 'no' across all the relevant statements were coded as 0 = No domestic violence exposure.

Bullying – victimisation and perpetration

Using measures created for LSAC,⁶ bullying experiences were examined at age 16–17 years (Wave 7; 2016). Respondents were asked to respond either 'Yes' or 'No' to a series of statements about their bullying victimisation and perpetration. For both victimisation and perpetration respondents were presented with the stem, 'For the next questions, please think about things that might have happened to you at school, or out of school or at work. Include texts, Facebook, etc., as well as face-to-face contact. Do not include things that happened with your close family members (such as brothers and sisters).'

Bullying victimisation items

During the last 12 months, since [current month] last year ...

- Someone hit or kicked me on purpose
- Someone grabbed or shoved me on purpose.
- Someone threatened to hurt me.
- Someone said mean things to me or called me names.
- Someone tried to keep others from being my friend.
- Someone did not let me join in what they were doing.

⁵ Measures adapted from:

The PATH through life study. Anstey, K. J., Christensen, H., Butterworth, P., Easteal, S., Mackinnon, A., Jacomb, T. et al. (2012). Cohort profile: the PATH through life project. *International Journal of Epidemiology*, 41(4), 951–960. doi.org/10.1093/ije/dyr025
The Christchurch Health and Development Study, www.otago.ac.nz/christchurch/research/healthdevelopment

⁶ Measure adapted from:

Brockenbrough, K. K., Cornell, D. G., & Loper, A. B. (2002). Aggressive attitudes among victims of violence at school. *Education and Treatment of Children*, 25(3), 273–287. www.jstor.org/stable/42899706
Smith, D. J., & McVie, S. (2003). Theory and method in the Edinburgh Study of Youth Transitions and Crime. *British Journal of Criminology*, 43(1), 169–195. doi.org/10.1093/bjc/43.1.169

- Someone spread rumours about me behind my back.
- Someone deliberately tried to hurt me by not talking to me.
- Someone deliberately excluded me from an activity, event or group.

Bullying perpetration items

During the last 12 months, since [current month] last year ...

- I hit or kicked someone on purpose.
- I grabbed or shoved someone on purpose.
- I threatened to hurt someone.
- I said mean things to someone or called someone names.
- I told others not to be someone's friend.
- I did not let someone join in what I was doing.
- I spread rumours about someone behind their back.
- I deliberately tried to hurt someone by not talking to them.
- I deliberately excluded someone from an activity, event or group.

In the current analyses, respondents were coded as either 'Victim and perpetrator', if they responded yes to at least one statement on each of the victimisation and perpetration measures; 'Victim only' if they responded 'yes' to at least one statement on the victimisation measure, but 'no' to all perpetration statements; 'Neither' if they responded 'no' to all victimisation and perpetration statements.

Gender role attitudes

At age 14–15 years (Wave 6; 2014), gender role attitudes were measured using a 3-item measure adapted from the Class Structure of Australia Project⁷ (1993). Using a 5-point agreement scale (1 = Strongly disagree to 5 = Strongly agree), the study child was asked, 'The following statements are about attitudes toward families and work. How strongly do you agree or disagree with these statements?'

- It is better for the family if the husband is the principal income earner outside the home and the wife has primary responsibility for the home and children.
- If both husband and wife work, they should share equally in the housework and child care.
- Ideally, there should be as many women as men in important positions in government and business.

In the current analyses, respondents were coded as 'Endorses conservative gender roles' if they either agreed with the first statement (responses 4 or 5) or disagreed with the second or third statements (responses 1 or 2). Others were coded as 'Does not endorse conservative gender roles'.

7 Baxter, J. H., Boreham, P. R., Clegg, S. R., Emmison, J. M., Gibson, D. M., Marks, G. N. et al. (1989). The Australian class structure: Some preliminary results from the Australian class project. *The Australian and New Zealand Journal of Sociology*, 25(1), 100–120. doi.org/10.1177/144078338902500106

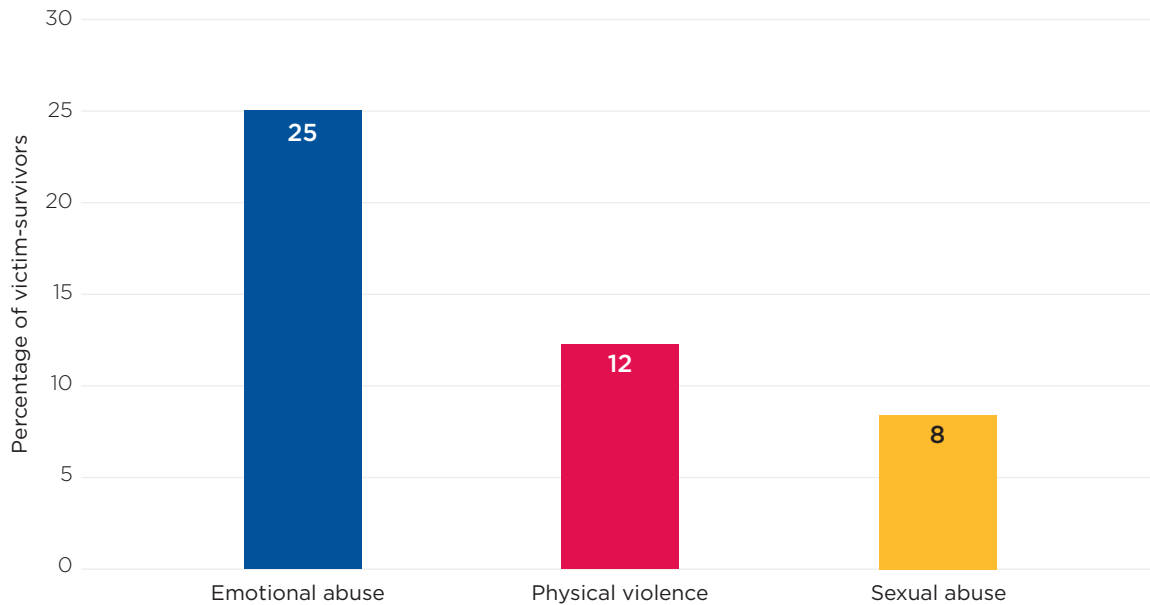
FULL RESULTS

Table S1: Frequencies of violence and abuse behaviours by sex

	Total (N = 1,788)		Female (N = 913)		Male (N = 875)	
	%	95% CI	%	95% CI	%	95% CI
Any intimate partner violence	28.5	26.2, 31.0	30.1	26.8, 33.6	26.9	23.7, 30.5
Emotional abuse						
Told me I was crazy, stupid or not good enough	16.4	14.5, 18.5	17.8	15.2, 20.8	14.9	12.3, 18.1
Blamed me for causing their violent behaviour	12.3	10.6, 14.1	11.8	9.6, 14.4	12.8	10.4, 15.6
Harassed me over the phone, by text, email or using social media	12.2	10.5, 14.1	11.8	9.5, 14.6	12.5	10.0, 15.5
Tried to keep me from seeing or talking to my family or friends	10.3	8.7, 12.2	10.9	8.6, 13.6	9.8	7.6, 12.5
Tried to convince my family, children or friends that I am crazy or turn them against me	5.9	4.7, 7.4	5.8	4.3, 7.9	6.0	4.3, 8.3
Followed me or hung around outside my home	5.3	4.1, 6.8	5.4	3.8, 7.5	5.2	3.6, 7.4
Threatened to harm or kill me or someone close to me	2.9	2.0, 4.1	2.8	1.7, 4.4	2.9	1.7, 5.1
Kept me from having access to a job, money or financial resources	1.9	1.2, 3.0	2.0	1.1, 3.5	1.9	1.0, 3.6
Physical violence						
Shook, pushed, grabbed or threw me	9.8	8.2, 11.6	10.3	8.2, 12.9	9.2	7.1, 11.9
Hit or tried to hit me with a fist or object, kicked or bit me	5.3	4.2, 6.7	4.3	3, 6.2	6.4	4.6, 8.7
Choked me	2.8	2.0, 4.0	3.3	2.1, 5.1	2.4	1.4, 4.0
Used or threatened to use a knife or gun or other weapon to harm me	2.6	1.8, 3.8	2.3	1.3, 4.0	2.9	1.7, 5.0
Confined or locked me in a room or other space	2.2	1.4, 3.3	2.3	1.3, 4.0	2.0	1.1, 3.8
Sexual abuse						
Made me perform sex acts that I did not want to perform***	6.3	5.1, 7.8	9.3	7.4, 11.8	3.3	2.1, 5.1
Forced or tried to force me to have sex**	4.9	3.8, 6.3	6.9	5.2, 9.1	2.8	1.7, 4.8

Notes: Total N = 1,788 participants, equating to 148,202 Australian 18-19 year olds. Excludes n = 7 who were eligible and did not respond. ***p = <0.001, **p = <0.01.

Source: LSAC K cohort, Wave 8

Figure S1: Prevalence of types of intimate partner violence and abuse victimisation among 18–19 year olds in the past 12 months

Notes: Weighted distribution among adolescents that have been in an intimate relationship, reporting at least one type of violence/abuse in the past 12 months. 95% confidence intervals = emotional abuse (22.9, 27.5), physical violence (10.0, 13.6) and sexual abuse (6.3, 9.2).

Source: LSAC K cohort, $N = 1,788; 148,203$

Table S2: Results from generalised structural equation model predicting intimate partner violence victimisation

	Emotional abuse aOR	Physical violence aOR	Sexual abuse aOR
Predictor variables			
Supportive friendships (ref. High)			
Moderate	1.07	1.18	1.03
Low	1.61*	1.48	1.00
Trust and communication with parents (ref. Moderate/high)			
Low	1.68***	1.25	2.28***
Covariates			
Sex (ref. Female)			
Male	0.93	0.87	0.31***
Parent education ^a (ref. University degree)			
Diploma or certificate	1.18	0.96	0.87
Year 12 or lower	1.53*	1.32	0.92
Financial hardship ^a (Cumulative W1–W8)			
	1.01	1.06*	0.98
Area disadvantage (ref. 65%+ completed year 12)			
46%–64%	0.93	0.84	1.72
0%–45%	0.93	1.36	2.88**

Table continued over page →

	Emotional abuse aOR	Physical violence aOR	Sexual abuse aOR
Parent abused in childhood (ref. no abuse)	1.20	1.17	1.69
Parent experience of domestic violence (ref. no domestic violence)	0.90	1.22	0.89
Parent anger or hostility in relationship ^a (ref. No anger/hostility; W1–W7)			
Experienced anger/hostility	1.54**	1.07	0.66
Bullying (ref. Neither)			
Perpetrator	2.52***	3.52***	2.38*
Victim only	1.58*	2.01*	2.27*
Gender role attitudes (ref. Does not endorse; W6)			
Endorses conservative gender roles	1.48**	0.92	1.18

Notes: $N = 1,489$. A separate model was constructed for each type of abuse. Predictor variables are from Wave 7 (study child 16–17 years), unless stated otherwise. aOR = adjusted odds ratio. Although Aboriginal or Torres Strait Islander (ATSI) status is a relevant consideration for dating abuse, the number of ATSI identifying respondents was too low to include in the current models. Further, initial analyses controlled for respondent's region of residence (metropolitan, regional or remote). However, the inclusion of region made no significant difference to the models and was removed for analytical simplicity. ^a Parent 1 report. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

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