

Measuring Domestic Violence in Longitudinal Research

October 2017

Australian Longitudinal Study on Women's Health

Research Centre for Generational Health and Ageing

University of Newcastle

Deborah Loxton, Natalie Townsend, Dominic Cavenagh, and Liana Green.

On behalf of the research team: Paula Bridge, Anna Dawes, Xenia Dolja-Gore, Peta Forder, Anna Graves, Jo Hiles, and Sarah Kabanoff.



Australian Longitudinal Study
on Women's Health

Contents

Acknowledgements.....	4
Background.....	5
Aims	6
The current project	6
Qualitative data analysis and results	7
Sample	7
Measures	7
Data analysis.....	9
Results	9
Qualitative methods and results	13
Sample	13
Methods	13
Results	14
Demographics.....	14
Qualitative themes	18
Lack of recognition.....	18
Characteristics of the abuse.....	19
Minimising and discounting.....	20
Fear of relationship failure.....	21
Attribution of blame	22
Guilt, shame and embarrassment.....	22
Emotional state	23
State of current relationship.....	24
Rejection of 'victim' label.....	25
Moved on	25
Denial	25
Don't know/forgot	26
Tentative themes	27
Discussion	28
Limitations	31

Main Findings	32
Recommendations	33
Conclusion	34
References	35
Appendices	39
Appendix 1:	39
Items used to measure domestic violence in the 1973-78 cohort	39
Appendix 2:	41
Items used to measure domestic violence in the 1989-95 cohort	41
Appendix 3: Interview schedule	42
Appendix 4:	43
Measure which includes years domestic violence was experienced	43
Enquiries	44
University of Newcastle:	44
www.alsw.org.au	44

Acknowledgements

The research on which this report is based was conducted as part of the Australian Longitudinal Study on Women's Health (ALSWH) by researchers from the University of Newcastle and the University of Queensland. We are grateful to the Australian Government Department of Health for funding ALSWH and to the women who provided the survey data.

We thank the Australian Government Department of Social Services for providing funding for this substudy, and the women who took part in interviews.

Background

Domestic violence is a serious public health problem. Experiences of domestic violence are associated with a plethora of mental health problems, such as anxiety [1-4], depression [1, 5-7], post-traumatic stress disorder [3, 8], and suicidal behaviour [9-11]. In addition, women effected by domestic violence have poor physical health, with chronic pain [1, 9, 12] and chronic disease [13] associated with domestic violence experiences.

It is estimated that one third of women experience domestic violence worldwide [14]. However, prevalence statistics for domestic violence vary widely depending on the sample composition, including factors such as age, cultural background, and the source of the sample. Domestic violence is a problem for women of all ages, however, the highest point prevalence is found in young women, followed by middle-aged women and then older women [15]. Prevalence rates of domestic violence also vary depending on the cultural background of the sample. For example, the WHO multi-country study on women's health and domestic violence was undertaken across 10 countries: Thailand, Bangladesh, the United Republic of Tanzania, Ethiopia, Brazil, Japan, Samoa, Serbia, Montenegro, Peru, and Namibia [16]. Despite consistency in measurement instruments, prevalence rates varied widely between settings, with 15% to 71% of women reporting experiences of sexual or physical partner violence. Prevalence rates are often not comparable and differ depending on the source of the sample. For example, samples drawn from clinical settings have consistently reported higher prevalence rates for domestic violence than samples drawn from the general population. For instance, Abbott, Johnson, Koziol-McLain and Lowenstein [17] recruited participants from hospital emergency departments and reported that 54% of participants had experienced domestic violence. By contrast, 5-26% of women reported experiencing domestic violence in a nationally representative sample [18]. Given the health issues that are associated with domestic violence, this is not a surprising result.

The number and type of questions that are asked of women also influence prevalence statistics. For example, Devries et al. [14] found that asking a single question about abuse elicits far fewer disclosures than asking the same women about abuse with a more comprehensive instrument. Questions that ask women to identify their experiences as 'violent' or 'abusive' might lead to fewer responses than items that ask about specific

behaviours. The mode of data collection may also influence responses to questions about abuse. Tourangeau and Smith [19] found that higher rates of sensitive behaviours were reported in self-administered surveys compared to surveys that were administered by interviewers.

In addition to sample composition, the number and types of questions asked, mode of data collection, and the time since the abuse occurred might also impact on prevalence rates. Some longitudinal research has demonstrated that there are inconsistencies in the reporting of abuse and adversity over time. Pachana, Brilleman and Dobson [20] found that more than half of participants inconsistently reported being grabbed, shoved, pushed, kicked or hit. That is, participants responded that they had experienced the abuse at one point but at subsequent surveys (3 and 6 years later) reported that the event had not happened. In addition, two thirds of participants inconsistently reported sexual abuse. Inconsistent responses have also been observed for childhood sexual abuse, with one third of participants inconsistently reporting this form of abuse over time [21].

The research to date suggests that domestic violence might be subject to inconsistent reporting over time but the scope of the issue has not been assessed. Further, the types of abuse most prone to inconsistent reporting have not been examined. In addition, the reasons why women might report domestic violence inconsistently have not been explored.

Aims

The aims of this project are to:

- determine why there is inconsistency in responding to abuse items,
- investigate the degree to which an inconsistent response indicates the presence or absence of abuse events, and
- examine the relative validity of asking about abuse using different timeframes.

To meet these aims, quantitative analysis was conducted with data from the Australian Longitudinal Study on Women's Health (ALSWH) and qualitative data were collected in the form of telephone interviews with a subsample of ALSWH participants who had inconsistently answered questions about domestic violence.

The current project

This report was commissioned by the Department of Social Services in March 2017. A draft report was delivered in June 2017. Data collection concluded in August 2017 and analysis completed in October 2017.

Qualitative data analysis and results

Sample

ALSWH includes over 58,000 participants in four cohorts born 1989-95, 1973-78, 1946-51, and 1921-26. The 1973-78, 1946-51, and 1921-26 cohorts were randomly selected from the Medicare database and recruited via mailed surveys in 1996 [22]. The 1989-95 cohort was recruited in 2013 via open recruitment [23]. The cohorts were compared with women of the same age in the Census and found to be broadly representative of Australian women of the same age, with some over-representation of tertiary educated women [24-26]. For the following analysis, participants were sampled from the 1973-78 cohort. Participants in this cohort have been surveyed approximately every three years since 1996. The following analysis uses data from Survey 5 (2009), Survey 6 (2012) and Survey 7 (2015). To be included in the current study, participants had to have completed at least one item of the Community Composite Abuse Scale (see Appendix 1) at two survey waves. Participants provided informed consent when they enrolled in ALSWH and the study has approval from the Human Research Ethics Committees of the Universities of Newcastle and Queensland.

Measures

Consistency of self report of domestic violence was evaluated by responses to the Community Composite Abuse Scale (see Appendix 1) [27]. The scale was used for the first time at Survey 5 (2009), and then at Survey 6 (2012) and Survey 7 (2015). For the purposes of this analysis, responses of 'In the last 12 months' and 'More than 12 months ago' were collapsed into 'Yes,' and indicated an experience of domestic violence. 'Never' and participants who indicated that they had never had a partner were collapsed into 'No,' which indicated no experiences of domestic violence. Responses were classified as 'Inconsistent' when participants responded 'Yes' to an item on the CCAS and then responded 'No' to the same item at a subsequent survey. Otherwise, the response was classified as 'Consistent.' The CCAS measures abuse on four subscales: emotional abuse, physical abuse, harassment, and sexual abuse.

For women who reported domestic violence consistently or inconsistently, demographic data were taken from the first survey in which they indicated an experience of domestic violence. For women who consistently reported no domestic violence, demographic information was provided by the first survey that the participant completed within the study period.

General health was measured by the question 'In general, would you say your health is' with the response options 'Excellent', 'Very good', 'Good,' 'Fair' or 'Poor' [28]. 'Excellent', 'Very good' and 'Good' were collapsed into 'Good', and 'Fair' and 'Poor' were collapsed into 'Poor.'

Participants were asked 'Who lives with you?' Women who responded 'Partner / spouse' were categorised as 'Living with partner', and women who responded 'Own children' or 'Someone else's children' were classified as 'Living with children'. Area of residence was classified using the Accessibility / Remoteness Index of Australia (ARIA+), which measures accessibility to services from the woman's home [29].

Women were asked about their ability to manage on their available income. Response options of 'Impossible,' 'Difficult all the time' and 'Difficult some of the time' were used to indicate the women found it 'Difficult' and responses of 'Easy' and 'Not too bad' suggested the women found it 'Easy'. Women were asked to indicate the highest qualification they had completed. Responses were 'No formal qualifications', 'Year 10 or equivalent (eg School Certificate)', 'Year 12 or equivalent (eg Higher School Certificate)', 'Trade / Apprenticeship', 'Certificate / diploma', 'University Degree', and 'Higher University Degree'. 'Year 10 or equivalent' and 'Year 12 or equivalent' were collapsed into 'Year 12 or less'. 'Trade / apprenticeship' and 'Certificate or diploma' were collapsed into 'Trade, apprenticeship, certificate or diploma.' 'University degree' and 'Higher University degree' were collapsed into 'University degree or higher.'

'Current smoker' includes women who smoked daily or less than daily, 'Never smoker' were women who indicated that they had never smoked, and 'Ex-Smoker' included women who used to smoke. The average number of standard drinks consumed per day category was calculated from responses to items that asked about the usual frequency and quantity of alcohol consumed [30]. Heavy episodic drinking was defined as drinking 'Five or more standard drinks of alcohol on one occasion' at least once per month. A woman was categorised as a 'Risky drinker' if she drank more than two drinks a day on average or she was a heavy episodic drinker. A woman was defined as a 'Non-drinker' if she indicated she never drank alcohol. All other women were classified as 'Low-risk drinker.'

Data analysis

The prevalence of emotional, physical, and sexual abuse, and harassment was calculated for each survey as the percentage of women in the cohort who responded 'Yes' to any of the items included within the respective subscales. Descriptive information about health and demographic characteristics was calculated for women who consistently reported abuse or no abuse, and for those who responded inconsistently. The final analysis, that described inconsistent responding by abuse type and subscale, only included those women who responded affirmatively to at least one item of the CCAS (that is, those who consistently reported no abuse were excluded).

Results

The prevalence of different types of partner abuse remained consistent over the study period (see Table 2). Approximately a third of participants reported emotional abuse and around a fifth reported physical abuse and harassment. Sexual abuse had the lowest prevalence, with less than 10% of women reporting this type of abuse.

Table 2: Prevalence of partner abuse at each survey by abuse type.

	Survey 5 N=8199 %	Survey 6 N=8009 %	Survey 7 N=7186 %
Emotional Abuse	34.5	32.1	32.3
Physical Abuse	20.6	20.3	20.6
Harassment	17.1	18.2	18
Sexual Abuse	6.7	7.1	7.8

Of the women who reported abuse at any of the three survey time points, 16% responded consistently. About one quarter made one inconsistent response, with 17% making two inconsistent responses, and 12% making three. Approximately one fifth of participants made 4-6 inconsistent responses, and 11% made 7 or more inconsistent responses.

Health and demographic factors were measured at baseline and are reported in Table 3. With the exception of living with children, there were few demographic differences between consistent domestic violence and inconsistent domestic violence reporters to items about abuse. Women who were inconsistent reporters were less likely to live with children, compared with women who were consistent domestic violence reporters. Inconsistent reporters were slightly less likely to have difficulty managing on their available income than consistent domestic violence reporters.

Women who had never reported domestic violence (consistent reporters of no domestic violence) were more likely to have good health, live with a partner, find it easy to manage on their available income, be in a relationship and have higher education attainment than consistent reporters of domestic violence and inconsistent reporters. In addition, those who consistently reported no domestic violence were less likely to be current smokers than consistent reporters of domestic violence and inconsistent reporters.

Table 3: Health and demographic factors of inconsistent/consistent responders.

Demographics	Consistently reported DV N=564 %	Inconsistently reported DV N=3009 %	Consistently reported no DV N=3739 %
General health			
Good	88.1	86.4	93.5
Poor	10.6	10.4	6.4
Living with partner			
No	25.7	26.6	17.8
Yes	73.4	70.3	82.2
Living with children			
No	28.9	37	36.7
Yes	70.2	59.9	63.3
Area of residence			
Major cities	55	55.1	56.9
Inner regional	25.9	24.5	24.4
Outer regional	12.9	11.7	12.5
Remote/very remote	3	3.2	2.5
Overseas	2.3	2.6	3.6
Financial stress			
Difficult	53	45.5	31.5
Easy	46.1	51.2	68.1
Educational qualifications			
No formal qualifications	0.9	0.7	0.7
Year 12 or less	19.5	21.3	16.5
Trade, apprenticeship, certificate or diploma	29.4	27.6	22.5
University degree or higher degree	47.3	45.8	58.9

Demographics	Consistently reported DV N=564 %	Inconsistently reported DV N=3009 %	Consistently reported no DV N=3739 %
Smoking status			
Never smoker	52.1	48.6	70.2
Ex-Smoker	27	28.4	21.4
Current Smoker	19.9	19.8	8.2
Alcohol consumption			
Non-drinker	11.3	9.3	13.3
Low-risk drinker	81.4	81.3	83.9
Risky drinker	5.9	6.1	2.4

Inconsistent reporting for each subscale and CCAS item is reported in Table 4. Of all the subscales, emotional abuse generated the highest percentage of inconsistent responses, followed by physical abuse, harassment, and sexual abuse. Within the emotional abuse subscale, 17-20% of participants reported inconsistently that their partner told them they were crazy, not good enough or stupid, was upset if dinner or housework was not done, or did not want them to socialise. In all, 9-12% of participants reported inconsistently that their partner told them that no one would ever want them or that they were ugly, tried to turn their family and friends against them, or kept them from seeing or talking to their family. Fewer participants (2-6%) reported inconsistently that their partner tried to convince their family or friends that they were crazy, took their wallet and left them stranded, refused to let them work outside the home, or kept them from medical attention.

Within the physical abuse subscale, 10-15% of participants reported inconsistently that their partner pushed, grabbed, shoved, shook, hit or tried to hit them with something, slapped them, or blamed them for their violent behaviour. Fewer participants (3-7%) reported inconsistently that their partner threw, kicked, bit, or hit them with a fist, beat them up, locked them in the bedroom, or used a weapon. Within the harassment subscale, 16% of participants reported inconsistently that their partner harassed them over the telephone. In addition, 9-12% of participants reported inconsistently that their partner followed them, hung around outside their house, or harassed them at work.

Table 4: Percentage and number of participants who responded inconsistently to abuse subscales and items.

Abuse categories and items	Inconsistent responders	
	%	N
Emotional abuse subscale	69.4	2478
Told me that I was crazy	20.7	739
Told me I wasn't good enough	20.1	717
Became upset if dinner/housework wasn't done when they thought it should be	19.5	696
Told me that I was stupid	18.5	660
Did not want me to socialise with my female friends	17.9	638
Told me that no one would ever want me	12.1	431
Tried to turn my family, friends and children against me	11.5	411
Told me that I was ugly	10.8	386
Tried to keep me from seeing or talking to my family	9.3	331
Tried to convince my friends, family or children that I was crazy	6.1	217
Took my wallet and left me stranded	4.1	145
Refused to let me work outside the home	2.5	90
Kept me from medical care	2.3	83
Physical abuse subscale	38.9	1389
Pushed, grabbed or shoved me	15	537
Blamed me for causing their violent behaviour	13.4	480
Shook me	10.4	371
Hit or tried to hit me with something	10.1	361
Slapped me	9.9	352
Threw me	6.9	248
Kicked me, bit me or hit me with a fist	5.5	195
Beat me up	3.3	118
Locked me in the bedroom	3	106
Used a knife or gun or other weapon	2.8	100
Harassment subscale	29.4	1049
Harassed me over the telephone	16	571
Followed me	12.2	436
Hung around outside my house	10.6	380
Harassed me at work	9	321
Sexual abuse subscale	8.5	303
Forced me to take part in unwanted sexual activity	8.5	303
Total number of inconsistent reporters	84.2	3009

Qualitative methods and results

Sample

Participants who took part in the qualitative telephone interviews were sampled from the 1989-95, 1973-78, and 1946-51 ALSWH cohorts. The total number of women who participated in semi-structured telephone interviews was 134, with 40 women from the 1989-95 cohort, 41 from the 1973-78 cohort, and 53 from the 1946-51 cohort.

To be included in the sampling frame, participants from the 1989-95 cohort must have responded to the abbreviated CCAS (see Appendix 2) in at least two surveys. In addition, participants were only included if they responded inconsistently, that is, indicated at least one experience of domestic violence and then subsequently reported that they had not experienced that form of domestic violence. Participants from the 1973-78 cohort responded to the CCAS (see Appendix 1) in at least two surveys from Survey 5, 6, and 7. In addition, participants were only included if they responded inconsistently, that is, indicated at least one experience of domestic violence and then subsequently reported that they had not experienced that form of domestic violence. Participants from the 1946-51 cohort were included in the sampling frame if they had responded to the question 'Have you ever been in a violent relationship with a partner/spouse?' in at least two surveys, and responded to at least one of Surveys 6, 7, or 8. In addition, participants were only included if they had responded inconsistently to the item, that is, responded 'Yes' in at least one survey and responded 'No' in a subsequent survey.

Methods

The interview schedule (see Appendix 3) was designed to elicit women's perceptions of abuse in relationships, their ideas about how this has changed over time, and how their own perceptions have changed over time, with focused questions about how they have responded to the ALSWH survey questions about violence over the survey time period. Interviewers were provided with a case study for each participant that included information about their response patterns and basic demographics to assist with the interview process. Sampling frames were established for each cohort and random sampling undertaken on a

staggered basis, beginning 23/5/17. Potential participants were emailed invitations to take part in the research. Participants who were interested in taking part were contacted to arrange an interview time. Interviews were recorded and main points noted by interviewers. Interviewers identified data pertinent to the research questions and noted appropriate quotes and audio segments. For the draft report, delivered June 2017, two coders identified preliminary themes based on interviewer summaries. In depth coding of all interviewer data was conducted by a sole analyst and initial themes were identified. Initial themes were refined by two coders who discussed the thematic elements until they reached consensus. The final themes presented in this document were confirmed with the sole analyst.

Results

Demographics

Tables 5, 6, and 7 include the demographics of interview participants. Only one woman reported having no formal education, but diversity in age, other levels of education, income management, area of residence, and partner status was considered adequate for all of the cohorts. It should be noted that ALSWH cohorts generally under-represent women from non-English speaking backgrounds. It should further be noted that interviews were conducted in English.

Table 5: Demographics of interview participants from the 1989-95 ALSWH cohort.

Demographics	N	%
Age		
22	8	20
23	6	15
24	6	15
25	5	12.5
26	7	17.5
27	8	20
Educational qualifications		
Year 12 or less	14	35
Trade, apprenticeship, certificate or diploma	8	20
University degree or higher degree	18	45
Financial stress		
Difficult	25	62.5
Easy	15	37.5
Area of residence		
Major cities	33	82.5
Inner regional	3	7.5
Outer regional	4	10
Living with partner		
No	28	70
Yes	12	30

Table 6: Demographics of interview participants from the 1973-78 ALSWH cohort.

Demographics	N	%
Age		
39	7	17.1
40	4	9.8
40	12	29.3
42	6	14.6
43	11	26.8
44	1	2.4
Educational qualifications		
Year 12 or less	8	19.5
Trade, apprenticeship, certificate or diploma	9	22
University degree or higher degree	24	58.5
Financial stress		
Difficult	20	48.8
Easy	21	51.2
Area of residence		
Major cities	25	61
Inner regional	8	19.5
Outer regional	8	19.5
Living with partner		
No	14	34.1
Yes	27	65.9

Table 7: Demographics of interview participants from the 1946-51 ALSWH cohort.

Demographics	N	%
Age		
66	13	24.5
67	14	26.4
68	9	17
69	6	11.3
70	9	17
71	2	3.8
Educational qualifications		
Missing	1	1.9
No formal qualifications	1	1.9
Year 12 or less	20	37.7
Trade, apprenticeship, certificate or diploma	13	24.5
University degree or higher degree	18	34
Financial stress		
Difficult	28	52.8
Easy	25	47.2
Area of residence		
Major cities	19	35.8
Inner regional	20	37.7
Outer regional	14	26.4
Living with partner		
No	23	43.4
Yes	30	56.6

Qualitative themes

Before providing information that is directly relevant to the research questions, it is important to understand the nature of women's experiences. Women spoke about experiencing sexual, physical, verbal, emotional and financial abuse perpetrated by their partners. They spoke about physical and psychological injuries they received during the relationship, about 'living with fear', needing to 'walk on eggshells', and the need to be vigilant in order to try and prevent abuse occurring (or recurring). Participants described difficulties in talking with other people about the abuse, adverse reactions when they did talk about the abuse, and about having 'nowhere to go' and no one to ask for help. The majority of the women in this study were no longer living with domestic violence and described their individual pathways to exiting the abuse. In most cases, this involved leaving the family home, often with very little in the way of possessions. Women completed ALSWH surveys at different time points during these experiences.

Women were asked about and talked freely about their perceptions of domestic violence. While responses were diverse, most women mentioned that domestic violence involved inequality with regard to control and many mentioned situations where one person made the other unhappy. Specific acts of abuse were also mentioned, including name-calling, physical acts of violence, and sexual abuse. The majority of women had some clarity around definitions of domestic violence. However, as will be seen in the themes that follow, perceptions of domestic violence, emotional states, the desire to avoid labelling, and adverse emotions contributed to delays in reporting domestic violence and in inconsistent reporting.

Lack of recognition

Lack of recognition included those cases where women indicated that during the relationship, they did not identify their partner's behaviour as abusive or violent. However, on reflection, they did consider their experiences as domestic violence. Many of these women said they felt their relationships were 'normal' and that it was not unusual for emotional, verbal and physical violence to occur within relationships. Some women said that their relationships were similar to their families of origin, which had involved domestic violence, while others spoke of a lack of experience that led them to believe that all relationships were 'awful.'

"All of the discourse around love is that you're crazy in love, love is painful, and so you just assume that that's what you're supposed to feel. If you're in love, it's

supposed to hurt... He was all I'd ever known, so I just assumed that that's what you're supposed to feel."

"I didn't know I was in a domestic violence relationship. It was my first relationship and I had nothing to compare it to but when I look back I would absolutely say it was a violent relationship."

"The way you are brought up and exposed to... your parents being in a relationship like this, you normalise that. You won't really think it is such an issue, you normalise it and think this is just how things are."

"It took me a long time to even realise I was being abused. It didn't seem real."

Third party influences contributed to women's ability to recognise behaviour as violence and social conventions were also identified as contributing to this issue, with some women noting how this had changed over time.

"There was a certain attitude towards some peers I knew. When I started speaking up and saying what happened they turned around to me and said 'no he didn't, you're lying, we know him and we know that is not true'. It put an attitude in me that I know it had happened but I didn't want people to think I was exaggerating, so I think I down played it in my mind."

"There is abuse that's now recognised that never used to be recognised."

By contrast, three women in their twenties talked about family and friends confronting them about their partner's behaviour and how this had helped them to recognise domestic violence.

"She told me I was being abused and saw the bruises and said 'do you realise what is happening? Stop making excuses'."

Normalising and not recognising abuse appeared to impact on the question that asked about the violent relationship more so than behavioural questions. While recognition of abuse may not lead to inconsistent responding, it was found to lead to a delay in disclosing abuse.

Characteristics of the abuse

The type and degree of abuse experienced impacted on disclosures of abuse. For example, emotional abuse was not always identified as abuse by women during the relationship. Several women said that rape within marriage was not always recognised as such, but only one woman talked about actually experiencing rape within marriage. In addition, violence

that was directed at objects or pets had not always been identified by women as constituting domestic violence. Some women spoke about feeling the need to prove that they had been abused, by providing some sort of physical evidence.

“If I had bruises all over me, people would pay attention. But because I didn’t, people said it was just in my mind... if it’s emotional or mental abuse, it’s harder to define, and recognise, and get assistance.”

“Yes that he was an aggressive person and would throw things and kick the dog but no to being violent because he never hit me.”

“At age 34 I was just leaving that relationship and I said ‘no’ because I was never physically hit. At age 38 with the help of a psychologist I could recognize the signs that it was emotionally and financially abusive and that he was a very aggressive person so that’s why I would have answered ‘yes’. At age 41 not sure why I said ‘no’ again, maybe because he never did lay a hand on me and I may have interpreted violent as having to be direct physical contact.”

“I was at some stages interpreting violence as physical and sometimes not...that’s all I can assume the reason for the change [in responding to the survey].”

In addition to the type of abuse, the ‘amount’ of abuse experienced also led women to question whether their experiences constituted domestic violence.

“Sometimes I think yes it [the relationship] was definitely violent and at other times I don’t know if it was considered enough violence... I think even if he never necessarily punched me in the face, there was enough of hurting me, slapping me, pushing me into walls, and the threat was always there, he was always saying he was going to hurt me and even if he never actually physically punched me he was always saying he would.”

“How bad is bad?”

As with lack of recognition of abuse, the characteristics of the abuse experienced led to underreporting of domestic violence. For some women, this delayed the reporting of domestic violence, but questioning whether their experiences were violent or not led to inconsistent responding.

Minimising and discounting

Women said that they had felt a relationship was abusive while they were in it but, on reflection, felt that it had been more unhealthy than abusive.

“I thought it was much worse at the time than it actually was. Much worse things have happened since then.”

“When I was younger and closer to the event, it seemed a lot more severe, and then after that, I was in a much healthier relationship, and I think it made me have a more positive look on my past experiences... maybe it was as bad as I had initially thought... it's easy to discount what your younger self thought was bad.”

“No I wouldn't call it a violent relationship, I think I would call it unhealthy now, because we just didn't communicate, and we ended up just not liking each other very much at the end. And even though I think we both got a bit bitchy, and there may have been some, you know like, verbal stuff, it never got violent or anything, so I would just say that it was unhealthy.”

It is worth noting that this minimising and discounting of abusive events applied to the younger two cohorts and predominantly to the youngest cohort. As they are now aged in their mid-twenties, experiences of violence will have been relatively recent. In contrast to women who did not recognise acts of abuse as 'violent', these results suggest that some women will report abusive events at the time but then revise these experiences as time moves on. The lack of certainty about the nature of their experiences led them to respond inconsistently.

Fear of relationship failure

Fear of relationship failure prevented women disclosing abuse. Women considered themselves solely responsible for the 'success' of the relationship, and disclosing abuse would necessitate taking action that would end the relationship. Sense of identity was closely tied to the success of the relationship for these women, which led them to persevere in the face of abuse to avoid compromising their sense of self.

“If you admit that there's problems, that's like admitting that you're flawed, and most people aren't going to do that, and also, I think because... in order to admit to someone else that there's problems, you have to be able to admit it to yourself.”

“You don't like to admit that you've failed in anything, so there's shame and embarrassment sometimes.”

“Admitting that I couldn't change things was somewhere in my mind, was probably like admitting defeat.”

“Women don’t want to lose hope by admitting to themselves that they haven’t achieved what they set out to achieve on the day they were married.”

In the absence of ongoing self blame (see next section), fear of relationship failure tended to result in a delay between experiences of abuse and affirmative survey responses.

Attribution of blame

Women indicated that feeling to blame for the ‘failed’ relationship or abuse was a barrier to disclosing abuse. Attributions of blame were equivocal and fluctuated over time.

“Even years after you don’t really want to admit that you failed because that little gnawing question is still there ‘was it my fault?’”

“If you’ve had that fight beaten out of you, of course you’re going to think that it’s your fault, and you’re not going to be able to express it.”

“When something happens people go through a stage of ‘was I too challenging to be with?’ When I was answering these questions there was a part of me that was conflicted about it. I have had some of my closest friends victim blame and tell me it was my fault.”

Women’s sense of responsibility for the success of their relationship frequently led to complex internal processes regarding attribution of blame. At some points in time, women externally attributed blame for the ‘failed’ relationship or abuse they had experienced. When this occurred, they tended to disclose abuse. However, at other points in time, causes of relationship failure and abuse were internally attributed (self blame). In these instances, women were reluctant to disclose abuse. Overall, attribution processes caused inconsistent responding.

Guilt, shame and embarrassment

Strongly related to fear of relationship failure and self blame were feelings of guilt, shame and embarrassment for entering into, and remaining in, situations of domestic violence.

“I got embarrassed that I couldn’t make it work.”

“It is embarrassing to think that you’ve got yourself in that situation.”

“Embarrassment, you know, how could I let myself get in this situation? And I think worry about my family’s reaction.”

“I’ve got a university education, and I’m sort of known for being outspoken feminist, so it’s the shame. It’s the absolute shame... there is still a thing in society about how could you allow that to happen? And the premise is always, as you know, it’s always on the victim.”

“The shame of thinking ‘how could I have made such a bad mistake?’”

“Because it’s embarrassing to admit you have been treated that way, don’t want to be seen as a ‘drama queen’, I had no money, so couldn’t leave anyway.”

“I felt a lot of embarrassment for putting myself through that for so long. I fought so hard to make that relationship work, so when it crumbled and it was such a poor relationship, I felt ashamed and felt a lot of embarrassment. So after the relationship ended, I denied it happened and I pushed it all away.”

“You have to walk away and that is hard to do, all your belongings are there, you don’t know what that person is going to do, you’ve got nothing to walk away with sometimes, and that is just humiliating and devastating.”

Feelings of guilt, shame and embarrassment prevented women from disclosing abuse. In terms of survey responses, these emotions led to a delay in reports of abuse.

Emotional state

When asked about their survey response patterns, many women spoke about their emotional state at the time of survey completion. Their ‘mood at the time’ led them to respond in particular ways.

“Sometimes when I was a little bit low, I would... if the questionnaires came out when I was a feeling a little bit low and then I would respond ‘yes’. But if I was feeling good about myself I would very rarely want to open up about anything. I didn’t want to bring it back up into my mind.”

“Probably the state of mind I was in. So if I was feeling gloomy, then I would give a different response, possibly, to when I was feeling on top of things.”

“I’ve been in different spaces of my life when I’ve answered those things.”

“I think it depends on how you are feeling at the time... I could have had a bad day at work or something as well... because I think that [mood] does influence you.”

“It just depends on the mood of the day, or what the circumstances are.”

Women's emotional state at the time of survey completion led to inconsistent responses over time.

State of current relationship

The state of the relationship at the time the survey was completed influenced the way that women responded to items that asked about domestic violence. Where violence had occurred in the past, either in the current relationship or a different relationship, and was not currently occurring, some women responded that they had never experienced domestic violence or abuse events.

"I would answer 'no' to those items today because I am in healthy relationship today."

"I was referring to different relationships, but I don't really know."

"It's not always bad, it goes up and down. When it's good, it's very good, and when it's bad, it's very bad. And that might also influence me why I sometimes said 'yes' and I sometimes said 'no'. Because when I said 'no', it might've been a patch of time where it went exceedingly good. But in another survey when I said 'yes' that was perhaps a patch that was dreadful."

"The roller coaster of the relationship determined my responses. I would just say to myself to get on with life and ignore the bad parts."

"I left my partner... it was 'yes' in the beginning because I was in the middle of it, it was happening to me right then, I was with an abusive partner who did all those things, and then the second time we were sort of had started trying to talk about it, we were trying to make resolutions, so there was 'no' to following me around and pretty much trying to check on everything I did... we had started trying to work on it which is why the results were different the second time I did the survey, and by the third one I had actually left all together. That's why there's a difference."

"In my mid to late 50s, things had become better, so it didn't enter my head anymore of how things had previously been bad."

"At age 60 when I answered 'no' that was when my husband had gone into care for other health reasons, and so while he was in care for 4 years, I was not the object of emotional abuse or controlling behaviour or financial abuse."

This type of inconsistent responding led to false negative rather than false positive reports of domestic violence.

Rejection of 'victim' label

Women overtly rejected the label of 'victim.' Disclosing past abuse was perceived as labelling themselves as 'victims' in direct opposition to their current sense of identity.

"That's not me. I don't want to be a victim. I don't want to be defined as that woman that got divorced to the abusive husband. That's not who I am. I am a really great Mum to three kids, I'm an internationally well respected scientist, I'm a girlfriend to a lovely man, I'm all these things, but I am not the victim of abuse."

"Victim label makes you feel weak and helpless."

Fear of being labelled a 'victim' led to women providing false negative reports of domestic violence and acts of abuse.

Moved on

Some women who perceived that they had moved on from the experience of violence did not disclose abuse due to the experience being perceived as irrelevant to their current lives.

"I had pushed it out of my head and I had young children when I was 50 and the children were fairly young and it was a part of my life that I never ever looked back on or thought about really."

"My thoughts today would be I'm concentrating on me and my health and that's all over in the past."

"Not directly affecting me now so letting the past be the past. Not too much I needed to express afterwards. Was a lot of heartache and trauma leaving the relationship but okay afterwards."

Feeling that the abuse was in the past resulted in women providing false negative reports of domestic violence and abusive acts.

Denial

When asked about their inconsistent responses, many women from all cohorts mentioned 'self denial' and suppression as causing their response pattern. Women talked about putting it out of their minds, 'sweeping it under the rug', '[hiding] it in your brain' and '[locking] it in a part of my head.' Denial could occur at any time both during and after the relationship.

"Part of it I guess was probably some self denial... Certain things I wasn't willing to accept later on because I didn't want that sort of defining part of who I was, by denying that certain things may or may not have happened."

“Perhaps I was suppressing a lot of things at that stage, trying not to think about them.”

“As soon as you tell someone, you’re admitting that it’s actually happening.”

“It is embarrassing to think that you’ve got yourself in that situation, I think, also you’ve gotta admit it to yourself first... if you open your mouth and say it to someone, you’re admitting it, but if you don’t admit it, you can sort of trick yourself that it’s not really even happening.”

Denial could be seen to lead to both a delay in reporting domestic violence or abusive acts and to inconsistent responding over time.

Don't know/forgot

Some women indicated that they did not know why they changed their responses, which could reflect a false negative response, for example:

“I probably should have answered ‘yes’ to that question when I was 36 because I had been in a violent relationship, not sure why I said ‘no’.”

“I honestly can’t tell you why I changed my answers for the ‘left me stranded’ and the ‘wallet’ one, because both of those were a current situation at the time of the last survey that I did, so I’m not too sure.”

However, some women also mentioned ‘forgetting’ in this context. Forgetting included women who appeared to have forgotten the events until reminded by the interviewer, while others remembered the events during the interview but felt that they had probably forgotten the events when they had provided the inconsistent response.

“To be honest, it was really hard even remember what you were referring to... If you hadn’t told me the question, or the time, I wouldn’t have even known what you’d be talking about.”

“Maybe I had a mental blank at age 38 when I said ‘no’, or at that time because I was in a new relationship which is healthy I didn’t answer ‘yes’ to those items.”

“I probably just forgot about it the next time.”

Forgetting was found to underlie inconsistent responding, in most cases women had provided false negative responses.

Tentative themes

While the majority of themes involved false negative reports of domestic violence or violent acts, only one theme solely involved false positive reports. This theme was named 'imparting other information' and occurred where women selected 'yes' to the abusive experiences because there was nowhere in the survey for them to record abuse experiences that had been perpetrated by someone other than an intimate partner. At later time points, they selected 'no' because they had found an alternative method of imparting this information. It must be noted that few women spoke of this, so this theme is tentatively proposed. One further tentative theme involved silencing, where women felt that society removed their voice or silenced them, making it difficult to disclose abuse experiences. As with 'imparting other information', this theme was not prominent in the data but may warrant further investigation.

Discussion

The quantitative research has demonstrated the scope of inconsistent responding to items that ask about domestic violence in surveys with community-based samples, in this instance among women aged 31 to 42. Emotional abuse items were found to involve the highest level of inconsistency, followed by physical abuse, harassment and sexual abuse. These quantitative findings were echoed in the qualitative study, where women questioned whether emotional abuse would be seen as violent and the type, frequency and severity of abuse were open to interpretation and reinterpretation over time, leading to delays and inconsistent reporting of abuse. This is in line with previous research which has shown that emotional abuse, such as controlling behaviour, is often not identified as abuse [31, 32].

In the quantitative study, experiences of domestic violence that were more obviously violent or abusive in nature were less likely to be reported inconsistently. For example, only 2% of women who had a partner who had 'Used a knife or gun or other weapon' responded inconsistently, whereas 21% of women who had a partner who had 'Told me that I was crazy' responded inconsistently. In addition, participants were far more likely to respond inconsistently to the emotional abuse subscale than the physical abuse subscale. It appears that items that are more prone to interpretation and re-interpretation are more likely to result in inconsistent responses.

The demographic profiles of the women who completed the survey items indicated that inconsistent and consistent domestic violence reporters are more similar to each other than to those who consistently report that they have not experienced domestic violence. This finding suggests that experiences of domestic violence might be present among many inconsistent reporters. This is in line with quantitative research that has been conducted with the 1946-51 cohort (unpublished) and with the qualitative results of the current study. These results suggested that the prevalence of false negative reports far exceeded those of false positive reports of domestic violence and abusive acts. Only those few women who were imparting other information (reporting non-partner abuse) and potentially some of those who didn't know why they had reported domestic violence in the past could be classified as providing false positive results.

False negative responses, or underreporting of domestic violence and abuse acts, has been reported by other studies. For example, Devries et al. [14] found responses to a single item resulted in underreporting compared to asking more than one item. However, the current study has expanded past research by clearly demonstrating that responses to domestic violence single items and multiple behavioural items are subject to both delays in reporting the events and to true positive responses later being reported as false negatives. The implication for cross sectional studies is clear, at a single point in time, domestic violence will be underreported whether it is measured by single or multiple items. Longitudinal data provide the opportunity to consider correcting underreporting by treating any reports of domestic violence as an enduring event that is, recoding inconsistent reports of abuse to a positive response. Recoding could assist with more accurate measurement of lifetime prevalence of domestic violence but is not appropriate for measurement of 12 month prevalence, which must allow for change.

Delays in reporting domestic violence are difficult to identify and could potentially remain hidden in longitudinal and cross-sectional survey data. Lack of recognition, the characteristics of abuse, and denial all led women to delay reporting abuse. This was particularly apparent when the question asked women to identify the relationship as 'violent' but also occurred for items that asked about abusive behaviour. Once women had recognised their experiences as being abusive, their ability to select an affirmative survey response was impeded by fear of relationship failure, which was strongly related to a sense of self blame and feelings of guilt, shame and embarrassment, which also led to delays with reporting their experiences.

Collecting retrospective measures of domestic violence experiences in longitudinal surveys could potentially assist in improving both 12 month prevalence and lifetime prevalence figures, where women may have delayed reporting abuse. For example, by attaching years to questions that ask about violence (see Appendix 4) would place clear parameters (end points) around violent experiences, which may also mitigate inconsistent reporting where women did not want to imply that they were currently experiencing abuse when the state of current relationship was non-abusive or that they had not moved on. An extension of this proposition would involve taking a modified life histories approach [33], where years are tied to particular events (eg the year Australia hosted the Olympics) to aid with recall, which might assist women who forgot abusive events. Providing years and using a modified life histories approach warrant further research to test the efficacy of these strategies and to understand the impact of recall bias. These concepts are offered as possible methods for

dealing with inconsistent responses to domestic violence items, not as a replacement for accurate current measurement.

The willingness of women to talk about their experiences of domestic violence suggests that when women agree to be interviewed, and a rapport has been built with an interviewer, and the purpose of the questions is clear, that women who have previously avoided reporting domestic violence are actually willing to do so. This could be due the nature of the questions, which was more cognitive than emotion oriented, in addition to feeling sufficiently safe in discussing these issues. Further interrogation of the data or future research may uncover more information about this finding.

Complex emotions were found to drive women's decision to select affirmative responses to questions that asked about domestic violence. Women's beliefs about responsibility, duty and perceived social expectations all influenced how women felt about their lives and their ability to disclose abuse experiences. For example, many women spoke about needing to work harder at their relationship because if the abuse continued or the relationship ended it was because they had not worked 'hard enough'. Ticking an affirmative response meant admitting 'failure' and involved feelings of shame and embarrassment. Inconsistent responding was related to the transient nature of attribution of blame for the 'failure' of the relationship and the abuse that occurred.

The emotional state at the time the survey was completed also led to inconsistent reporting, with one mood being equated with a positive response at one time point and a different mood being held responsible for a later negative response. The desire to avoid emotions also led to inconsistent responding. Some of those who provided false negative responses said they had moved on; selecting 'yes' meant revisiting the past along with adverse feelings of failure and self blame. Similarly, denial spoke strongly of the desire not to revisit past adverse experiences and minimising and discounting were also used as cognitive methods of avoiding undesirable emotions associated with past abuse experiences, which is in line with previous research [34, 35].

The desire to keep a positive outlook was maintained by women in ways that could also lead to false negative responses. Where their relationship was currently non-abusive, either because they had a different partner or because the events were seen as happening a long time ago or had occurred infrequently, women reported never having had abusive experiences. It appeared that reporting past abuse would somehow impact or reflect negatively on the current state of the relationship. Women also rejected the victim label by providing false negative responses. In these cases, selecting 'yes' was equated to labelling

themselves as a victim, which was an undesirable stereotype that conflicted with their current self identity.

In summary, asking women to respond accurately to items that ask about lifetime experiences of abuse can come at a high cost that involves revisiting past trauma, triggering undesirable emotions and potentially unresolved inner conflicts, threats to past and current self identity and to their current relationship. For some women, these costs are too high, which leads to inconsistent responding over time. More research is needed in this area to find suitable methods that will not re-traumatise women who have lived with violence and that will reduce underreporting.

Limitations

Limitations of the current study include the lack of qualitative information from women who have consistently responded to items that ask about domestic violence and abusive acts. It would be useful to learn why these women have responded consistently, and in particular to ask how they have been able to overcome potential adverse emotional states while completing surveys. The quantitative results pertain to women aged 31 to 42 years, although ALSWH has prepared current draft publications with other age groups that will supplement these findings in the near future. ALSWH samples are generally not representative of women who do not speak English as a first language, and that was also the case for the qualitative research which was conducted solely in English. ALSWH samples are also over representative of women with a tertiary education. Finally, all of the factors that influence survey responses may also influence participation in the qualitative study and the content of the interviews, particularly the participants' current emotional state, and current relationship.

Main Findings

Qualitative findings showed that inconsistent responding was attributed to:

- Emotional state at the time of survey completion
- The desire to avoid triggering negative emotions associated with past abuse and relationship 'failure'
- Perceived threats to women's sense of identity and their current relationship

Qualitative findings indicated that delays in reporting domestic violence were attributed to not recognising acts as abusive or out of the ordinary, fear of failure and feelings of guilt, shame and embarrassment.

Quantitative results indicated that emotional abuse items were the most likely to be reported inconsistently.

Quantitative and qualitative findings indicated that inconsistent responding predominantly reflected false negative responses.

Inconsistent and delayed reporting of domestic violence results in underreporting, which impacts on the accuracy of both 12-month and lifetime prevalence estimates of domestic violence.

Recommendations

Based on the findings of this report, the following suggestions are made regarding the construction and presentation of survey items:

- Single items and those that ask women to indicate that their relationship was 'violent' will result in a conservative measure of domestic violence that should be noted as a limitation.
- Where possible, multiple items that ask about acts of abuse should be included, although recognition of underreporting should be noted as a limitation.
- The impact of providing clear parameters (and end points) for the timing of abuse events to mitigate false negative reporting due to women moving on warrants further investigation.
- Providing women with the space to indicate whether violence and abusive acts are current or in the past might help to mitigate the desire not to reflect badly on their current relationship.
- Providing a clear explanation regarding why it is important to collect accurate data about past and current domestic violence might go some way towards demonstrating the benefits of the research, as a counterpoint to the perceived costs of providing true positive responses. The details of such an approach require further research with women who have lived with domestic violence.

Conclusion

When assessing the prevalence of domestic violence, it is important to understand the complex issues that underlie the reliability and validity of the measures used. It was rare for women to have reported acts of domestic violence where it had never occurred, which suggests that measures of domestic violence at the cross-sectional and longitudinal level tend to underreport the prevalence of domestic violence. In addition, women who report domestic violence inconsistently most closely resemble women who consistently report domestic violence on demographic and health measures. Together, these results provide evidence that the reported strength of associations between domestic violence and poor health are likely to be weaker than is actually the case.

While inconsistent reporting remains a concern in longitudinal research, the majority of women report their experiences consistently over time. The importance of collecting longitudinal data includes the ability to identify predictors of domestic violence and to track women's outcomes in relation to the onset, duration and cessation of domestic violence, as well as the long-term consequences of domestic violence. The current research suggests that longitudinal data might also provide the opportunity to correct underreporting by recoding inconsistent responses. A finding that warrants further investigation. Finding ways to mitigate the perceived emotional costs of completing items that ask about domestic violence should also be a priority for reducing underreporting of domestic violence in both longitudinal and cross-sectional research.

References

1. Carlson, B.E., McNutt, L.A. and Choi, D.Y., *Childhood and adult abuse among women in primary health care: effects on mental health*. J Interpers Violence, 2003. **18**(8): p. 924-41.
2. Sato-DiLorenzo, A. and Sharps, P.W., *Dangerous intimate partner relationships and women's mental health and health behaviors*. Issues Ment Health Nurs, 2007. **28**(8): p. 837-48.
3. Robertiello, G., *Common Mental Health Correlates of Domestic Violence*. Brief Treatment And Crisis Intervention, 2006. **6**(2): p. 111-121.
4. Williams, S.L. and Mickelson, K.D., *The Nexus of Domestic Violence and Poverty: Resilience in Women's Anxiety*. Violence Against Women, 2004. **10**(3): p. 283-293.
5. Taft, A.J. and Watson, L.F., *Depression and termination of pregnancy (induced abortion) in a national cohort of young Australian women: the confounding effect of women's experience of violence*. BMC Public Health, 2008. **8**: p. 75.
6. Beydoun, H.A., Beydoun, M.A., Kaufman, J.S., Lo, B. and Zonderman, A.B., *Intimate partner violence against adult women and its association with major depressive disorder, depressive symptoms and postpartum depression: a systematic review and meta-analysis*. Soc Sci Med, 2012. **75**(6): p. 959-75.
7. Zlotnick, C., Johnson, D.M. and Kohn, R., *Intimate partner violence and long-term psychosocial functioning in a national sample of American women*. J Interpers Violence, 2006. **21**(2): p. 262-75.
8. Krause, E.D., Kaltman, S., Goodman, L.A. and Dutton, M.A., *Avoidant coping and PTSD symptoms related to domestic violence exposure: a longitudinal study*. J Trauma Stress, 2008. **21**(1): p. 83-90.
9. Ellsberg, M., Jansen, H.A.F.M., Heise, L., Watts, C.H. and Garcia-Moreno, C., *Intimate partner violence and women's physical and mental health in the WHO multi-country study on women's health and domestic violence: an observational study*. The Lancet, 2008. **371**(9619): p. 1165-1172.
10. Hurwitz, E.J., Gupta, J., Liu, R., Silverman, J.G. and Raj, A., *Intimate partner violence associated with poor health outcomes in U.S. South Asian women*. J Immigr Minor Health, 2006. **8**(3): p. 251-61.

11. Fanslow, J. and Robinson, E., *Violence against women in New Zealand: prevalence and health consequences*. New Zealand Medical Journal, 2004. **117**(1206): p. 1-12.
12. Dillon, G., Hussain, R., Loxton, D. and Rahman, S., *Mental and physical health and intimate partner violence against women: a review of the literature*. International Journal of Family Medicine, 2012. **2013**: p. 15.
13. Coker, A.L., Davis, K.E., Arias, I., Desai, S., Sanderson, M., Brandt, H.M. and Smith, P.H., *Physical and mental health effects of intimate partner violence for men and women*. Am J Prev Med, 2002. **23**(4): p. 260-8.
14. Devries, K.M., Mak, J.Y., Bacchus, L.J., Child, J.C., Falder, G., Petzold, M., Astbury, J. and Watts, C.H., *Intimate partner violence and incident depressive symptoms and suicide attempts: a systematic review of longitudinal studies*. PLoS Med, 2013. **10**(5): p. e1001439.
15. Rennison, C. and Rand, M.R., *Nonlethal intimate partner violence against women: a comparison of three age cohorts*. Violence Against Women, 2003. **9**(12): p. 1417-1428.
16. Garcia-Moreno, C., Jansen, H.A.F.M., Ellsberg, M., Heise, L. and Watts, C.H., *Prevalence of intimate partner violence: findings from the WHO multi-country study on women's health and domestic violence*. The Lancet. **368**(9543): p. 1260-1269.
17. Abbott, J., Johnson, R., Koziol-McLain, J. and Lowenstein, S.R., *Domestic violence against women: Incidence and prevalence in an emergency department population*. JAMA, 1995. **273**(22): p. 1763-1767.
18. Loxton, D., Dolja-Gore, X., Anderson, A.E. and Townsend, N., *Intimate partner violence adversely impacts health over 16 years and across generations: A longitudinal cohort study*. PLOS ONE, 2017. **12**(6): p. e0178138.
19. Tourangeau, R. and Smith, T.W., *Asking sensitive questions: The impact of data collection mode, question format, and question context*. Public Opinion Quarterly, 1996. **60**(2): p. 275-304.
20. Pachana, N.A., Brilleman, S.L. and Dobson, A.J., *Reporting of life events over time: Methodological issues in a longitudinal sample of women*. Psychological Assessment, 2011. **23**(1): p. 277-281.
21. Langeland, W., Smit, J.H., Merckelbach, H., de Vries, G., Hoogendoorn, A.W. and Draijer, N., *Inconsistent retrospective self-reports of childhood sexual abuse and their correlates in the general population*. Soc Psychiatry Psychiatr Epidemiol, 2015. **50**(4): p. 603-12.
22. Brown, W., Bryson, L., Byles, J., Dobson, A., Lee, C., Mishra, G. and Schofield, M., *Women's Health Australia: recruitment for a national longitudinal cohort study*. Women & Health, 1998. **28**(1): p. 23-40.

23. Loxton, D., Powers, J., Anderson, A., Townsend, N., Harris, M., Tuckerman, R., Pease, S., Mishra, G. and Byles, J., *Online and Offline Recruitment of Young Women for a Longitudinal Health Survey: Findings From the Australian Longitudinal Study on Women's Health 1989-95 Cohort*. J Med Internet Res, 2015. **17**(5): p. e109.
24. Mishra, G., Hockey, R., Powers, J., Loxton, D., Tooth, L., Rowlands, I., Byles, J. and Dobson, A., *Recruitment via the Internet and Social Networking Sites: The 1989-1995 Cohort of the Australian Longitudinal Study on Women's Health*. J Med Internet Res, 2014. **16**(12): p. e279.
25. Dobson, A., Hockey, R., Brown, W., Byles, J., Loxton, D., McLaughlin, D., Tooth, L. and Mishra, G., *Cohort Profile Update: Australian Longitudinal Study on Women's Health*. Int J Epidemiol, 2015.
26. Lee, C., Dobson, A., Brown, W., Bryson, L., Byles, J., Warner-Smith, P. and Young, A., *Cohort profile: the Australian Longitudinal Study on Women's Health*. Int J Epidemiol, 2005. **34**: p. 987 - 991.
27. Loxton, D., Powers, J., Fitzgerald, D., Forder, P., Anderson, A., Taft, A. and Hegarty, K., *The Community Composite Abuse Scale: reliability and validity of a measure of intimate partner violence in a community survey from the ALSWH*. Journal of Women's Health, Issues & Care, 2013. **2**(4).
28. McHorney, C., Ware, J. and Raczek, A., *The MOS 36-Item Short-Form Health Survey (SF-36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs*. Med Care, 1993. **31**(3): p. 247-63.
29. Hugo Centre for Migration and Population Research. *About ARIA+ (Accessibility/Remoteness Index of Australia)*. 2010; Available from: http://gisca.adelaide.edu.au/projects/category/about_aria.html.
30. Powers, J., Anderson, A., Byles, J., Mishra, G. and Loxton, D., *Do women grow out of risky drinking? A prospective study of three cohorts of Australian women*. Drug Alcohol Rev, 2015. **34**(3): p. 278-88.
31. Harris, A., Honey, N., Webster, K., Diemer, K. and Politoff, V., *Young Australians' attitudes to violence against women: Findings from the 2013 National Community Attitudes towards Violence Against Women Survey for respondents 16-24 years*. 2015, Victorian Health Promotion Foundation: Melbourne, Australia.
32. Catalozzi, M., Simon, P., Davidson, L., Breitbart, V. and Rickert, V., *Understanding control in adolescent and young adult relationships*. Arch Pediatr Adolesc Med, 2011 **165**(4): p. 313-9.
33. Blum, Z., Karweit, N. and Sorenson, A.B., *A method for the collection and analysis of retrospective life histories*. 1969, The Johns Hopkins Center Reports for the Study of the Social Organization of Schools,.

34. Vezina, J. and Hebert, M., *Risk factors for victimization in romantic relationships of young women: a review of empirical studies and implications for prevention*. *Trauma, violence & abuse*, 2007. **8**: p. 33-66.
35. Hlavka, H., *Normalizing Sexual Violence: Young Women Account for Harassment and Abuse*. *Gender & Society*, 2014. **28**: p. 337-58.

Appendices

Appendix 1:

Items used to measure domestic violence in the 1973-78 cohort

This question asks about situations you may have experienced with current or past partners. (Mark as many as apply on each line)

My Partner:	In the last 12 months	More than 12 months ago	Never
a Told me that I wasn't good enough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b Kept me from medical care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c Followed me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d Tried to turn my family, friends and children against me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e Locked me in the bedroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f Slapped me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g Forced me to take part in unwanted sexual activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h Told me that I was ugly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i Tried to keep me from seeing or talking to my family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j Threw me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k Hung around outside my house	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l Blamed me for causing their violent behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m Harassed me over the telephone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n Shook me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o Harassed me at work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

My Partner:		In the last 12 months	More than 12 months ago	Never
p	Pushed, grabbed or shoved me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q	Used a knife or gun or other weapon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r	Became upset if dinner / housework wasn't done when they thought it should be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s	Told me that I was crazy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t	Told me that no one would ever want me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u	Took my wallet and left me stranded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v	Hit or tried to hit me with something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
w	Did not want me to socialise with my female friends	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
x	Refused to let me work outside the home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
y	Kicked me, bit me or hit me with a fist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
z	Tried to convince my friends, family or children that I was crazy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
aa	Told me that I was stupid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
bb	Beat me up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix 2:

Items used to measure domestic violence in the 1989-95 cohort

This question asks about situations you may have experienced with current or past partners. (Mark as many as apply on each line)

My Partner:		In the last 12 months	More than 12 months ago	Never
a	Told me that I was ugly, stupid or crazy, or that I wasn't good enough or that no one would ever want me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b	Followed me or harassed me around my neighbourhood / work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c	Tried to turn my family, friends or children against me or tried to convince them I was crazy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d	Kicked, bit, slapped or hit me with a fist or tried to hit me with something	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e	Forced me to take part in unwanted sexual activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f	Tried to keep me from seeing or talking to my family, friends or children, or didn't want me to socialise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g	Pushed, grabbed, shoved, shook or threw me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h	Blamed me for causing their violent behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i	Harassed me over the telephone, email, Facebook or internet	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j	Used a knife or gun or other weapon or beat me up	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k	Became upset if dinner / housework wasn't done when they thought it should be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l	Refused to let me work outside the home or took my wallet and left me stranded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Appendix 3: Interview schedule

1. What do you think an unhealthy relationship is?
2. Would that be different to an abusive or violent relationship?
3. Have those ideas changed from when you were younger?
4. I can see from your answers, that when you were (.....) you've put 'yes' to (.....), is that right?
5. Can I ask how you would respond to that question today?
6. May I ask why that might have changed?
7. Can I ask you what's made you change your responses over time?
8. May I ask if you ever asked anyone for help about a particular relationship you've had?
9. May I ask if you ever *wanted* to tell someone but then chose not to?
10. Did you get help *during* the relationship, or *after* it ended?
11. What kind support did you receive? (Doctor? Counselling? Police? Help to find accommodation?) – was it helpful?
12. Was there a time where you felt misunderstood or was there was an aspect about your experience that the other person found difficult to understand?
13. Have you had a friend or a family member that ever needed help?
14. From your experience, why do you think most women don't tell anyone?
15. What advice would you give a friend if she was in a domestic violence relationship?

Appendix 4:

Measure which includes years domestic violence was experienced

If you have ever lived with a violent partner or spouse, in which years did you experience violence? (Mark all that apply)

- | | | |
|----------|---|--------------------------|
| a | I have never lived with a violent partner or spouse | <input type="checkbox"/> |
| b | Before 2007 | <input type="checkbox"/> |
| c | 2007 | <input type="checkbox"/> |
| d | 2008 | <input type="checkbox"/> |
| e | 2009 | <input type="checkbox"/> |
| f | 2010 | <input type="checkbox"/> |
| g | 2011 | <input type="checkbox"/> |
| h | 2012 | <input type="checkbox"/> |
| i | 2013 | <input type="checkbox"/> |

Enquiries

University of Newcastle:

Professor Deborah Loxton

Deputy Director, Australian Longitudinal Study on Women's Health

Research Centre for Generational Health and Ageing

University of Newcastle, Callaghan NSW 2308, AUSTRALIA

Telephone: 02 4042 0690

Fax: 02 4042 0044

Email: deborah.loxton@newcastle.edu.au

www.alsw.org.au

A detailed description of the background, aims, themes, methods, and representativeness of the sample and progress of the study is given on the project website. Copies of surveys are also available on the website, along with contact details for the research team, abstracts of all papers published, papers accepted for publication, and conference presentations.