# Social-Level Factors Related to Positive Mental Health Outcomes following Intimate Partner

Violence: Results from a Population-Based Aotearoa New Zealand Sample.

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## **KEY WORDS**

Intimate Partner Violence, Positive Mental Health, Social Support, Recovery, Help-seeking

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Social-Level Factors Related to Positive Mental Health Outcomes following Intimate Partner Violence: Results from a Population-Based Aotearoa New Zealand Sample.

### **ABSTRACT**

Intimate Partner Violence (IPV) continues to be an issue for women globally. There remains a gap in research about what contributes to better mental health following IPV. The socio-demographic characteristics and other factors associated with positive mental health were explored among a sample of 454 women aged 16 and over who reported previous exposure to physical and/or sexual IPV. 66% of women reported positive mental health. The cessation of violence, support at disclosure and ongoing informal support were factors significantly associated with positive mental health. Greater community outreach to improve responses to disclosure and practical support is needed.

### INTRODUCTION

Intimate Partner Violence (IPV) warrants global attention with an estimated 30% of women experiencing IPV worldwide (World Health Organization, 2013). Defined as any behaviour within an intimate relationship that can cause physical, psychological or sexual harm, IPV can have widespread physical and mental health outcomes (World Health Organization, 2012). This may include physical injuries, higher levels of depression and anxiety (Heise & García-Moreno, 2002), and suicidal ideation (Karakurt, Smith & Whiting, 2014). While the impact of these experiences must not be minimised, the capacity for survival, tenacity and resilience alongside these negative effects should also be acknowledged (Anderson et al., 2012; Saakvitne et al., 1998; Grych, Hamby & Banyard, 2015).

Some studies have suggested that not everybody necessarily reports enduring psychological problems after IPV experiences (e.g., Anderson et al., 2012). Post-Traumatic Growth (PTG), covering the domains of growth, relating to others, personal strength, appreciation of life and spiritual change (Tedeschi & Calhoun, 1996) has been investigated in samples of women who have previously experienced IPV. Valdez and Lilly reported that 87% of women who had previously experienced IPV reported PTG (Valdez & Lilly, 2015), while Cobb and colleagues reported evidence of PTG in 67% (Cobb, Tedeschi, Calhoun & Cann, 2006). In a further sample of 189 women who had experienced physical or sexual IPV in their lifetime, 42% were categorised as resilient (defined as scoring below the threshold for PTSD or depressive symptoms) (Machisa, Christofides & Jewkes, 2018).

Understanding the factors contributing to positive mental health following IPV is important to enable us to strengthen supportive pathways. However, there is a paucity of research exploring these pathways. The few studies that have explored this under the labels of resilience and PTG, have noted that factors which contribute to better mental health can include individual characteristics (e.g., spirituality), relational factors (e.g., social support), and community or cultural factors (e.g., community cohesion and ethnic identity) (Howell et al., 2018; Kennedy, 2005; Anderson et al., 2012;

Grych et al., 2015). Studies have also shown that growth after IPV is more likely once a relationship with an abusive partner or the trauma has ended (Cobb et al., 2006; Tedeschi & Calhoun, 1995).

Some studies have interpreted growth following IPV as the absence of mental illness, however an alternate way of assessing positive mental health, distinct from measuring the absence of mental illness, has been developed. This conceptualises positive mental health as encompassing three components, *Emotional Wellbeing, Psychological Wellbeing* and *Social Wellbeing* [the Mental Health Continuum Short Form (MHC-SF)] (Keyes, 2002). According to Keyes, emotional wellbeing is considered the presence of positive *feelings* about life (the presence positive affect, such as feeling in 'good spirits') or the absence of negative affect, such as not feeling 'hopeless'). Psychological wellbeing relates to individual factors such as whether individuals feel they are *functioning* well (i.e., like most parts of themselves, have trusting relationships with others, see growth in themselves, have a sense of purpose and direction, self-determination and feel like they have control over their environments). Social wellbeing relates to *social criteria* for evaluating functioning in life, such as social contribution, social acceptance and seeing society as having potential for growth (Keyes, 2002).

Measurement of positive mental health has been shown to have discriminant value in describing the health of general populations (Keyes, 2007). A benefit of this holistic measurement of positive mental health (incorporating assessment of positive emotion toward life, and functioning well either psychologically or socially) is that it acknowledges that positive mental health consists of both individual and social factors. This conceptualisation of positive mental health adds to current understandings of concepts such as resilience and PTG, by conceptualising mental health as multi-dimensional and demonstrating mental health and mental illness as distinct but related concepts (Westerhof & Keyes, 2010). Additionally, the latent factors of the mental health continuum short form, which measure positive mental health are in line with core components of the definition of mental health outlined by the World Health Organization (World Health Organization, 2001a, p1; Guo, Tomson, Guo, Li, Keller & Söderqvist, 2015), and assess effective functioning for the individual and the community, hedonic components (feeling and emotion) and eudaimonic components (meaning and self-realisation) (Keyes, 1998; Waterman, 1993; Guo et al., 2015).

To our knowledge there have been no studies that have measured the prevalence of positive mental health for women that have been exposed to IPV. The current study seeks to determine the prevalence of positive mental health for women exposed to IPV and to identify characteristics and social factors that are associated with positive mental health.

### **METHODS**

Design And Sample

The sample was 454 women aged 16, and over (average age 47.5 years, SD = 15.8), who had ever experienced physical and/or sexual IPV, some of whom may have experienced IPV within the past 12 months. Data was taken from the 2019 New Zealand Family Violence Study/ He Koiora Matapopore, a population-based study which explored people's health and life experiences. A quantitative questionnaire based on the World Health Organization Multi-Country Study on Violence Against Women (WHO-MCS) was used (García-Moreno, Jansen, Ellsberg, Heise & Watts, 2005).

# Full Study Sample Sampling Strategies

The study was conducted in Auckland, Northland and the Waikato. These regions include the largest urban area of the country as well as numerous smaller urban and rural areas and account for about 40% of the Aotearoa New Zealand population. They include a diverse range of Māori (Indigenous population of New Zealand), Pasifika, Asian and European New Zealanders.

Random sampling was conducted using primary sampling units (PSU) based on meshblock boundaries, the smallest geographical units used by Statistics New Zealand. Starting from a randomly selected household, every second and sixth house was selected. Non-residential and short-term residential properties, rest homes and retirement villages were excluded, as well people without a home, and those in boarding houses, residential institutions and prisons. Interviewers made visits to each selected household to recruit participants. Data was collected through face to face interviews, and answers were recorded on a tablet.

To be eligible to participate, the respondent needed to be aged 16 and over, able to speak conversational English, have lived in the household for one month or more, and slept in the house for

four or more nights a week on average. In households with more than one eligible respondent, the chosen participant was randomly selected.

To ensure the safety of participants, all research was conducted following safety guidelines for conducting research on violence against women (World Health Organization, 2001b). Interviewers only interviewed one randomly selected woman per household. Interviews were conducted in privacy with no one over the age of two years present, and the confidentiality of participant responses were maintained. Face-to-face interviews were conducted to enable rapport building and assessment and response to any potential distress. Interviewers were carefully selected and trained in safety protocols. Participants provided written informed consent. At the conclusion of the interview, all participants were provided with a list of support agencies regardless of disclosure status (for more details on the methods see Fanslow, Gulliver, Hashemi, Malihi, & McIntosh, 2021). Ethics approval was received from The University of Auckland Human Participants Ethics Committee (reference number 2015/018244).

# Full Study Response Rate And Representativeness

The final sample size for the full study was 2,887 (including 1423 men and 1464 women). Those who agreed to participate in the study represented more than 60% of the eligible population (63.7% eligible women and 61.3% eligible men), and the response rates were comparable across deprivation level. The ethnic and deprivation level distribution of the final sample was comparable to the general population. In particular, the representativeness of Māori in the sample (11%; 9% male and 12.8% female) was closely comparable to the distribution of Māori in the general population (12%; 11.4% male and 11.7% female). However, the final sample was under-represented for those aged 16-19 (3.4% compared to 7.1% in the general population) and for those aged 20-29 years (10.2% compared to 17% in the general population) and over-represented for those 60-79 years old (29.4% compared to 20.6% in the general population).

## IPV Sample Selection Criteria

The IPV sample included only women who said yes to any of the following questions on lifetime IPV:

Physical IPV. Participants were asked: 'Has any partner ever slapped you or thrown something at you that could hurt you?' 'pushed or shoved you or pulled your hair?' 'hit you with their fist or something else that could hurt you?' 'kicked, dragged or beaten you up?' 'choked or burnt you on purpose?' 'threatened or actually used a gun, knife or other weapon against you?'.

Sexual IPV. Participants were asked: 'Has any partner ever forced you to have sexual intercourse when you did not want to? For example by threatening you or holding you down' 'Did you ever have sexual intercourse when you did not want to because you were afraid of what your current or any other partner might do if you refused?' 'Did your current partner or any other partner ever force you to do anything else sexual that you did not want or that you found degrading or humiliating?'. IPV Sample Socio-Demographic Characteristics are presented in Table 1.

# Measures

Measures are based on the standardised questionnaire used in the WHO-MCS (García-Moreno et al., 2005). The measure of deprivation by Exeter and associates (2017) was added to this study questionnaire, as well as the validated scales: Mental Health Continuum Short Form (Keyes, 2002) and Adverse Childhood Experiences (Felitti et al., 1998). See table 1 and 2.

**Table 1**Measures of Socio-Demographic characteristics the IPV sample from the 2019 New Zealand Family Violence Study.

Variable	Measure
Age	Participants age was categorised into the following groups: 16-24, 25-34, 35-44, 45-54 and 65+.
Education	Participants were asked 'What is the highest level of education that you achieved?'. The response options were Primary, Secondary qualifications and Higher. The responses were made into a binary variable: Primary-Secondary and Tertiary.
Independent	Participants were categorised into two categories: having an
Source of Income	independent source of income from wages, investments or retirement income (Yes) or not (No).
Food Security	Participants were asked 'Do you ever worry about not having enough money to buy food?' Responses were categorised into a binary variable: Food secure (never) and Food insecure (occasionally, sometimes, often and all the time).
Personal Income	Participants were asked 'Do you personally earn more or less than \$50,000 per year?' and response options included less than \$25,000, \$25,000-\$49,999, \$50,000-\$74,999, \$75,000-\$100,000 and greater than \$100,000. Responses were categorised into the binary variable of less than \$50,000 and greater than \$50,000.
Household	Similarly, participants were asked 'Does your household earn more or
Income	less than \$50,000 per year' with the same response options available as for personal income.
Deprivation	Area level deprivation was measured in accordance with criteria set out in the New Zealand Indices of Multiple Deprivation (IMD) (Exeter, Zhao, Crengle, Lee & Browne, 2017). Seven domains of deprivation are covered by this measure including employment, income, crime, housing, health, education and geographical access (Exeter et al., 2017). We categorised individuals as living in areas that were least deprived, moderately deprived or most deprived.

**Table 2**Measures of Contributing Factors the IPV sample from the 2019 New Zealand Family Violence Study.

Variable	Measure
Current Partnership Status	Participants were asked 'Are you currently married, or do you have a partner?' Responses were made into a categorical variable: married, cohabiting, divorced/separated and widowed.
General Health	Participants were asked 'In general, would you describe your overall health as excellent, good, fair, poor, or very poor?' Responses were made into the binary measure 'Bad' (Poor, Very Poor, Fair) and 'Good' (Excellent, Good).
Current Physical IPV	If participants answered yes to any of the physical IPV questions and indicated that IPV had occurred within the past 12 months, they were categorised as a 'yes' to current physical IPV.
History of Child Sexual Abuse	To increase the likelihood of disclosing sexual abuse experienced during childhood, a dual report method was undertaken. During the interview, respondents were asked 'Before the age of 15, do you remember if anyone ever touched you sexually, or made you do something sexual that you didn't want to do?'. Immediately prior to the completion of the interview, respondents were also asked to make an anonymous report about their experience of child sexual abuse by putting a mark on a card with two faces on it (a happy face for no child sexual abuse and a sad face for experiencing child sexual abuse). Respondents were classified as sexually abused during childhood if they responded affirmatively to the interview question or marked the sad face in the anonymous report.
Adverse Childhood Experiences (ACE)	ACEs were measured according to the ACE criteria by Felitti and associates (1998). Eight items were used to measure this: 'Did you live with anyone who was depressed, mentally ill or suicidal?', 'Did you live with anyone who was a problem drinker or alcoholic?', 'Did you live with anyone who used illegal street drugs or who abused prescriptions medications?', 'Did you live with anyone who served time or was sentenced to serve time in a prison, jail, or other correctional facility?', 'Was your mother or step mother ever slapped, hit, kicked, punched or beaten up?' 'Before age 18, did any parent or adult in your home ever hit, beat, kick, or physically hurt you in any way?(not including smacking)', 'Did a parent or adult in your home ever swear at you, insult you, or put you down?' and 'Were your parents separated or divorced?'. Responses were categorically grouped across 0-1 experiences, 2-5 experiences and 6+ experiences. The use of the ACE measure has been validated (Meinck, Cosma, Mikton & Baban, 2017)
Positive Childhood Experiences	Participants were asked: 'When you were growing up, in your first 18 years of life, did you live with anyone who ensured that your basic needs were met?' 'When you were growing up, in your first 18 years of life, did you live with anyone who recognised and encouraged your strengths?' 'When you were growing up, in your first 18 years of life, did you live with someone who loved you and who was on your side?'. The responses were categorised into 0 experiences, 1 experience and 2+ experiences.
Help-Seeking	Participants were asked: 'Who have you told/did you tell about your partner's behaviour?' Speaking to the police, a lawyer, the court, service providers, health workers or mental health workers was categorised as 'Formal Help Seeking'. Speaking to a family member, friends, neighbours or workmates was categorised as 'Informal Help Seeking'.
	All participants were also asked 'Did anyone try to help you?' regardless of whether they had indicated they had sought help or not. Participants chose from the same options as help-seeking above (Who did you tell about your partner's behaviour?) and their responses were categorised as 'Received Formal Help' and 'Received Informal Help'. We measured receipt of informal help independently of simply telling someone about the partners behaviour (disclosure) because we acknowledge that some people may receive help even without disclosing.
Reaction to disclosure	A sub-sample was created of women who had indicated 'yes' to telling someone about their partners behaviour (n=324). They were asked if they had told someone about their most recent experience of forced sex from a partner or non-partner and asked what response was received to this disclosure - 'How did they respond?'. Negative Reaction to Disclosure. If these participants reported receiving any of the following responses: 'Blamed me for it', 'Told me to keep it quiet' or 'Were indifferent' it

	was categorised as a negative reaction. <i>Positive Reaction to Disclosure</i> . If participants reported experiencing any of the following responses: 'Supported Me' or 'Advised to report to police', it was categorised as a positive reaction. Participants could choose multiple responses.
Family Support	Participants were asked 'When you need help or have a problem, can you usually count on members of your family for support?' Possible responses were 'Yes' or 'No'.
Support	Received informal help and family support were combined to make a categorical 'support' variable. The responses were grouped into four categories: receiving both family support and informal help, receiving neither family support nor informal support, receiving either family support or informal help.

### Outcome Variable: Mental Health

Keyes' Mental Health Continuum Short Form (MHC-SF) was used to measure mental health. The use of the MHC-SF has been validated across many studies internationally (Perugini et al., 2017; Schutte & Wissing, 2017; Salama-Younes, 2011). The MHC-SF groups 14 dimensions of mental health under three categories: *Positive Emotions*, which includes Positive Affect and Avowed quality of life (e.g., 'How often do you feel happy?'), Positive Psychological Functioning, which includes self-acceptance, personal growth, purpose in life, environmental mastery, autonomy and positive relations with others (e.g., 'How often did you feel good at managing the responsibilities of your daily life?') and Positive Social Functioning, which includes social acceptance, social actualisation, social contribution, social coherence and social integration (e.g., 'How often did you feel that you had something important to contribute to society?') (Keyes, 2007). Participants rated the frequency with which they experienced each of these items in the past month on a 6-point Likert scale, where never=1, every day=6.

The MHC-SF conceptualises mental health across the categories of *Flourishing, Moderate*Mental Health and Languishing. Flourishing is defined as living with high levels of well-being, with positive emotion and functioning well psychologically and socially. It is measured by having a high score (5 or 6) on one of the measures of emotional wellbeing, and high scores (5 or 6) on six of the eleven items of psychological and social wellbeing. Languishing is defined as low-levels of wellbeing, or feelings of emptiness, stagnation, and quiet despair. It is measured by having a low score (1 or 2) on one of the three measures of emotional wellbeing and low scores (1 or 2) on six of

the eleven items of psychological and social wellbeing. Participants who are neither flourishing nor languishing are categorised as 'moderately mentally healthy' (Keyes, 2002).

Positive and Lower Mental Health. For the purposes of this study, the above labels of Flourishing and Languishing were changed to 'Positive Mental Health' and 'Low Mental Health' respectively. The criteria for the measurements for each of these outcomes did not change, however the labels were changed to not minimise the detrimental impacts of IPV by implying that this experience is associated with flourishing.

Due to the low numbers of participants who reported 'Low mental health' in the IPV sample, those with 'Low mental health' and 'Moderate mental health' were grouped together as 'Lower Mental Health' (see results section). This combination of categories is common practice among other studies (Schotanus-Dijkstra et al., 2016; Sofija, Harris, Sebar & Phung, 2021; Redelinghuys & Rothman, 2020).

### Statistical Analysis

Reported estimates of the prevalence of positive and lower mental health were obtained with descriptive statistics. Descriptive statistics were generated for the socio-demographic characteristics for the whole IPV sample as well as for each mental health group and the differences were tested with Chi square statistics. Chi square tests were also used to examine bivariate correlations between mental health status and other social factors that were associated with mental health in the literature. We then built a multivariable logistic regression model including socio-demographic variables and contributing variables that had a p-value less than 0.05 in the bivariate analyses (Table 2). Given that the outcome variable is dichotomous and that there are multiple independent variables being explored, multivariable logistic regression is the most suitable statistical test for this study (Brunner & Giannini, 2011; Hidalgo & Goodman, 2013). All analyses were conducted with STATA 16 (StataCorp., 2019).

### **RESULTS**

# Sample Demographics

The mean age for the entire sample was 50.8 years (SD=15.5), 51.9 years (SD=15.2) for those reporting positive mental health and 48.8 years (SD=16) for those reporting lower mental health.

5.1% were between 16-24 years old, 11.5% between 25-34, 19.3% between 35-44, 20.6% between 45-54, 21.9% between 55-64 and 21.7% in the 65 years and above. 24.5% were categorised as least deprived, 37.2% as moderately deprived and 38.3% as most deprived. 57.9% of the sample had post-secondary education and 42.1% had primary-secondary education. 78.9% of the sample reported having an independent source of income, and 66.4% reported food security (never worrying about food). 67.3% of the sample had a personal income of less than \$50,000 NZD.

### Mental Health Status Prevalence

66% of the IPV sample (n=300) reported positive mental health, 31% (n=141) reported moderate mental health, and 3% (n=13) reported low mental health. The combined lower mental health category prevalence was 34% (n=154).

Characteristics Of IPV Sample Reporting Positive Versus Lower Mental Health

Socio-Demographic Characteristics. Those reporting positive mental health did not differ significantly from those reporting lower mental health on socio-demographic characteristics including age, education, deprivation level, independent source of income, personal and household income, and food security status. (See Table 3).

**Table 3**Socio-Demographic characteristics associated with positive or lower mental health among the IPV sample from the 2019 New Zealand Family Violence Study.

# Mental health status

	Positive Mental	Lower Mental Health	Total	P value
	Health	N=154 (34%)		
	N=300 (66%)			
Socio-demographics n (%)				
Age Categories				0.111
16-24	12 (52.17)	11 (47.83)	23	
25-34	29 (55.77)	23 (44.23)	52	
35-44	62 (71.26)	25 (28.74)	87	
45-54	60 (64.52)	33 (35.48)	93	
55-64	63 (63.64)	36 (36.36)	99	
65+	73 (74.49)	25 (25.51)	98	
Education				0.994
Primary-secondary	126 (66.32)	64 (33.68)	190	
Tertiary	173 (66.28)	88 (33.72)	261	
Independent source of income				0.891
Yes	236 (65.93)	122 (34.08)	358	
No	64 (66.67)	32 (33.33)	96	
Food security				0.691
Secure (never worry)	201 (67.00)	99 (33.00)	300	
Insecure (have worried)	99 (65.13)	53 (34.87)	152	
Personal income				0.414
<50k	186 (64.58)	102 (35.42)	288	

>=50k	96 (68.57)	44 (31. 43)	140	
Household income				0.880
<25,000	45 (63.38)	26 (36.62)	71	
25,000-49,999	52 (65.82)	27 (34.18)	79	
50,000-74,999	50 (62.50)	30 (37.50)	80	
75,000-100,000	43 (66.15)	22 (33.85)	65	
>100,000	81 (69.23)	36 (30.77)	117	
Deprivation				0.588
Least Deprived	76 (68.47)	35 (31.53)	111	
Moderately Deprived	114 (67.46)	55 (32.54)	169	
Most Deprived	110 (63.22)	64 (36.78)	174	

Factors Contributing To Positive Mental Health In The IPV Sample At The Univariate level

Current Partnership Status. There were no significant differences in current partnership status between those reporting positive mental health and those reporting lower mental health.

General Health. Those with good general health were more likely to report having positive mental health (71%).

Current Physical IPV. Those who had in the past but who were not currently experiencing physical IPV were more likely to report positive mental health (67%).

Childhood Related Factors. Those who had fewer adverse childhood experiences were more likely to report positive mental health (e.g., 71% of those reporting 0-1 ACE's). There were no significant differences in relation to experiencing childhood sexual abuse and positive childhood experiences across the positive and lower mental health groups.

Social Support Factors. Telling formal or informal sources about the violence was not significantly associated with differences in reporting positive mental health.

Those who received help from informal sources were significantly more likely to report positive mental health (70%). Receiving help from formal services was not significantly associated with reported mental health status.

Participants who reported receiving any negative reaction to disclosure were more likely to report lower mental health (78%). Having received any positive reaction following disclosure did not significantly distinguish between those reporting positive and lower mental health.

Those who could usually count on members of their family for support in an emergency were more likely to report positive mental health (68%). Also, those who reported having both family support and informal help were more likely to report positive mental health (72%) whilst those reporting no family support and no informal help were more likely to report lower mental health (62%). (See Table 4)

**Table 4**Factors contributing to positive mental health among the IPV sample from the 2019 New Zealand Family Violence Study.

	Positive Mental Health	Lower Mental Health	Total	P value
	N=299 (66%)	N=154 (34%)		
Current partnership status				0.577
Married	125 (67.93)	59 (32.07)	184	
Cohabiting	72 (61.02)	46 (38.98)	118	
Divorced/separated	79 (66.95)	39 (33.05)	118	
Widowed	24 (70.59)	10 (29.41)	34	
General health	0 ( 0)			0.004
Bad	85 (57.05)	64 (42.95)	149	
Good	214 (70.86)	88 (29.14)	302	
Current Physical IPV				0.007
Yes	12 (42.86)	16 (57.14)	28	
No	288 (67.61)	138 (32.39)	426	
<b>Childhood Related Factors</b>				
History of child sexual abuse				0.423
Not Abused	188 (67.63)	90 (32.37)	278	
Abused	110 (63.95)	62 (36.05)	172	
Adverse Childhood Experiences				0.027
0-1	151 (71.23)	61 (28.77)	212	
2-5	131 (63.59)	75 (36.41)	206	
6+	18 (50.00)	18 (50.00)	36	

Positive Childhood Experiences				0.759
0	4 (80.00)	1 (20.00)	5	
1	8 (61.54)	5 (38.46)	13	
2+	288 (66.06)	148 (33.94)	436	
Help seeking				
Telling Formal				0.496
Yes	87 (68.50)	40 (31.50)	127	
No	213 (65.14)	114 (34.86)	327	
Telling Informal				0.604
Yes	204 (66.89)	101 (33.11)	305	
No	96 (64.43)	53 (35.57)	149	
Received formal help				0.590
Yes	56 (63.64)	32 (36.36)	88	
No	244 (66.67)	122 (33.33)	366	
Received informal help				0.024
Yes	166 (70.94)	68 (29.06)	234	
No	134 (60.91)	86 (39.09)	220	
Family Support				0.016
Yes	266 (68.38)	123 (31.62)	389	
No	31 (52.54)	28 (47.46)	59	
Support				0.002
No family support/No informal help	13 (38.24)	21 (61.76)	34	
Yes family support/No informal help	199 (64.67)	65 (35.33)	184	
No family support/Yes informal help	18 (72.00)	7 (28.00)	25	
Yes family support/Yes informal help	147 (71.71)	58 (28.29)	205	

Negative Reaction to Disclosure				0.004
Yes	2 (22.22)	7 (77.78)	9	
No	213 (67.62)	102 (32.38)	315	
Positive Reaction to Disclosure				0.594
Yes	9 (60.00)	6 (40.00)	15	
No	206 (66.67)	103 (33.33)	309	

# Logistic Regression results

**Table 5**Factors associated with positive mental health among the IPV sample from the 2019 New Zealand Family Violence Study.

Factors	AOR	95% CI	P value
General Health			
Bad	1.00		
Good	1.39	0.83 2.35	0.21
Adverse Childhood			
Experiences			
0-1	1.00		
2-5	0.89	0.52 1.50	0.65
6+	0.59	0.24 1.46	0.26
<b>Current Physical IPV</b>			
No	1.00		
Yes	0.29	0.11 0.76	0.011
Negative Disclosure Reaction			
No	1.00		
Yes	0.12	0.02 0.58	0.009
Support			
No family support/ No informal help	1.00		
Yes family support/ No informal help	3.89	1.22 12.41	0.022
No family support/Yes informal help	6.68	1.62 27.56	0.009
Yes family support/ Yes informal help	6.11	1.99 18.73	0.002

Note. IPV=intimate partner violence; AOR=adjusted odds ratio; CI=confidence interval; *P* values in bold indicate significance at the <.05 level

In this sample of women who have experienced IPV, there were no significant associations between general health, adverse childhood experiences and current positive mental health.

Women who reported current exposure to physical IPV were less likely to have positive mental health compared to women who did not report current exposure to physical IPV (AOR= 0.29; 95% CI 0.11 - 0.76). Women who reported a negative reaction to disclosure were also less likely to have positive mental health compared to those who did not report a negative reaction (AOR= 0.12; 95% CI 0.02-0.58). Compared to those who had no family support and received no informal help, positive mental health was almost four times more likely to be reported by women who had family support but no informal help (AOR= 3.89; 95% CI 1.22 – 12.41); and more than six and a half times more likely to be reported by those who had no family support but who did receive informal help (AOR= 6.68; 95% CI 1.62 – 27.56). Those who had both family support and who received informal help were about six times more likely to report positive mental health (AOR= 6.11; 95% CI 1.99 – 18.73). See table 5.

### DISCUSSION

This study explored the prevalence of positive mental health and associated factors among women who have experienced IPV. The purpose was to investigate what factors may support recovery and longer term positive mental health. Given the prevalence of IPV in the population, understanding ways to support recovery is important to mitigate the long-term negative consequences that can result.

The Prevalence Of Positive Mental Health In The IPV Sample

Two thirds of the IPV sample reported positive mental health. The prevalence of positive mental health in our IPV sample is low compared with the general population in Canada (76.8% flourishing) (Afifi et al., 2016) but high compared to the general populations in United States (51.9 % flourishing) (Catalino & Fredrickson, 2011) and the Netherlands (36.5 % flourishing) (Schotanus-

Dijkstra et al., 2016). Differences in prevalence rates may in part result from differences in recruitment and data collection methods such as face to face interviewing (Schotanus-Dijkstra et al., 2016), computer-assisted face to face interviewing (Afifi et al., 2016) and web-based surveys (Catalino & Fredickson, 2011). For example, studies have found that online surveys are not always representative of the entire population compared to face to face interviews (Blasius & Brandt, 2010).

The high prevalence of positive mental health in our sample may be partially due to selection bias. This IPV sample was identified through a population-based study, with a 64% response rate. As such the respondents who chose to participate in the study may not necessarily represent the entire pool of women who have been exposed to IPV or who are experiencing low mental health. Those who were experiencing the most severe cases of IPV or the lowest mental health are likely to be missing from the sample, as previous studies have found that women who experience the most severe forms of IPV are less likely to participate in surveys, particularly those still cohabitating with their partners (McNutt & Lee, 2000; Waltermaurer, Ortega & McNutt, 2003). Studies have also shown that the stigma associated with mental illness could act as a barrier for participating in mental health research (Woodall, Morgan, Sloan & Howard, 2010). The exclusion criteria for our study (e.g., excluding those who were without a home or those who lived in boarding houses or residential institutions) may also have contributed to the relatively high proportion of those reporting positive mental health.

Characteristics Of Positive Mental Health In The IPV Sample

Those who reported positive mental health in our IPV sample reported that their general health was good. This is consistent with previous research demonstrating that physical health and mental health are interlinked (Ohrnberger, Fichera & Sutton, 2017). In our IPV sample, the other socio-demographic characteristics did not significantly differ between the positive and lower mental health groups.

Factors Contributing To Positive Mental Health

The logistic regression model highlighted a number of different factors that significantly contributed to positive mental health outcomes for women who have experienced IPV. Importantly, positive mental health outcomes were more likely to be reported by women who were not experiencing current physical violence. This highlights the importance of supporting women's safety, which needs to include active responses to contain the violent behaviour of the person using the violence (Family Violence Death Review Committee, 2016). Other studies have found that the cessation of physical IPV is important for recovery from depressive and PTSD symptoms (Blasco-Ros et al., 2010) and post-traumatic growth (Cobb et al., 2006; Tedeschi & Calhoun, 1995).

Telling either a formal or informal source of support about the IPV experience was not significantly associated with women's reported mental health status. Whilst public awareness campaigns often urge women who experience violence to speak out or to tell others about the violence, this research suggests that telling alone is insufficient to support women's later positive mental health.

Response at the point of disclosure emerged as having significant implications for contributing to women's later positive mental health. In the sub-sample of women who had disclosed their IPV to someone, those who reported experience of any negative response to disclosure were much less likely to report positive mental health. This strong finding is consistent with previous literature, which reported that negative social reactions to disclosure may compound the negative impacts of IPV (Yndo, Weston & Marshall, 2019; Woerner, Wyatt & Sullivan, 2019). If people receive negative responses to their disclosure, they are likely to experience more distress and less likely to seek out further help or disclose the violence again (Family Violence Death Review Committee, 2016).

Importantly, other studies provide evidence that a positive response to disclosure (i.e., disclosure followed by receiving social support) is associated with better mental health for those who have experienced violence (Sylaska & Edwards, 2014). Previous research has highlighted that

response at the point of disclosure is an important gateway to accessing additional support. Fostering an environment where people feel supported to disclose can enable future help-seeking (Yndo et al., 2019). Whilst positive responses to disclosure of sexual IPV (partner and non-partner) did not emerge as a significant factor contributing to mental health in our study, this is likely to be because 95% of the IPV sub-sample who had told someone about their abuse, reported that they had not received positive responses to disclosure. This is a serious gap and indicates that considerable work is urgently required to ensure that friends, family and other informal sources of support as well as formal services have the training and resources, they need respond in ways that support women's safety.

In this study, women who received help from informal sources were more than six and a half times more likely to report positive mental health. The implication of this is that the strongest contributor to positive mental health among women who have experienced IPV is receiving help (actions), rather than the disclosure itself. Results also indicate that family support is an important contributor to women reporting positive mental health. Our findings align with other studies, which have highlighted social support as an important contributor to better mental health outcomes for women who have experienced IPV (Howell et al., 2018; Coker et al., 2002; Blasco-Ros et al., 2010; Ford-Gilboe et al., 2009). In particular, our findings make an important contribution on where the social support comes from – friends, neighbours, colleagues and family. Over half of our sample reported receiving informal support from family, friends, neighbours or workmates and many studies have shown these as vital sources of support (Sylaska & Edwards, 2014). Informal sources of support may also be present when the abusive partner is not, which means there is more potential for them to provide tangible support, such as providing safety or an escape from the violence (neighbours) (Paquin, 1994) or interpersonal and instrumental support, such as workplace accommodations and information about resources available (workmates) (Kulkarni & Ross, 2016).

These findings can be linked to Ungar's (2012) social ecological theory of resilience, which suggests that it is a combination of individual needs and environmental factors that facilitate growth. In particular, Ungar points out that resilience following exposure to adversity is closely linked with

the availability of meaningful opportunities and resources provided in the environment. This theoretical understanding is consistent with our finding that receiving help from informal sources of support and not just help-seeking by the individual was an important contributor to positive mental health in this sample. Further, the quality of support provided by one's environment, such as the support provided by informal supports (e.g., friends and family) and how meaningful that support was, facilitated positive mental health for those who experienced IPV.

In our study one in five women in the sample reported receiving formal help. However, there was no significant relationship between receiving help from formal services and women's positive mental health. This does not mean that receiving help from formal services is not important, as these services are important for providing pragmatic support such as housing support, financial help and care for children (Pels, van Rooij & Distekbrink, 2015) and for accessing legal and social services (Sayem, Begum & Moneesha, 2013). Accessing these formal services can be important for enhancing women's safety, but more focus is needed on how these services can change their organisational practice to improve access and response (Wills, Ritchie & Wilson, 2008).

While ACEs are associated with negative mental health outcomes in the general population (Bellis et al., 2019), we did not find a significant association between ACEs and mental health status in this IPV exposed sample. This is likely to be the result of low variance in ACE exposure between the positive and lower mental health groups in our IPV exposed sample, as ACEs are strongly associated with later exposure to IPV (Mair et al., 2012; Walsh, Blaustein, Knight, Spinazzola & Van Der Kolk, 2007). Similarly, when examining the factors contributing to positive mental health given that a large majority of the sample reported having some positive childhood experiences (over 90%), these variables may have offered little to distinguish between the two mental health groups.

# **Strengths And Limitations**

Much previous IPV research has focused on documenting the negative consequences associated with IPV exposure. This study provides important information about associations with better mental health outcomes following IPV, which can contribute to our understanding of resilience

and recovery. We extend the limited previous research that explored mental health outcomes for women who have experienced IPV by measuring positive mental health as distinct from the absence of mental illness. To our knowledge, this is the first study exploring positive mental health in an IPV sample.

An additional strength of this study is that it is drawn from a population-based study and is, therefore, more representative of the IPV population in the community and not just from those who have sought services (i.e., shelters or those who have reported to police). The large sample size of 454 is another strength of this study. The use of validated measures for key dependent and independent variables also lends confidence to the robustness of our findings.

As noted previously, the response rate for this population-based study means that we may not have captured the full range of women who have been exposed to IPV, or those with the poorest mental health. This may mean, for example, that the overall prevalence of positive mental health that we obtained may be greater than would be obtained from other IPV samples e.g., those who are in shelters or engaging with the police. Nonetheless, our findings highlight the importance of factors that contribute to positive mental health which may still be relevant for those missing from our sample.

Practice Implications And Future Research

This research confirms the importance of violence cessation to enable women to experience positive mental health. To support violence cessation, services are necessary to help men to stop using violence and to ensure women's safety.

Given the importance of responses from informal sources of help in contributing to the recovery and resilience of women who have experienced IPV, there needs to be greater outreach to support these groups. Supporting friends, family, neighbours and colleagues to have the skills to respond well to disclosure and to provide practical support may assist women to be safe, recover and contribute to their positive mental health. Strategies and programmes directed at informal sources should be targeted at points and places where people already are, such as schools, organisations and workplaces (Rayner-Thomas, Fanslow & Dixon, 2014). Consideration of women's support networks

can also be important when determining services in clinical or legal settings (Kocot & Goodman, 2003).

This research highlights the importance of developing population level strategies to improve helpful responses following disclosure of IPV. Improvement strategies need to be specific about what responses are helpful or unhelpful. For example, poor understandings about the dynamics of violence by people in the community, including judging, minimising or not believing the violence and victimblaming are unhelpful responses (The Backbone Collective, 2020). Other researchers have also highlighted the importance of strategies to improve responses to disclosure (Yndo et al., 2019; Syalska & Edwards, 2014). Further qualitative research to elucidate what helpful informal responses entail would be of benefit.

## Conclusion

Overall, the results demonstrate that positive mental health following exposure to IPV is associated with a number of different social factors. Importantly, the cessation of the abuse, support at the point of disclosure and on-going informal support are factors which can be strengthened to promote better mental health for women who have experienced IPV.

# **AUTHORS NOTE**

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