

The Adverse Childhood Experiences of Methamphetamine Users in Aotearoa/New Zealand

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Abstract: Using in-depth semi-structured interviews, the family environment of forty-one former frequent methamphetamine users is analyzed using a ten category measure of adverse childhood experiences (ACEs). The qualitative analysis reveals almost three-quarters experienced four or more ACEs, especially parental separation, parental substance abuse, emotional neglect and physical neglect. Females compared to males, and Māori compared to European/Pākehā, experienced more adversity, while father figures played a disproportionate role in producing participants' childhood adversity. Physical neglect, physical abuse, parental mental illness, sexual abuse and early age of parental separation were especially detrimental to participants' healthy development. With approximately five ACEs each on average, this first ever life course-based qualitative study of frequent methamphetamine users in Aotearoa/New Zealand adds further evidence to the body of knowledge that demonstrates frequent substance use is an adaptive counterproductive coping mechanism to adverse childhood experiences. However, six interviewees were exposed to none or one ACE. With 'good' and 'fortunate' childhoods, and loving and supportive parents, such contrary childhoods underscore the importance of cultivating and practicing prosocial authoritative parenting practices.

Keywords: Methamphetamine users, Aotearoa/New Zealand, adverse childhood experiences, life course, authoritative parenting.

INTRODUCTION

In Aotearoa/New Zealand, media stories about methamphetamine use regularly appear in newspapers, where "the scourge" of methamphetamine addiction is commonly depicted as indiscriminately destroying individual lives, families and whole communities (Northern Advocate, 2017). From these media depictions a popular anti-methamphetamine narrative has emerged that presumes this "evil" drug to be so "highly addictive" that, like a "virus," it does not distinguish between gender, age, ethnicity or socioeconomic-status (Quill, 2016; 2016b). However, Ministry of Health survey data (2014; 2016; 2019) shows methamphetamine use among males is two-to-three times higher than females; those aged 25-44 use methamphetamine at a higher rate than other age groups; Māori are two-to-three times more likely to have used methamphetamine than European/Pākehā; while about five times more people living in the most deprived neighbourhoods use methamphetamine than those living in the least deprived neighbourhoods. Survey data also shows between 0.7% and 3% of Aotearoa/New Zealand adults used methamphetamine in the previous 12-months, while about 0.2% or 10,000 individuals use methamphetamine on a monthly basis (Ministry of Health, 2014; Policy Advisory Group 2015; Ministry of Health, 2016; McQuillan, 2017; MacLean,

2018). Nevertheless, 36% arrested for a criminal offense in 2015 reported using methamphetamine in the previous 12 months (Johnson, 2018). The highly elevated prevalence rates of frequent substance use among Aotearoa/New Zealand's prisoners correlates with their elevated rates of severe psychiatric disorders, including major depression and PTSD (Brinded *et al.*, 2001). This indicates widespread self-medication of a drug that was originally marketed and prescribed as an antidepressant (Rasmussen, 2008).

While methamphetamine use in Aotearoa/New Zealand is relatively uncommon and unequally distributed, it nevertheless has the potential to seriously harm individuals, families and communities. Methamphetamine use can potentially increase the risk of cardiovascular and mental health problems, particularly anxiety, mood swings and paranoia, which can lead to users disconnecting from family and community (Policy Advisory Group, 2009; Wilkins *et al.*, 2015). Methamphetamine use has also been associated with violent behaviour for those with existing mental health problems and a predisposition for violence (Policy Advisory Group, 2009), and is closely connected to organised criminal activity (Wilkins *et al.*, 2017; Clayton, 2017), both of which harm community cohesion.

More broadly, the 2018 government inquiry into mental health and addiction found one-in-five Aotearoa/New Zealanders experience mental health

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and addiction challenges at any given time, while the number of people accessing treatment services increased 73% from 2008 to 2018. The inquiry conceptualized addiction as a “*counterproductive coping mechanism*” for intergenerational and childhood trauma, sexual abuse, family violence, neglect, loneliness, isolation, bullying victimization, social exclusion and economic deprivation (Paterson *et al.*, 2018: 44). In their submissions to the inquiry, citizens called for research to “engage more fully with life-course theory” (ibid: 50) and a “life-course approach” (ibid: 83). In addition, intervening early in the life-course and at critical transition points to prevent “adverse childhood experiences” was seen as the “best medium-to long-term investment in mental wellbeing” (ibid: 50). However, life-course-based research on methamphetamine users’ childhood, adolescence and adulthood is required to help identify life-course experiences, trajectories, transitions and turning points (Laub and Sampson, 2003). As part of the first life course-based qualitative study of frequent methamphetamine users in Aotearoa/New Zealand that seeks to identify turning points in the onset, persistence and desistance from methamphetamine use, this paper is a direct response to that call. Specifically, this paper uses a ten category measure of adverse childhood experiences (ACE) to provide the first comprehensive analysis of the family environment of 41 former frequent methamphetamine users. By bringing the person to the forefront, this IRB-approved¹ research can be considered the qualitative complement to the survey-based ‘Illicit Drug Monitoring System’ which has collected annual data about ‘frequent methamphetamine users’ (Wilkins *et al.*, 2019).

THE LIFE-COURSE METHOD

By integrating personal, social and environmental factors, the life-course method focuses on changes in relationships and behavior as people twist and turn along the pathway of life, and how, in turn, these changes affect behaviours such as drug use patterns (Hser, Longshore, and Anglin, 2007). The life-course approach recognises both the mutual influence of person and social context over time and the bi-directional nature of relationships (Giele and Elder, 1998). Ideally, a life-course approach seeks to obtain data on:

human agency	health, wellbeing, and subjective aspects of meaning and satisfaction
linked lives	relationships in family, school, work, friendship, marriage and other social domains
timing	event histories in these major domains of activity
location	social, cultural and historical context (ibid)

Despite memory recall issues, a retrospective person-based life-history narrative approach is valuable for understanding the processes of frequent drug use over multiple phases and domains of the life-course (Laub and Sampson, 2003; Boeri and Whalen, 2009). Life histories also reveal in the drug user’s own words the personal-situational context of their behaviour, thereby revealing the interconnectedness between life events and situations (Laub and Sampson, 2003). The data acquired for this research project is as follows:

N	Primary Data (obtained via snowballing method)
35	In-depth semi-structured interviews with ex-methamphetamine users (100 hours of recorded data)
6	In-depth interviews with mother/wives/ex-wife/partner/ex-partner of ex-methamphetamine users (10 hours of recorded data)
Supplementary Data (obtained via an online methamphetamine support group)	
6	Transcribed testimonies of ex-methamphetamine users (7 hours of video data)
18	Transcribed live online chats with ex-methamphetamine users (20 hours of video data)
65	Approximately 1 million words of transcribed empirical data

The 35 semi-structured interviews that are the heart of this research were conducted in 2018 and divided into two parts: 1. *Life in Review* (containing 35 prepared questions), and 2. *Methamphetamine Use* (containing 30 prepared questions). In part 1, interviewees were asked to review their life from beginning to present, including the following domains: family; school; friendships; work; romantic relationships; marriage; parenting; psychological health; physical health; religion/spirituality. Interviews focused on the significant relationships, experiences and events in each of the above life domains in order to understand the trajectories, role transitions and turning points in their life. Participants were also asked about their drug use history (except methamphetamine), and at the end of each life domain were asked whether that domain has influenced their drug use, and, reciprocally,

¹Approved by ‘Ewha Womans University Institutional Review Board’, at Ewha Womans University. IRB#: 158-6.

whether drug use has impacted on that life domain. Part 2 focused specifically on their methamphetamine use, including onset, progression, control, impact, desistance and life post-methamphetamine use. On average, each interview lasted approximately three hours. Regarding the forty-one interviews, contact was initially made with five former methamphetamine users known to the author. A snowballing method was used to locate twenty-two other interviewees, while the remaining fourteen were found through advertisements posted on two online methamphetamine support groups. The interview location was chosen by the interviewee, and included private homes, commercial establishments, public spaces and work.

As Table 1 shows, participants were born between 1962 and 1995 (with half born in the 1970s), and 43-years-old on average. Additionally, 54% are male, 46% female, 74% European/Pākehā and 26% Māori (the general population is 49%, 51%, 70% and 16.5% respectively). Regarding residence, participants have lived throughout all of Aotearoa/New Zealand's provinces in various villages, towns and cities. Regarding socioeconomic-status, distribution largely accords with the 2006 New Zealand socio-economic index (Milne, Byun and Lee, 2013). Despite the sample size, the interviewees' sociodemographic characteristics are broadly reflective of the general population. To qualify as a former frequent methamphetamine user, participants had to have used methamphetamine for at least six consecutive months, but had not used for at least 12 months. On average, interviewees were frequent methamphetamine users for seven-and-a-half-years, and ceased being a methamphetamine user seven-years prior to the interview at age 36. All interviewees also have an extensive and varied history with other legal and illegal substances.

ADVERSE CHILDHOOD EXPERIENCES

Szalavitz (2016) has demonstrated that 'addiction' does not simply appear overnight but unfolds over the life-course, while the road to addiction is commonly paved with childhood trauma (along with a predisposition to mental illness). Even though Szalavitz posits there is no significant trauma history in up to one-third of those who become 'addicted', about two-thirds have suffered at least one traumatic childhood experience. Importantly, the higher the exposure to trauma the greater the risk. Szalavitz thus

conceptualizes addiction as a learning disorder, because it is an adaptive coping style that becomes counterproductive when the addictive behavior persists despite ongoing negative consequences. Like Szalavitz and the aforementioned government inquiry, Aotearoa/New Zealand's Ministry of Health (2009; 2015: 10) has identified the following as key risk factors for the "misuse" of alcohol and drugs: (1) exposure to traumatic life experiences, such as child abuse and neglect; (2) family violence and household dysfunction; (3) mental illness, and (4) belonging to a marginalised and lower-socio-economic group.

Studies into adverse childhood experiences (ACEs) have established a strong link between exposure to childhood adversity and adult health risk behaviours, such as frequent substance use (Felitti *et al.*, 1998; Dube *et al.*, 2003; Mersky, Topitzes and Reynolds, 2013); with the greater the number of ACEs the higher the risk of poor health outcomes (Anda *et al.*, 2006; Hughes *et al.*, 2017). A 2013 review (De Venter, Demyttenaere and Bruffaerts) of 65 studies on adverse childhood experiences and later poor health outcomes found parental separation, parental substance abuse and child abuse to be very frequent risk factors. ACE studies typically cover three categories of abuse (psychological, physical and sexual), two categories of neglect (physical and emotional), and five categories measuring exposure to household dysfunction (parental separation, exposure to domestic violence, parental substance abuse, mental illness, and/or imprisonment) (Dube *et al.*, 2002). The present study includes these ten categories, but also combines 'gang involvement' with 'imprisonment of a family member'.

Importantly, ACEs commonly co-occur (Edwards *et al.*, 2003; Arata *et al.*, 2007). In the original study, Felitti *et al.* (1998) found 87% exposed to one category were also exposed to at least one other, with 17% experiencing four or more. In the present study, 88% exposed to one category were also exposed to at least one other, with 71% experiencing 4 or more (especially parental separation, parental substance abuse, and emotional and physical neglect). In addition, the original ACE study found ACE scores to be cumulative, thus compared to persons with zero ACEs (only two in the present study), those with four or more were seven times more likely to be "alcoholic", and ten times more likely to have injected a street drug (*ibid.*). It was concluded substance "abuse" mostly functions to alleviate the emotional and social distress that results from multiple ACEs (*ibid.*).

Table 1: Number of ACEs per Interviewee

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35		
-1 to 1-35	♂	♂	♀	♀	♀	♂	♀	♀	♀	♀	♀	♂	♂	♂	♂	♂	♂	♂	♀	♂	♂	♂	♂	♀	♂	♀	♂	♂	♀	♀	♂	♂	♂	♂			
Gender	P	P	P	P	P	P	P	M	P	P	P	P	P	P	P	P	M	P	P	P	P	P	P	P	P	P	P	P	M	M	M	M	P	M			
Ethnicity	62	62	65	67	68	68	69	69	70	70	70	71	71	71	71	72	72	72	73	73	74	75	75	75	76	77	79	79	80	82	84	87	87	89	95		
Year of Birth: 19~				5		8	7	16		9		16	17	17	2	12	0	13	12	0	5		9	1	4	2	7	12	0	16	1	4					
1. Parental Separation	•			•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
2. Emotional Neglect				•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
3. Substance Abuse	A				A	A	AI	AI	A	A	AI	AI	AI	AI	I	A	AI	AI	AI	AI			A	AI	AI	A	A	I	A						I		
4. Physical Neglect	•		•	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
5. Domestic Violence			•	•		•	•	•	•	•	•	•	•	•		•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
6. Physical Abuse	•		•	•	•	•	•	•	•	•	•	•	•	•		•			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
7. Psychological Abuse	•		•	•	•	•	•	•	•	•	•	•	•	•		•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
8. Prison/Gang							•				•								•					•			•										
9. Mental Illness			•	•		•	•			•				•					•					•													
10. Sexual Abuse	•		•	•	•							•	•								•			•													
TOTAL ACEs	7	0	6	5	5	6	8	6	2	4	8	1	1	5	5	5	7	1	6	6	3	0	4	7	3	6	5	4	3	8	4	8	6	1	8		

Ethnicity: P = Pākehā; M = Māori. Parental Separation: age at separation. Substance Abuse: A = Alcohol; I = Illegal Substances; AI = Alcohol and Illegal Substances

Table 2: ACEs by Ethnicity and Gender

	ADVERSE CHILDHOOD EXPERIENCES	Māori n9	Pākehā n26	Male n19	Female n16	TOTAL n35
1	Parental separation	7 (78%)	19 (73%)	16 (84%)	10 (63%)	26 (74%)
2	Emotional neglect	6 (67%)	19 (73%)	11 (58%)	14 (88%)	25 (71%)
3	Substance abuse in the family	8 (89%)	16 (62%)	11 (58%)	13 (81%)	24 (69%)
4	Physical neglect	8 (89%)	15 (58%)	13 (68%)	10 (63%)	23 (66%)
5	Exposure to verbal and/or physical domestic violence	5 (56%)	9 (35%)	7 (37%)	7 (44%)	14 (40%)
6	Physical abuse	6 (67%)	6 (23%)	4 (21%)	8 (50%)	12 (34%)
7	Psychological abuse	3 (33%)	8 (31%)	4 (21%)	7 (44%)	11 (31%)
8	Imprisonment and/or gang involvement	6 (67%)	5 (31%)	5 (26%)	6 (38%)	11 (31%)
9	Mental illness in the family	2 (22%)	8 (31%)	4 (21%)	6 (38%)	10 (29%)
10	Sexual abuse	1 (11%)	8 (31%)	3 (16%)	6 (38%)	9 (26%)
	TOTAL	52	113	78	87	165
	AVERAGE	5.7	4.3	4.1	5.4	4.8

In the present study, each interviewee has, on average, experienced 4.8 ACEs (see Tables 1, 2, 3).² Despite using methamphetamine at a significantly lower rate in general, females experienced on average more ACEs than males (5.4 vs. 4.1 per individual); with 9-out-of-16 exposed to six or more. Females were more likely than males to have experienced all but two of the ten measures. Could this suggest females are less likely to resort to substance use to alleviate emotional and social distress? As emerging science shows, females are more robust, resilient and resistant to illness (Saini, 2017). Of the six who were exposed to none or one ACE – but still frequently used methamphetamine for between 6-and-20-years - five were male. Māori experienced more ACEs than European/Pākehā (5.7 vs. 4.3 per individual); with 6-out-of-9 exposed to six or more (see Table 3). Māori were more likely than European/Pākehā to have experienced all but three of the ten measures. Does this high exposure to adversity help to partly explain why Māori use methamphetamine at rates two to three times that of European/Pākehā?

Only three pairs of interviewees share the exact same cluster of ACEs, but with each pair there is variation in the timing, duration, cause and/or

consequences of each ACE. Thus while ACEs are commonly shared, each life-course is unique relative to what, when and how ACEs occurred. And unlike longitudinal data on criminal careers - which has found chronic high-rate offenders to have accumulated the most severe childhood deficits and to be early starters and late finishers (Krohn and Thornberry, 2003) - there is no discernible correlation between the number of ACEs and the age of onset, frequency, quantity and duration of later methamphetamine use. For example, Interview-22 (male, 43-years-old) encountered no ACEs yet was a heaviest methamphetamine user for the longest period of time (approximately 20-years), whereas Interview-1 (male, 56-years-old) experienced seven ACEs yet used at a non-escalating moderate level between ages 40-45. Likewise, Interviewees 23 (male, 43-years-old) and 28 (male, 38-years-old) were exposed to the exact same ACEs, and both started using methamphetamine in 1999 (but at age 24 and 19 respectively). However, Interview-23's use accelerated much quicker and lasted approximately 4-years longer.

RESULT & DISCUSSION

Whilst placing childhood experiences into their appropriate categories is a necessary task, this does not provide knowledge about participants' lived childhood experiences and the subjective aspects of their lives. As the following analysis of each ACE demonstrates, what gives the life-course approach its *life* is the socially situated sentient individual, who, in their own words, integrates events and experiences and gives them meaning (Giele and Elder, 1998).

²To qualify for inclusion, the interviewee's parental figure must have separated or deceased, been imprisoned, involved in a criminal gang, suffered from a mental illness, clearly and consistently engaged in domestic violence, were problem drinkers or frequently used at least one illegal substance. Additionally, the interviewee had to have been clearly and consistently exposed to emotional or physical neglect, psychological or physical abuse, authoritarian parenting or sexually abused at least once.

Table 3: ACEs Clustered Together (Including Ethnicity and Gender)

Number of ACEs	0	1	2	3	4	5	6	7	8	9	10
32%											
29%											
26%											
23%											
20%							M♀				
17%						M♂ M♂ M♂	M♀				
14%						P♀	P♀		M♂		
11%		P♀			P♀	P♀	P♀		M♂		
9%		P♂		M♀	P♀	P♂	P♀	M♂ M♂	M♀		
6%	M♂	P♂		P♂	P♂	P♂	P♂	P♀	P♀		
3%	P♂	P♂	P♀	P♂	P♂	P♂	P♂	P♂	P♀		
Participants (n35)	2	4	1	3	4	6	7	3	5	0	0

1. Parental Separation (Including Divorce or Death of One Parent)

Longitudinal studies from Aotearoa/New Zealand (Henry *et al.* 1993) and elsewhere (Kolvin *et al.*, 1988; Mednick *et al.*, 1990) have pinpointed parental separation as an important risk factor for delinquency and frequent substance use. Parental separation affected 74% of the interviewees (and at least 4 of the 6 testimonies). For 15 of the 26 interviewees, the father’s conduct was primarily responsible for the separation. The father either: engaged in an extra-marital affair, was violent, controlling and/or had a substance abuse problem. Of the four mothers who were mainly responsible, one died, one was opioid dependent, while the other two had severe mental illnesses. In the remaining eight cases there was shared responsibility, as the relationship slowly fell apart due to conflicts, stress, disconnection and/or clashing personalities. For 17 of the 26 interviewees, separation occurred before age 10. The timing of the separation is important because the severity of the impact is strongly correlated with age. For the sixteen who saw parental separation severely impact on their life-course, all occurred at or before age 12 (and half age 5 or below). For the remaining ten who saw parental separation exert a medium or minimal negative impact, all but three occurred between 12-17. The impact was minimal because drug use and delinquency onset had already occurred and/or their

relationship with one or both parents was already distant. The impact was severe because the separation variously contributed to: separation anxiety; fear of rejection; depression; anger; disruptive behaviour at school; lack of attachment, supervision and/or guidance from one or both parents; dissolution of the relationship with a neglectful father; the “*mental breakdown*” of a mother; and fraught relations with and abuse by controlling and disciplinarian step-parents or grandparents.

2. Emotional Neglect (Consistent Lack of Attunement/Attachment by One or both Parents)

Longitudinal research has pinpointed lack of positive parental involvement with the child to be a key predictor of later delinquent behaviour (Loeber and Dishion, 1983; Patterson, DeBaryshe, and Ramsey, 1989). Likewise, Maté (2008) found emotionally absent parents to be very common among frequent substance users. (Maté (2008: 239) argues poorly attuned parent-child relationships provide an insufficient template for the development of a child’s “psychological and neurological self-regulation systems”, thus making them more likely to look outside oneself for emotional soothing. Emotional neglect affected 71% of the interviewees, and at least 2 of the 6 testimonies. The father was much more likely to be both physically absent and emotionally distant. The parents’ emotional neglect stemmed from: being too busy working; being

strict, controlling, disciplinary and authoritarian; suffering “*very hard abusive childhoods*” themselves and thus being “*incapable of showing love*”; having a mental illness; and having a substance use or gambling problem. Because they lacked parental attachment and bonding these interviewees variously felt “*very withdrawn*”; “*very unhappy*”; “*always confused*”; “*a deep sense of not belonging*”; “*fully disconnected*” or “*like I came from a family where people didn’t seem to like me*”. Being “*never hugged*” or “*never told that we were loved*” contributed to: “*struggling with people leaving*”; being a “*very possessive friend*” who “*destroyed*” friendships; being a “*needy*” person who “*liked to be liked*”; always trying to impress a father to obtain approval; wanting a boyfriend for “*love and comfort*”; suffering depression, suicidal thoughts and/or low self-esteem; and early onset of delinquency and drug use.

3. Parental Substance Abuse (i.e., Problem Drinker and/or Frequently Used an Illegal Drug)

Research indicates parental substance abuse interrupts a child’s healthy development, which places them at heightened risk of developing emotional, behavioural, mental health and thus substance use problems (Li, Pentz and Chou, 2002; Calhoun *et al.*, 2015). Parental substance abuse affected 69% of the interviewees, and 4 of the 6 testimonies. For 21 of the 24 interviewees the main substance was alcohol, indicating its disproportionate harmful effects on children relative to illegal substances.

In seven cases, only one parental figure had a substance abuse problem, whereas in seventeen cases both parents (and/or step-parents) had an alcohol or illegal substance use problem. Regarding alcohol, they variously described their parental figures as: “*a bit of an alcoholic*” or an “*alcoholic*”; a “*functional alcoholic*” or a “*chronic alcoholic*”; someone who “*struggled with alcoholism*” or drank “*24/7*” and so was “*always drunk*”; a “*chronic*”, “*heavy*”, “*regular*” or “*binge*” drinker; a “*hard out pisshead*” or “*blackout drinker*”; “*big drinkers*” who drank “*every day*”; or people who “*drank a lot*” and then “*fought a lot*”. In only two cases did the parents try to shelter them from alcohol or illegal substances, and in only three cases was the parental attitude negative toward both alcohol and illegal substances. In five cases, the attitude was permissive (“*relaxed*” or “*accepted*”) toward alcohol, nicotine and illegal substances. For the majority (14 of the 24), their parents were permissive of alcohol use yet opposed to illegal substance use. Thus, in ten cases at least one

parent encouraged their drinking; while in three cases at least one parent encouraged cannabis use (their parents provided cannabis at age 8, 10 and 14 respectively). Despite the harmful effects of their parent’s alcohol use, in only two cases did it exert a (partial) deterrent effect on their own alcohol consumption; and even then Interview-17 (male, 46-years-old) would still “*get shitfaced*” between ages 12-16, and Interview-6 (male, 50-years-old) became a binge drinker in his late-20s and 30s.

4. Physical Neglect (Consistent Lack of Supervision and Guidance by One or both Parents)

Inadequate parental monitoring and supervision is one the most important parenting variables predicting delinquency (Laub and Sampson, 1988; Krohn and Thornberry, 2003) and frequent substance use (De Venter, Demyttenaere and Bruffaerts, 2013). In a study of delinquent boys sent to Epuni Boys’ Home in the 1970s and 1980s (including Interview-17), an absent father was the most common factor (Cohen, 2011). Of the 19 males interviewed, 11 had an absent father. Physical neglect affected 66% of the interviewees, and at least 2 of the 6 testimonies. In only two cases was the mother absent, whereas in ten cases they were partly or “*fully disconnected*” from their father. While both parents were absent in eleven cases, in four of those cases the father’s absence led to the mother working long hours, resulting in severe lack of supervision and guidance. In all but one case, having one or both parents being “*pretty much non-existent*” or “*away for long shifts quite a lot*” exerted a severe negative impact on their life-course. It left them in the hands of: an “*alcoholic*” or neglectful father; a mentally ill or drug-dependent mother; a strict, authoritarian grandparent; a psychologically, physically or sexually abusive step-father; a neglectful step-father or step-mother; a sexually abusive uncle; or a sexually abusive “*sadistic*” older brother. Psychologically, this physical neglect contributed to them feeling “*separation anxiety*”, “*withdrawn*”, “*unhappy*”, “*emotionally sensitive*”, “*embarrassed*”, “*angry*”, “*unloved*”, resentful, neglected and a “*deep sense of not belonging*”. It also negatively impacted forming and maintaining relationships, severely disrupted schooling, and/or contributed to early onset of delinquency and drug use.

5. (Clear and Consistent) Exposure to Verbal and/or Physical Domestic Violence

Violent homes are regarded as one of the highest risk factors for the development of delinquent

behaviour (Bowers *et al.*, 1994) and other adverse emotional, behavioral, social and academic outcomes (Harold and Sellers, 2018). Thus, children exposed to domestic violence are at higher risk of developing short-and-long-term negative outcomes (Grych and Fincham, 1990; Kolbo *et al.*, 1996). Domestic violence affected 40% of the interviewees, and at least 4 of the 6 testimonies. In only one case was the mother the main instigator of the violence. In four cases a “very violent” father with a “bad temper” was the main instigator, wherein he “beat the shit out of my mum their whole relationship”; beat the mother “pretty bad”; “held mum up by the throat against the wall”; or “left holes in the walls where he had put mum’s head”. Where both “quite violent” parental figures were involved, they either engaged in “constant break-ups and arguments”; “fought a lot”; “argued all the time”; or were “bickering and yelling at each other on a regular basis”.

6. Physical Abuse (at a Clear and Consistent Level)

Parental physical abuse has been found to be a strong predictor of delinquency (Loeber *et al.*, 2003) and substance dependence (Fergusson, Boden and Horwood, 2008). Physical abuse affected 34% of the interviewees, and at least 4 of the 6 testimonies. In only two cases were both parents physically abusive, whereas it was equally likely to be conducted by either a father, a mother or a grandparent (yet when it was only the mother, the father was either often or completely absent). Where the father or step-father “was the punisher” he regularly gave the strap, or “beat me and my brother up”, or was “physically violent” or “physically smashed me”. This includes Interview-17 (male, 46-years-old), whose father “smashed” a beer bottle over his head during their “first real fight”. Where the “really abusive” mother was “the one to discipline” the interviewee, the “punishment” or “hiding” could be “horrendous”. This includes Interview-3 (female, 53-years-old), whose “schizophrenic” mother attacked her with a “psychotic look”. For interview-30 (female, 36-years-old), her mother was “always hating on” her while her grandparents and uncles and aunties were regularly giving her “beatings”. Likewise, interview-8 (female, 49-years-old) had a “very heavy handed” grandmother who gave her a “hiding for everything” in order to “dominate” her. This physical abuse contributed to them feeling “angry”, “pissed off”, “terrified” and left wondering “Why did that happen?” To deal with this abuse, a few “took off from home”, some used cannabis “as a pick me up to calm the emotions that were going on inside”, while one developed a “very

destructive core belief” premised on the view that “a man is allowed to do to me whatever he wants”. Interview-33 (female, 31-years-old) believes her abusive father made her the “abusive, asshole person that I was towards people”. Interview-30 (female, 36-years-old) equated “the beatings” with “love” because the people who seemingly loved her also physically abused her.

7. Psychological Abuse (at a Clear and Consistent Level)

Adolescents subjected to psychological abuse as a child tend to exhibit more mental health and behavioral problems (Iram Rizvi and Najam, 2014), thus heightening the risk of frequent substance use (Claussen and Crittenden, 1991). Psychological abuse affected 31% of the interviewees. They were more likely to be psychologically abused by their mother (who was more likely to be present). Interview-5 (female, 50-years-old) had a “controlling” “narcissist” mother who “put the fear of god” in her and never allowed her to have her own opinion. This led to her “not feeling good” about herself. Interview-11 (female, 48-years-old) had a psychologically “messed up” mother who was “incapable of showing love” and repeatedly said to Interview-11 and her twin sister, “I wish I had never had you kids. You ruined my life”. As her twin sister was born with a disability, “it was like mum was ashamed of us”. Interview-26 (female, 39-years-old) had a “mentally violent” step-father who repeatedly called her a “donkey” who “couldn’t do anything right”, which “destroyed my personality with each day that I was alive”. Interview-17 (male, 46-years-old) had a racist “alcoholic” father who encouraged him to drink beer from age 5, and then when his 7-year-old brother could drink more told him, “Your brother is better than you”. To “impress” his drunk father, he would phone his estranged mother and call her a “dirty slut” and “bitch”. He had witnessed his father use these words, and thus thought being “demeaning” was how a man treated a woman. The father of Interview-35 (male, 23-years-old) was labelled “criminally insane” by the court, “schizophrenic bipolar” by a psychiatrist, and “cursed” by family members. His father claimed he regularly “beat the shit out of” Interview-35’s mother because he was trying to “desensitize” him to a cruel world. Witnessing this abuse “had a psychological impact” on the way he processes emotions. His desensitized coping mechanism has been to adopt an “I just don’t care” attitude and to not hold on to “negative energy”.

8. Imprisonment and/or Gang Involvement of Family Member

Parental incarceration places children and youth at heightened risk of developing emotional, psychological and behavioural problems (e.g., insecure attachments, internalizing and externalizing behaviours) (Parke and Clarke-Stewart, 2001). In Aotearoa/New Zealand, children of adult gang members are at heightened risk of being abused and neglected (Ministry of Social Development, 2016), with both factors contributing to frequent substance use. Imprisonment and/or gang involvement affected 31% of the interviewees. All of them were male, either a father, brother, or uncle who played a significant role in their life-course. They were imprisoned for either drug offenses, burglary, aggravated robbery, grievous bodily harm, sex offenses or murder (of a step-mother). Four of them were patched gang members, while five others were deeply involved with gang members and gang activity.

9. Mental Illness in the Family

Parental mental illness can negatively interfere with a child's cognitive, emotional, behavioural and social development (Downy and Coyne, 1990), such as hindering attachment formation, thereby increasing the risk for frequent substance use (Manning and Gregoire, 2009). While mental illness in the family affected 29% of the interviewees, in all but one case the family member was their mother. Despite at least five being institutionalized, in all but one case their psychological issues were never adequately addressed. Their mental illnesses included: having schizophrenia due to suffering a *"horrific and traumatic ongoing episode"* when young; battling for many years from *"mental breakdowns and eating disorders"* due to losing the *"love of her life"*; trying to commit suicide due to depression; having *"lots of unseen to issues she never dealt with from her unhappy childhood"*; being *"really messed up"* and suicidal because she was repeatedly raped at 15 by five gang members, three of whom were her biological brothers; suffering post-natal depression and *"mental health issues"* due to being molested by her adoptive father; being depressed, suicidal, and engaging in self-harm due to experiencing a *"very hard abusive childhood"* and the death of her 14-year-old son; being *"unwell mentally"* due to a *"troubled past"*, which included being raped twice; having a severe mental illness that required long-term institutionalization; and being institutionalized for *"schizophrenic bipolar"* disorder after he *"lost the plot"* and *"started attacking the whole household"* (resulting

in 21 counts of grievous bodily harm). These psychological problems severely impacted emotional bonding to this parent. As Interview-11 (female, 48-years-old) put it, *"I felt like my mother didn't love me"*.

10. Sexual Abuse

Childhood sexual abuse is associated with long-term problems in adulthood, including personality disorders, depression and substance dependence (Fergusson, Boden and Horwood, 2008). Maté (2008) found the addict's life to be marked by an excess of pain, in particular sexual abuse. Sexual abuse affected 26% of interviewees, and at least 3 of the 6 testimonies. Six of the nine sexual abuse victims were female, while for seven the abuse began between ages 4 and 6. In four cases, the abuse was a one-off event, while for two they were abused by one male over 2 and 7 years respectively. In addition, one was abused by two separate males when 4 and 5, another by three separate males between 4 and 13, and the last by three separate men between 6 and 11. All but one of the perpetrators were male, which included an older brother, an uncle, a step-father, a foster parent, a father's co-worker, a young male friend and neighbour, a middle-aged neighbour, an elderly male neighbour, an elderly couple and neighbour, a male baby-sitter, a classmate, a teenage male friend, and a teenage male acquaintance. This sexual abuse has exerted *"a huge impact"* on their life-course, including: being a bed-wetter until age 10; *"needing mum to protect me"* due to being *"petrified of the dark"* and thinking people were going to *"hurt me"*; wanting to cry all the time but not knowing why; having difficulty *"being intimate"*; being unable to have *"healthy relationships"*; always feeling *"very numb"*; and taking any drug that *"altered my state-of-mind"*. Interview-31 (female, 34-years-old) simply stated, *"I think the rape has fucked me up more than the drugs"*.

11. Non-Adverse Upbringing

Importantly, two interviewees avoided all adverse childhood experiences. Additionally, Interview-34 (male, 29-years-old) only experienced emotional neglect from his *"emotionally absent"* father, while Interview-12 (female, 47-years-old) only experienced emotional neglect from her *"scary and old-school"* immigrant parents. Likewise, Interviewees 13 (male, 47-years-old) and 18 (male, 45-years-old) only experienced parental separation after their father had an extra-marital affair. What characteristics do these six interviewees share? Interview-2 (male, 56-years-

old) was happy “*all the way through*” childhood as he lived the “*ideal farm life*” with “*excellent*” parents who “*never argued*”. Likewise, Interview-22 (male, 43-years-old) had “*such a good upbringing*” on the family farm with his “*loving*” parents where everything was done “*prim and proper*” (although “*if you did wrong you would get a boot up the arse*”). Interview-34 (male, 29-years-old) had a “*good childhood*” growing up in an “*upper-middle class*” “*Anglican household*” in one of Aotearoa/New Zealand’s wealthiest suburbs. His home environment was economically “*privileged*” and “*very safe*”, his relationships with both parents “*strong*”, and his parents “*instilled*” in him “*the moralistic things*”. Interview-13 (male, 47-years-old) had a “*fortunate upbringing*” with his “*pretty normal*” and “*awesome*” parents, while Interview-18 (male, 45-years-old) also had loving and supportive parents who were “*strong on things like values and morals and ethics*”. Additionally, five-of-the-six had loving and supportive mothers. Essentially, one or both parents practised authoritative parenting, which theoretically consists of emotionally available, warm, communicative and supportive parents who set firm rules, yet also allow some autonomy (Farrington, 2010). By providing a mixture of structure and freedom, authoritative parenting facilitates healthy psychosocial development (Steinberg *et al.*, 2004). But while strong and positive parent–child bonding protects against delinquency (Hawkins, *et al.*, 2003), each still developed serious and long-term poly drug use habits. However, their methamphetamine use onset can be traced not to family factors but to an adventure-seeking personality, delinquent peer associations, school bullying victimization or work environment.

CONCLUSION

Almost 70-years ago, the Gluecks (1952) demonstrated a *far higher proportion* of the homes of children who became delinquent were broken, separated, disorganised, lacked harmony, unity, warmth and respect; while the parents were more likely to be emotionally and psychologically disturbed, have substance use problems, and a history of delinquency or criminal activity. When faced with an array of developmental obstacles to receiving healthy and attuned parenting, the Gluecks (1952: 182) concluded such adverse childhood experiences “*have serious consequences for the growing child*”. With approximately five ACEs each on average, this research adds further evidence to a body of knowledge initiated by the Gluecks, and cited throughout this paper, that demonstrates exposure to adverse

experiences during childhood is a key precursor to poor health outcomes, such as frequent substance use. In the present study, 88% of interviewees exposed to one category were also exposed to at least one other, with almost three-quarters having experienced four or more (especially parental separation, parental substance abuse, and emotional and physical neglect). This accords with a review of 65 studies on adverse childhood experiences and later poor health outcomes mentioned above, wherein parental divorce, substance abuse and child abuse were found to be very frequent risk factors (De Venter, Demyttenaere and Bruffaerts, 2013).

Regarding specific risk factors, on seven of the ten measures analysed, one parent was more likely to be responsible - and that one parent was more likely to be a father. While the mother was more likely to be psychologically abusive and mentally ill, the father was more likely to be responsible for parental separation, to be emotionally distant and physically absent, and the instigator of domestic violence. More broadly, a father, step-father, brother, uncle or male figure was more likely to have been sexually abusive, imprisoned or involved in gang activity. This indicates father figures, and males generally, played a disproportionate role in producing their childhood adversity. While “*there is a multiplicity of causal chains and pathways, all of which have a weak individual influence*” (Laub and Sampson, 2003: 277), physical neglect, physical abuse, parental mental illness, sexual abuse and early age of parental separation appear to have been especially detrimental to their healthy development. Additionally, alcohol consumption and a permissive attitude toward alcohol use were much more harmful than illegal substances.

These findings indicate protective authoritative parenting practices - especially from the father - are required at the beginning of the life-course to help avert the developmental pathway of frequent substance use from unfolding. In particular, Patterson (1980) put forth the following set of prosocial parenting practices: (1) notice what the child is doing, (2) monitor it over long periods, (3) model social skill behaviour, (4) clearly state house rules, (5) provide reinforcement for conformity, (6) consistently provide sane punishments for transgressions, and (7) negotiate disagreements so that conflicts do not escalate. These rational, contingent and supportive family monitoring practices centre upon the appropriate amount of *attachment*, *supervision* and *discipline* between parent and child. This is because delinquency is more likely to occur if the parent-to-child relationship is based upon: (1) weak

emotional attachment, (2) weak supervision, (3) erratic and harsh discipline, and (4) rejection (Laub and Sampson, 1988).

But since “conditions do not equally affect all persons subjected to them” (Glueck and Glueck, 1952: 184), then the adverse quality of family life is not, in itself, sufficient to cause children to become frequent methamphetamine users. This is because some children socialised under equally unfavourable conditions do not become frequent methamphetamine users (such as at least fifteen interviewees’ siblings), while those not exposed to any ACEs (such as Interview-2 and 22) can become frequent methamphetamine users. Findings from the ‘Harvard Study of Adult Development’ (one of the world’s longest studies of adult life) shows an adverse childhood “need be neither destiny nor doom” (Vaillant, 2012: 52). The 75-year-old study found that childhood trauma becomes less important over time, while the positive experiences that occurred during childhood endure (especially experiencing a warm loving home). Simply, “what goes right is more important than what goes wrong” (ibid).

Therefore, a “rough causal explanation” may be proffered that is the result of a non-deterministic and contingent “dynamic interplay” between the ten adverse experiences acting upon the child and adolescent (ibid: 184). Specifically, the Gluecks (ibid: 167) advocated the concept “*plurality of causes*”, which conceptualizes persistent delinquency as being the result not of *one specific* combination or pattern of factors but of several *different* combinations. Since a very complex aggregation of various internal and external conditions are associated with delinquency, then becoming a frequent methamphetamine user may result from “a variety of different sequences leading to the same result” (ibid: 168). As Vaillant (2012: 52) concluded, it is the child’s “total experience”, and not any particular trauma or relationship, that exerts the clearest influence on adult psychopathology and maladjustment. Thus it cannot be determined that any measure-by-measure causal sequence will hold correct for each case, but rather experiencing a certain cluster of preceding ACE factors will *probably* increase the *tendency* to becoming a frequent methamphetamine user later in life.

Such a conclusion resists the view that drug users can be neatly grouped into distinct categories, with each group possessing a unique etiology and trajectory. Not only does such an approach ignore the

instability of categorizations over time, but it also overlooks behavioural change across the life-course and the considerable heterogeneity in adult outcomes (Laub and Sampson, 2003). Nevertheless, the 2018 government inquiry and Szalavitz (2016) appear correct to conclude that for many - but not all – frequent substance use may be considered an adaptive *counterproductive coping mechanism* to multiple adverse childhood experiences. The inquiry is also correct to implore the government to focus on prevention and promoting wellbeing, especially early in life, to tackle the social determinants of mental health and substance use challenges.

Regarding limitations, while the sample is obviously too small to produce a representative profile of Aotearoa/New Zealand’s methamphetamine using population, this study still provides original, valuable and useful knowledge about the childhood and family environment of Aotearoa/New Zealand’s methamphetamine users. Despite being the first study to provide such data to the public and policy makers, this study cannot increase knowledge on the genetic, neuro-biological, neuro-cognitive and physiological influences on deviance and substance use that has been revealed through the Dunedin Multidisciplinary Health and Development Study (Poulten, Moffitt and Sila, 2015). Nevertheless, Laub and Sampson (2003) have shown such latent time-stable individual traits are likely to be insufficient to explain long-term delinquent trajectories.

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Received on 10-06-2021

Accepted on 02-07-2021

Published on 04-11-2021

<https://doi.org/10.6000/1929-4409.2021.10.164>

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