

Title	Resilience in the face of trauma: implications for service delivery
Authors	Dermody, Aoife;Gardner, Caroline;Davis, Sharon;Lambert, Sharon;Dermody, John;Fein, Marisa
Publication date	2018-10
Original Citation	Dermody, A., Gardner, C., Davis, S., Lambert, S., Dermody, J. and Fein, M. (2018) 'Resilience in the face of trauma: Implications for Service Delivery', Irish Probation Journal, 15, pp. 161-178.
Type of publication	Article (peer-reviewed)
Link to publisher's version	http://www.probation.ie/en/PB/Pages/WP18000040
Rights	© Probation Service, Probation Board for Northern Ireland and individual authors, 2018
Download date	2024-12-14 06:16:59
Item downloaded from	https://hdl.handle.net/10468/7490



UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Resilience in the Face of Trauma: Implications for Service Delivery

Aoife Dermody, Caroline Gardner, Sharon Davis, Sharon Lambert, John Dermody and Marisa Fein*

Summary: It was noted with some concern by service providers in Limerick that women presenting to homeless, probation and drug treatment services in Limerick city significantly exceeded the number attending similar services in other geographical areas in Ireland. Different services were engaging with the same women simultaneously, sometimes for years, without any discernible positive outcomes for the women. Research was commissioned to facilitate a better understanding of the women's needs, with a view to enabling services to be more responsive. The findings profile a group of women with considerable resilience and capacity for survival, despite very challenging life experiences. An Adverse Childhood Experiences analysis showed that the women in this research cohort were more frequently affected by almost all forms of childhood adversity than people in the general population. The women proffered some practical advice that could help services to be designed and delivered in a trauma- and gender-informed manner. This paper presents a brief literature review of trauma and trauma-informed care, outlines the research findings and makes recommendations for future service design and delivery.

Keywords: Women, trauma, adverse childhood experiences, homelessness, probation, drug treatment, trauma-informed care.

Introduction

Overview of trauma

The term 'trauma' can have various meanings depending on who is using it and in what context. Medical doctors, for instance, may talk of trauma as the wounds that result from physical injury. Psychological trauma, however, is defined more broadly as 'an event, series of events

*Aoife Dermody, Caroline Gardner, Sharon Davis, John Dermody and Marisa Fein are Researchers with Quality Matters (email: aoife@qualitymatters.ie, caroline@qualitymatters.ie, sharon@qualitymatters.ie, johndermody@gmail.com, marisa@qualitymatters.ie). Sharon Lambert is a Lecturer at the School of Applied Psychology, Cork University (email: sharonlambert@ucc.ie).

or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, emotional or spiritual well-being' (SAMHSA, 2014: 7). Psychological trauma refers both to events and to an individual's unique experience or response to events or enduring conditions (Covington, 2008; Pearlman and Saakvitne, 1995).

The ground-breaking Adverse Childhood Experiences (ACEs) study established a relationship between exposure to childhood emotional, physical or sexual abuse and household dysfunction, and seven of the leading causes of death in adults (Felitti *et al.*, 1998). The study also established a strong graded relationship between experiences of childhood adversity and subsequent negative health outcomes; the more ACEs someone had, the more significant were their negative health outcomes in later life. Felitti *et al.*'s research, which was conducted with over 17,000 people in the general population, found that those with four or more ACEs had a 4–12-fold increased health risk for alcoholism, drug abuse, depression and suicide attempts (1998: 245).

Building on the original ACEs study, other researchers have established correlations between childhood adversity and homelessness, substance misuse and criminality.

ACEs were strongly related to experiences of adult homelessness, with the risk of adult homelessness increasing by 40% for each additional type of childhood adversity reported (Cutuli *et al.*, 2013). These findings were replicated in an Irish study in the Cork Simon Community, where 77% of service-users experienced four or more ACEs, compared with 12.5% in the general public, while 8% had all 10 ACEs (Lambert and Gill-Emerson, 2017).

The relationship between childhood trauma and substance misuse is also well documented (Dube *et al.*, 2003; Covington *et al.*, 2008). A summary of the literature by the National Institute of Drug Addiction in the US notes that up to two-thirds of people in treatment for drug abuse report that they were physically, sexually or emotionally abused during childhood (Swan, 1998).

While the initial research into the impact of ACEs concentrated primarily on health outcomes, there is now strong evidence that higher scores on the ACEs questionnaire are linked to future violence, the likelihood of incarceration and the risk of recidivism (Moore and Tatman, 2016). In their study on the prevalence of ACEs in a population

of juvenile offenders, Baglivio *et al.* (2014) found that offenders reported disturbingly high rates of ACEs, and had higher composite scores than previously examined populations.

Developments in neuroscience have helped us understand that there are real neurological reasons why people exposed to ACEs engage in high-risk behaviour (Van Der Kolk, 2014; Burke-Harris, 2015, Reim *et al.*, 2015). Exposure to adversity and toxic stress affects the developing brain and bodies of children, with particular implications for both the pleasure and reward centre of the brain and the area responsible for processing and regulation of emotions (Burke-Harris, 2015; Reim *et al.*, 2015). Trauma survivors may experience persistent states of ‘hyper-arousal’, which includes dysregulated fear, anger or elation; others may experience ‘hypo-arousal’, leaving them unresponsive and disengaging (Ogden *et al.*, 2006; Van Der Kolk, 2014). These responses, which can be understood as ‘normal’ trauma responses, can make it difficult for trauma survivors to engage with mainstream services, and, indeed, for mainstream services to engage meaningfully with trauma survivors.

Trauma-informed care

In light of the clear connections between childhood adversity and substance misuse, criminality and homelessness as outlined above, there is an impetus for service providers to understand trauma, how it manifests, and how services can appropriately support trauma survivors.

Trauma-informed care (TIC), which has its origins in the treatment of post-traumatic stress disorder among military veterans, is an approach to the provision of human services that has increasingly gained traction over the past 30 years (Wilson *et al.*, 2013). In order for organisations to work in a trauma-informed way they need to:

1. maximise physical and psychological safety (for both staff and service-users)
2. partner with service-users to ensure that they have an active voice in decision-making
3. identify trauma-related needs of service-users (routinely screen for trauma and its effects)
4. enhance service-users’ wellbeing and resilience
5. enhance family wellbeing and resilience
6. enhance the wellbeing and resilience of staff
7. partner with agencies and systems that interact with service-users,

adopting an interagency approach in the interests of the service-users (Wilson *et al.*, 2013).

The Substance Abuse and Mental Health Services Administration (SAMHSA) in the United States provides a road map for creating a trauma-informed organisation. It notes that this is a fluid, ongoing process, requiring organisations to assess, and potentially modify, every facet of their operations to ensure that they can be effective in serving trauma survivors (SAMHSA, 2014). Becoming a trauma-informed organisation is not an insignificant undertaking.

The research

Background and methodology

The research was commissioned by the PALLS project, a Probation Service funded project that works with adults involved in the criminal justice system in the Mid-West region. The objectives were to get a clearer picture of the needs, and a better understanding of the experiences, of women accessing local drug, homeless and criminal justice services. A steering committee was established to liaise with Quality Matters, who conducted the research, and to facilitate contact with women service-users who agreed to be interviewed for the research. The committee had representatives from PALLS, the Probation Service, the Mid-West Drug and Alcohol Forum, the Health Service Executive (HSE) Drug and Alcohol Services, Mid-West Simon Community, Bedford Row Family Project, and McGarry House, the local low-threshold homeless service. Ethical approval was received from the Probation Service and HSE Mid-West.

Information leaflets about the research were displayed in prominent places within the participating services, and information sessions were held with frontline workers, who were asked to identify women who might be invited to participate.

Semi-structured interviews were conducted with female service-users of eight services in Limerick in October and November 2016. Interviews lasted between 35 minutes and one hour and covered 65 questions in total. Semi-structured interviews allowed women the opportunity to provide information that they felt was relevant, especially regarding questions that focused on how they felt when interacting with services. The interview tools used with the women drew on two frameworks.

Firstly, the National Drug Rehabilitation Implementation Committee's standards for care-planning (NDRIC, 2008) informed the domains of need. Secondly, questions relating to trauma were drawn from the ACEs Study and the definitions of ACEs provided by the Centers for Disease Control and Prevention (Felitti *et al.*, 1998). Instruments were developed by the research team, approved by the project steering group and then piloted prior to use in the field.

In addition to these interviews, frontline staff who worked with women with substance abuse issues were invited to complete a survey, which was distributed via email and completed online. The survey instrument was developed using a number of bespoke items, as well as items from the Trauma-Informed Care Project's organisational self-assessment.¹ The tool was developed by the research team, approved by the steering group and piloted prior to use. The online survey was distributed to front-line staff from drug and alcohol services, homeless services, and the Probation Service.

Profile of service-user research participants

A total of 24 women took part in the interviews and ranged in age from early 20s to mid-50s, with an average age of 35. All participants identified as Irish and participants included women from the majority population and Traveller women. 63% ($n = 15$) of the women had lived in Limerick their entire lives, while another 21% ($n = 5$) had moved to Limerick within the past two years. Other significant characteristics of the women included the following.

- 83% were parents, and 17% had at least one child in someone else's care.
- 21% had been cared for in foster or group homes.
- 79% had experienced homelessness at least once in their lives, with 67% homeless at the time of the research (in homeless accommodation, staying temporarily with someone, or sleeping rough).
- 83% had engaged with the Irish legal system (Courts, Gardai or Probation Service).
- While all the women had difficulties with drug misuse across the lifespan, a majority stated that they currently 'rarely' or 'never' used alcohol or drugs, with 39% reporting daily or weekly drug use.

¹ www.traumainformedcareproject.org

- 65% of the women self-identified as having mental health issues.
- 91% of the women had experienced intimate partner violence in adulthood.

Ethical considerations

The researchers were committed to ensuring that all participants felt safe, felt empowered, and had an overall positive experience of the research process. A number of ethical risks were identified, and management strategies employed to ensure that participants felt safe throughout the research. This included measures to preserve total anonymity for all participants and taking each of those interviewed through a 16-point informed consent checklist that outlined all facets of the research before beginning their interview. All participants were provided with contact details for out-of-hours support should they feel upset later in the day following the interview. All field researchers had significant experience of working with vulnerable adults and interviews were trialled in a peer environment prior to use in the field. All participants were compensated for their time.

The researchers were committed to identifying pragmatic recommendations from the research findings, and the Steering Committee undertook to implement the recommendations.

Results

Findings in relation to the women's experiences of childhood and adult trauma

Of the 24 women who took part in this research, 23 answered questions in relation to ACEs (Felitti *et al.*, 1998). The ACEs questionnaire examines 10 categories of adverse childhood experiences in three broad domains: abuse (physical, emotional or sexual); neglect (physical or emotional); and household dysfunction (substance misuse, criminality, mental illness, divorce and exposure to domestic violence) (Dube *et al.*, 2003). A simple 'yes or no' answer is elicited for each of the questions, with positive responses scoring one point. The final cumulative score is the ACE score for the individual (Felitti *et al.*, 1998).

The results of this research showed that the women who participated had disproportionately high rates of ACEs when compared to the general population. The range of ACE scores of the women in the study was 0–8, with the average being 5. The most frequently occurring ACE scores were 8 and 5. Over 55% ($n = 13$) of the women had scores of 5 or more,

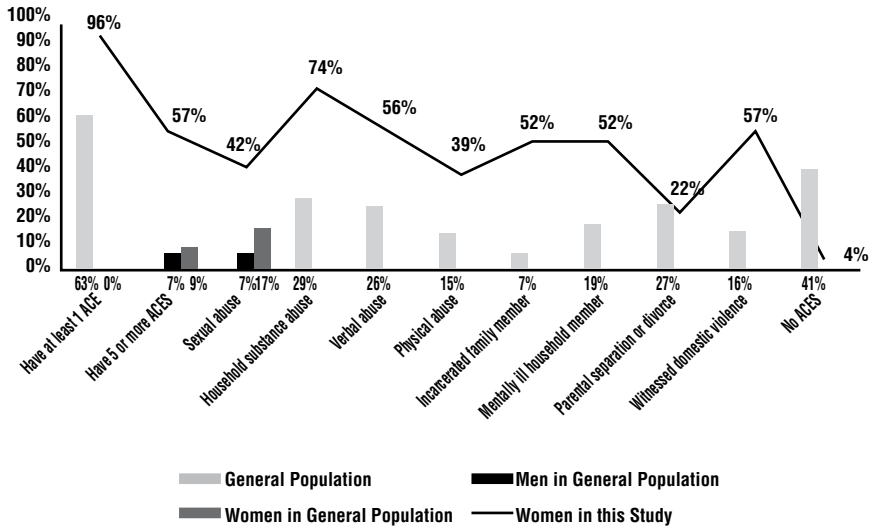
and five of these women had scores of 8. Figure 1 shows that the women in this study were more frequently affected by almost all forms of childhood trauma and were, in many instances, affected to a very significant degree. They were:

- 7 times more likely to have grown up in a household where there was an incarcerated person (e.g. family member)
- 6–8 times more likely to have 5 or more ACEs (6 times more likely than women in the general population; 8 times more likely than men)
- 3.6 times more likely to have grown up in a household where there was domestic violence
- 3 times more likely to have grown up in a household where there was somebody with a mental health illness
- 2.6 times more likely to have grown up in a house where there was substance abuse
- 2.5–6 times more likely to have experienced childhood sexual abuse (2.5 times more likely than women in the general population; 6 times more likely than men)
- 2.5 times more likely to have experienced physical abuse in childhood
- twice as likely to have experienced verbal abuse in childhood
- 1.5 times more likely to have one ACE than people in the general population
- 10 times less likely to have no ACEs at all.

Figure 1 depicts the experiences from the general population of the 10 ACE items in the bars, with the line depicting the proportion of women in the study who had experienced ACEs. It clearly shows a pattern of women having significantly higher rates of ACEs than those recorded for the general population (Felitti *et al.*, 1998).

The ACEs study revealed that experience of physical abuse, sexual abuse or witnessing mother being a victim of domestic violence doubled the risk of being a victim of intimate partner violence, with exposure to all three increasing the risk of victimisation in adulthood by 3.5 times (Anda *et al.*, 2002). In addition to inquiring about ACEs, the women in this study were asked about experiences of intimate partner violence; 91% had experienced violence by a partner in adulthood. This compares with prevalence figures for domestic violence in adult women in the general population of between 18% and 39% (Kelleher & Associates and O'Connor, 1995).

Figure 1. Cohort ACES compared to general population



As previously detailed, the prevalence of ACEs is a predictor of health difficulties later in life, including problematic substance use. All of the participants interviewed for this research had current or previous difficulties with drug and/or alcohol use. When asked about their problematic substance use, over 65% ($n = 15$) of the women stated that, in their opinion, it was related to trauma and/or their life experiences. A further 30% ($n = 7$) stated that their problematic substance use was somewhat related to trauma and/or life experiences. When discussing the relationship between the two, 33% ($n = 8$) of the women stated that they had used drugs or alcohol as a past coping mechanism.

Findings in relation to the needs of women

Parenting

Women highlighted the challenges of balancing caring for their children and building a future for themselves and their children.

The fear of losing custody of their children reduced some women’s willingness to engage with a service, as articulated in the following quote:

Never went to a service [for two years] because I knew the kids would have been taken off me ... the fear kept me from asking for

help ... I know everything is watched ... I know women who have brought their kids and social workers were on top of them and took them away ... a social worker is a heart stopper.

Participants who had multiple children in care spoke about wanting one dedicated social worker:

Trying to manage all the various people, social workers and foster carers, is actually making my life challenging – having just one social worker would be much better. There are so many reviews, so many case conferences.

Some of the women (42%) viewed services as unsafe and inappropriate places to bring their children:

I don't want my kid in there because everyone just wants the next fix; I don't want my kid listening to conversations in waiting rooms.

The women also identified lack of childcare as a barrier to attending services:

When I was trying to get into recovery before, I couldn't go to the day programme because there was no crèche for my child. I suppose it delayed my recovery for about a year ... my using was getting worse while I was waiting.

Housing and homelessness

The women who participated in this research clearly identified the lack of safe, available housing as a core barrier to progression:

Housing is huge – housing first, then the rest of the services. You can deal with the rest ... I would prefer my own place because I can be away from a dangerous environment with drugs and could get my child back and give them a safe place.

The women identified two system barriers that make it extremely difficult to secure accommodation: landlords being unwilling to rent property to Housing Assistance Payment (HAP) scheme participants, and the lack of savings for a rental deposit. These obstacles are captured in the quotes below.

Landlords don't want hassle to deal with HAP, they just want the money up front. The ones that do accept HAP have higher prices.

Not able to do it [pay] on my own and I need a bit of help ... financial and searching ... I have some of the deposit but not sure where I am going to come up with the rest of the money ... 50% of my income goes to rent at [service] ... so it is hard to save.

Criminal justice issues

Of the women who answered the question 'Do you want to stop offending?', 100% ($n = 18$) answered 'Yes'. Two-thirds of the women (66.7%) had been on probation.

The women were equivocal about whether or not contact with the Probation Service could assist them with not offending, with 29% answering in the affirmative and 37% saying that offending is a personal choice and not within the Probation Officer's control. The women who felt their Probation Officer could help them reflect a sense of support, mutual respect and genuine caring:

Yes, if you get the right one. Someone that listens but won't take excuses, who will call you out on your stuff and not let you get away with anything. But you know she was there for you if you needed anything. I will never forget my Probation Officer. She motivated me to do better because I cared for her.

Other women felt that their Probation Officer could not help them to stop offending:

I don't think there is anything that can be done to help – people can do it if they want.

Women cited lack of stability in their lives, mental health difficulties and fears for their safety as reasons for missing appointments with their Probation Officer.

I missed appointment because I had to go into town [to the Probation Office] – I was afraid I would be attacked by someone who could hurt me. Depression is also a cause. Sometimes it is hard to get out of bed.

A few women noted that Probation Officers could be flexible and accommodating when it came to appointments, while others were able to identify what would help them keep appointments: outreach-based appointments, consistency in appointment times and reminders by text or phone.

Some women stated that their primary needs in relation to offending were support in finding a rehabilitation placement and access to housing. They particularly noted that lack of detox facilities hampered their efforts at desisting from offending.

Drug and alcohol use

The women identified a number of key gaps in service provision in relation to drug and alcohol services, including adequate detox facilities, access to counselling and child-friendly services.

One woman spoke about what counselling could provide for her:

I need to have proper counselling ... Once a week would be enough. It would be the safe place I think I am missing. I need a place to go where I can talk. I need to trust them – need them not to be bound by the same restrictions as other services.

Other women were clear about the need for gender-specific services:

Women would benefit from women-only services – we would be stronger because when a man is around, he thinks he owns you ... I would be nervous with a man sitting there.

The women also identified the need for safe accommodation, appropriate to their needs, to support and facilitate their recovery from substance misuse.

Mental health

Self-identified mental health difficulties were prevalent among the group of women interviewees, with 65% acknowledging having mental health issues. The women identified a number of challenges in accessing mental health supports: timeliness of access to services, fear of child protection services and not trusting their service provider.

The women spoke about the need for swift access to services based on need:

I am on the waiting list because I missed my last appointment ... Depression makes it hard to get going ... I was feeling really bad one day and [the service] refused to see me. There is no one checking up on me. They should see you when you need to be seen, not when it is convenient for them.

The women also spoke about mental health and addiction simultaneously, underpinning the connection between the two in their lives. They referenced the need for services to work together:

I received [mental health] help to get me off [medication] and so I don't have a benzo issue anymore, but there are not enough places where you can get help for poly drug use. Treatment centres [for mental health] should be connected with detox and other services.

A number of women reported feeling judged by their general practitioner or mental health provider. They emphasised the need to be treated with dignity and respect:

I feel judged by my doctor. He is not helpful or honest. I don't trust him at [service]. I need someone to talk to confidentially who is understanding and who I can trust.

Poignant statements of being alone in their struggles were made by a number of women:

I feel particularly isolated ... left to me own devices.

The weekends are hard – there is no support at the weekend. This is when isolation kicked in for me.

Rating of service providers on key trauma-informed qualities

Both service-users and service staff were asked to rate service provision in relation to qualities associated with trauma-informed services. The women and staff were asked to rate on a scale of 1–5 – with 1 being 'not at all' and 5 being 'very much so' –the extent to which services made the women feel:

- (a) safe
- (b) cared for
- (c) understood
- (d) valued
- (e) respected
- (f) trusted.

The results are depicted in Figure 2. The women who participated were generally positive in their overall perception of drug and alcohol service providers, with scores averaging between 4.3 and 5.0 ($n = 22$) for all areas of the survey. In relation to feeling cared for, valued, and respected, the average was the maximum score of 5. Housing-related services scored in the average range between 2.5 and 3.7 ($n = 21$). The least well-regarded services were offending-related/criminal justice services, with scores ranging from 1.9 (poor) to 2.7 (average) ($n = 19$).

Figure 2. Service-user ratings of service providers

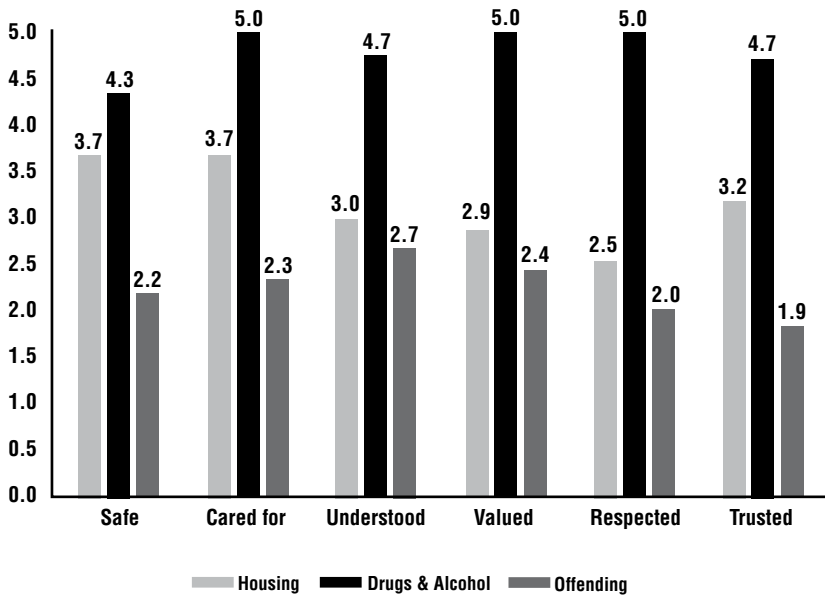
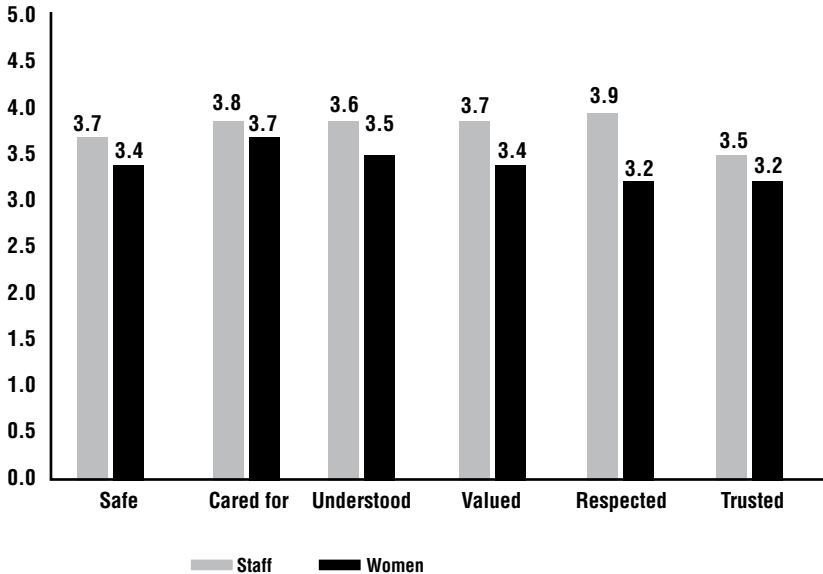


Figure 3 shows a comparison of service providers' ranking of themselves compared to service-users' ranking of the services against the same

qualities. The service provider scores are an amalgamation from all three types of service provider. In all cases, staff ranked themselves higher than the women ranked them on each of the qualities, with more marked differences in relation to their capacity to make women feel respected, and to a lesser degree safe, valued and trusted.

Figure 3. Comparison of service-provider and service-user ratings of services



Discussion and recommendations

The data in this research align with similar research nationally and internationally, concluding that people using homeless, addiction and criminal justice services are likely to be ‘unrecovered trauma survivors’ (Whitfield, 1998; Lambert and Gill-Emerson, 2017; Felitti *et al.*, 1998; Moore and Tatman, 2016). The current study identified that the participants had an average ACE score of 5; previous research indicates that a score of 4 or more is clinically significant, with increased risk for psychological and substance dependence disorders, homelessness and involvement with criminal justice systems (Taylor and Sharpe, 2008; Murphy *et al.*, 2014; Burke-Harris, 2015; Moore and Tatman, 2016; Birn *et al.*, 2017).

It has been well established that exposure to trauma has implications for brain structure, decision making, ability to engage effectively with services, and emotional regulation (Reim *et al.*, 2015; Jedd *et al.*, 2015; Hart and Rubia, 2012; Lambert and Gill-Emerson, 2017; Schore, 2003). Experiences of trauma frequently result in behaviours that can be considered aggressive, challenging, evasive and non-engaging. Services that incorporate knowledge about the impact of trauma on the brain and behaviour facilitate a better understanding of presenting behaviour; the client is no longer regarded as unwilling and difficult, but instead is perceived as unable and trying. Reinterpreting these behaviours as entirely understandable adaptive responses to unresolved trauma depersonalises the behaviour and improves staff responses, and ultimately increases the service's capacity to support traumatised clients (Lambert and Gill-Emerson, 2017; Huckshorn and LeBel, 2013). Providing training to staff to enable them to understand clients' behaviour through a trauma lens, and respond appropriately, is recommended.

Acknowledging the role of trauma in the development of substance misuse, mental health difficulties and criminality is not about providing an 'abuse excuse', but about developing new evidence-informed strategies for engaging with unrecovered trauma survivors.

There is also a very high correlation between ACEs and the likelihood of experiencing intimate partner violence in adulthood (Franchek-Roa *et al.*, 2017). A staggering 91% of women in the current study reported experiences of intimate partner violence, indicating a need to routinely screen women attending mental health, addiction, homeless, mental health and criminal justice services for intimate partner violence.

Thematic analysis of the research findings indicated that there is variance between the women's experience of the service they received and some service providers' perceptions of themselves in relation to key factors underpinning trauma-informed care, including feeling valued, respected, safe, cared for, understood and trusted (SAMHSA, 2014). This points to the potential value of services turning the lens of scrutiny away from the women and towards themselves, so that they might better understand their capacity to provide effective services to this cohort of women. It is recommended that services consider taking a whole-service approach, including assessment and corrective action, to the issue of trauma in order to provide an environment where their clients can engage, heal and grow.

Notwithstanding the small cohort involved, this research adds to the

international body of evidence on trauma and substance use, criminality and homelessness. The research highlights the need for health and community services to explore and implement trauma-informed approaches to ensure they can effectively engage trauma survivors, and women substance users in particular.

Since this study's completion, there has been some progress in relation to the recommendations outlined above. An action relating to trauma-informed care for services in Limerick has been included in the regional HSE Connecting for Life suicide prevention action plan 2017–2020 (HSE 2017). Additionally, Novas, a homeless service within Limerick, is developing a service standard and online training module to support organisations working with vulnerable groups to become trauma-informed. These developments are encouraging and will create opportunities for additional research and shared learning across a range of agencies who work to the shared goal of evidence-informed effective practice.

References

- Anda, R.F., Whitfield, C.L., Felitti, V.J., Chapman, D., Edwards, V.J., Dube, S.R. and Williamson, D.F. (2002), 'Adverse childhood experiences, alcoholic parents, and later risk of alcoholism and depression', *Psychiatric Services (Washington, DC)*, vol. 53, no. 8, pp. 1001–1009
- Baglivio, M., Epps, N., Swartz, K., Sayedul Huq, M., Sheer, A. and Hardt, N.S. (2014), 'The prevalence of Adverse Childhood Experiences (ACE) in the lives of juvenile offenders', *Journal of Juvenile Justice*, vol. 3, pp. 1–23
- Birn, R.M., Roeber, B.J. and Pollak, S.D. (2017), 'Early childhood stress exposure, reward pathways, and adult decision making', *Proceedings of the National Academy of Sciences of the United States of America*, vol. 114, no. 51, pp. 13549–13554.
- Burke-Harris, N. (2015), *How Childhood Trauma Affects Health Across a Lifetime* (TED talk), available at https://www.ted.com/talks/nadine_burke_harris_how_childhood_trauma_affects_health_across_a_lifetime (accessed 1 August 2018)
- Covington, S. (2008), 'Women and addiction: a trauma-informed approach', *Journal of Psychoactive Drugs*, November, Suppl. 5, pp. 377–385
- Covington, S.S., Burke, C., Keaton, S. and Norcott, C. (2008), 'Evaluation of a trauma-informed and gender-responsive intervention for women in drug treatment', *Journal of Psychoactive Drugs Supplement*, vol. 5, pp. 387–398.
- Cutuli, J.J., Montgomery, A.E., Evans-Chase, M. and Culhane, D. (2013), *Factors Associated with Adult Homelessness in Washington State: A Secondary Analysis of Behavioral Risk Factor Surveillance System Data*, Seattle: Bill & Melinda Gates Foundation
- Dube, S.R., Felitti, V.J., Dong, M., Chapman, D.P., Giles, W.H. and Anda, R.F. (2003), 'Childhood abuse, neglect and household dysfunction and the risk of

- illicit drug use: the Adverse Childhood Experiences study', *Pediatrics*, vol. 111, no. 3, pp. 564–572
- Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M. and Edwards, V. (1998), 'Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults', *American Journal of Preventive Medicine*, vol. 14, no. 4, pp. 245–258
- Franchek-Roa, K.M., Tiwari, A., Lewis-O'Connor, A. and Campbell, J. (2017), 'Impact of childhood exposure to intimate partner violence and other adversities', *Journal of the Korean Academy of Child and Adolescent Psychiatry*, vol. 28, no. 3, pp. 156–167
- Hart, H. and Rubia, K. (2012), 'Neuroimaging of child abuse: a critical review', *Frontiers in Human Neuroscience*, vol. 6, doi: 10.3389/fnhum.2012.00052
- HSE (2017), *Connecting for Life Mid-West: Suicide Prevention Action Plan 2017–2020*, Limerick: HSE Mid-West
- Huckshorn, K. and LeBel, J. (2013), 'Trauma informed care', in K. Yeager *et al.* (eds), *Modern Community Mental Health: An Interdisciplinary Approach*, Oxford: Oxford University Press
- Jedd, K., Hunt, R.H., Cicchetti, D., Hunt, E. Cowell, R.A., Rogosch, F.A., Toth, S.L. and Thomas, K.M. (2015), 'Long-term consequences of childhood maltreatment: Altered amygdala functional connectivity', *Development and Psychopathology*, vol. 27, no. 4, part 2, pp. 1577–1589
- Kelleher & Associates and O'Connor, M. (1995), *Making the Links: Towards a Strategy for the Elimination of Violence Against Women in Intimate Relationships with Men*, Dublin: Women's Aid
- Lambert, S. and Gill-Emerson, G. (2017), *Moving Towards Trauma-Informed Care: A Model of Research and Practice*, Cork: Simon Community
- Moore, M. and Tatman, A. (2016), 'Adverse childhood experiences and offender risk to reoffend in the united states: a quantitative examination', *International Journal of Criminal Justice Sciences*, vol. 11, pp. 148–158
- Murphy, A., Steele, M., Dube, S.R., Bate, J., Bonuck, K., Meissner, P., Goldman, H. and Steele, H. (2014), 'Adverse Childhood Experiences (ACEs) questionnaire and Adult Attachment Interview (AAI): Implications for parent child relationships', *Child Abuse & Neglect*, vol. 38, no. 2, pp. 224–233
- NDRIC (2008), *National Protocols & Common Assessment Guidelines*, Dublin: HSE
- Swan, N. (1998), 'Researchers face broad gaps in information', available at https://archives.drugabuse.gov/NIDA_Notes/NNVol113N2/exploring.html (accessed 11 August 2018)
- Ogden, P., Minton, K., Pain, C., Siegel, D.J. and Van Der Kolk, B. (2006), *Trauma and the Body: A Sensorimotor Approach to Psychotherapy*, New York: W.W. Norton
- Pearlman, L.A. and Saakvitne, K.W. (1995), *Trauma and the Therapist: Countertransference and Vicarious Traumatization in Psychotherapy*, New York: W.W. Norton
- Reim, M.M., Alink, L.R., Out, D., Van Ijzendoorn, M.H. and Bakermans-Kranenburg, M.J. (2015), 'Beating the brain about abuse: Empirical and meta-analytic studies of the association between maltreatment and hippocampal volume across childhood and adolescence', *Development and Psychopathology*, vol. 27, no. 2, pp. 507–520

- SAMHSA (2014), *Trauma-Informed Care in Behavioural Health Services*, Treatment Improvement Protocol (TIP) Series, No. 57, Rockville, MD: Substance Abuse and Mental Health Services Administration
- Schore, A.N. (2003), 'Early relational trauma, disorganized attachment, and the development of a predisposition to violence', in M.F. Solomon and, D.J. Siegel (eds), *Healing Trauma: Attachment, Mind, Body and Brain*, New York: W.W. Norton
- Taylor, K.M. and Sharpe, L. (2008), 'Trauma and post-traumatic stress disorder among homeless adults in Sydney', *Australian & New Zealand Journal of Psychiatry*, vol. 42, no. 3, pp. 206–213
- Van Der Kolk, B. (2014), *The Body Keeps the Score: Mind, Brain and Body in the Transformation of Trauma*, New York: Penguin
- Whitfield, C.L., Anda, R.F., Dube, S.R. and Felitti, V.J. (2003), 'Violent childhood experiences and the risk of intimate partner violence in adults: Assessment in a large health maintenance organization', *Journal of Interpersonal Violence*, vol. 18, no. 2, pp. 166–185
- Wilson, C., Pence, D.M. and Conradi, L. (2013), 'Trauma-informed care', in *Encyclopaedia of Social Work*, available at <http://socialwork.oxfordre.com/view/10.1093/acrefore/9780199975839.001.0001/acrefore-9780199975839-e-1063> (accessed 1 August 2018)