Self-harm among young people (including self-injury or self-poisoning) is a complex and significant public health issue. Despite considerable research investigating the characteristics, reasons and motivations for self-harm, it is a behaviour that remains largely misunderstood and highly stigmatised in the community. Meanwhile, young people and their families continue to be significantly impacted by self-harming behaviours, the immediate physical injury and emotional harm of the behaviour is often compounded by unhelpful responses.

Young people experiencing mental ill-health are a group at increased risk of engaging in self-harm, yet little is known about effective therapeutic interventions. This research bulletin summarises findings from recent literature and identifies opportunities both in clinical practice and research to develop and trial new therapeutic approaches.

**Background**

Self-harming behaviours are often described as a response to emotional or psychological distress, including overwhelming negative feelings and a sense of hopelessness. While a history of self-harm is a risk factor for suicide, generally self-harm is not an attempt at suicide, instead some young people engage in self-harming behaviours as an alternative to ending their life (Klonsky, 2007).

In Australia, rates of self-harm among young people are cause for concern. The 2015 Child and Adolescent Mental Health and Wellbeing Survey found that approximately one in ten Australian adolescents had self-harmed at some point in their lives (Figure 1). Among young women aged 16-17 years, 22.8 per cent had self-harmed in their lifetime (Lawrence, Johnson, & Hafekost, 2015).

These data are consistent with a 2010 Australian community prevalence survey where 24.4 per cent of young women and 18.1 per cent of young males (aged 20-24 years) reported they had self-injured in their lifetime (Martin, Swannell, Hazell, Harrison, & Taylor, 2010).

Internationally, self-harm among young people has also been identified as a significant issue, with the numbers and rates of young people self-harming shown to be more common from the age of 12 years onwards (Hawton, Bergen, Waters, et al., 2012). Young women account for a significant proportion of individuals hospitalised for self-harm, most often as a result of self-poisoning. However, only a minority of young people who self-harm present to hospital. Within the community more young people self-harm by cutting (Madge et al., 2008) and the majority do not receive clinical care (Hawton, Bergen, Kapur, et al., 2012).
Impact of self-harm

Young people who self-harm are at risk from the immediate physical injury (such as wounds, infections and organ damage) and the emotional impact (including feelings of shame, distress and depression). Those who repeatedly self-harm are at risk of a range of potential future adverse outcomes. These include: increased risk of suicide (Fergusson et al., 2005; Finkelstein et al., 2015); mental health problems (Klonsky, 2011); future substance misuse (Mars et al., 2014; Moran et al., 2015); and poor economic participation outcomes as a result of disruption to education and career pathways (Mars et al., 2014).

Self-harm also has a significant impact on family members, compromising their own mental health, the quality of their relationships and their ability to participate in paid work (Ferrey et al., 2016). Parents of young people who self-harm report lower levels of wellbeing, and increased levels of distress is often described as a combination of shock, sadness, guilt and fear (Morgan et al., 2013; Oldershaw et al., 2008).

Self-harm in clinical populations

Self-harming behaviours have been found to occur in the context of a wide range of diagnosable mental health disorders, including mood and anxiety disorders, eating disorders and first-episode psychosis. The 2015 Child and Adolescent Health Survey found “self-harm was markedly higher in young people with major depressive disorder. One quarter (25.8 per cent) of males and just over half (54.9 per cent) of females with major depressive disorder (based on self-report) had harmed themselves in the previous 12 months” (Lawrence et al., 2015 p11).

Evidence of effective interventions for self-harm among young people is limited. What is available supports the use of the specialised psychological treatments of Dialectical Behaviour Therapy for Adolescents (DBT-A) and Mentalization-based Therapy (MBT) (Hawton et al., 2015; Ougrin et al., 2015). DBT-A is manualised cognitive behavioural treatment designed to specifically treat adolescents engaging in self-harming behaviours by increasing emotional regulations skills. Delivered over 16-weeks, it involves weekly...
individual therapy, family therapy when required and a multifamily skills training group in an outpatient setting (Fleischhaker et al., 2011). MBT is a manualised treatment delivered in weekly individual and monthly family sessions over one year (Brent et al., 2013) that aims to improve emotional regulation and interpersonal relationships by increasing skills in understanding the actions and intentions of others.

The complex nature of the behaviour and its motivations requires that we look beyond specific self-harm interventions and research the impact of other interventions addressing underlying mental ill-health (such as anxiety, distress, poor coping skills, trauma and depression). Including self-harm outcome data in other clinical trials and studies for a range of youth mental health interventions would assist in developing a better understanding of the functions of, and effective interventions for, self-harm (De Silva et al., 2013).

For this research bulletin we explored recent studies reviewing the reasons for self-harm in adult and youth populations, the impact of a young person’s self-harm on family members and the evidence available for effective interventions for children and adolescents (Table 1).

### Table 1 - Description of studies

<table>
<thead>
<tr>
<th>Article</th>
<th>Article type</th>
<th>Key findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ferrey et al. (2016)</td>
<td>Qualitative Study of family members experiences</td>
<td>Impact of self-harm by young people is significant on family members and support for them and their experience needs to be incorporated into clinical care of young person.</td>
</tr>
<tr>
<td>Edmondson, Brennan, and House (2016)</td>
<td>Systematic Review of self-reported motivations for self-harm (youth and adult)</td>
<td>People also report positive motivations for self-harm which include definition of self and positive experiences which need to be considered within research methodologies and development of therapeutic responses.</td>
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**Clinical interventions for self-harm in children and adolescents**


This systematic review identified all Randomised Control Trials (RCTs) of interventions for self-harm in children and adolescents (up to 18 years of age and who, in presenting to clinical services, had self-harmed in the past six months). Eleven trials were included with a total of 1,126 child and adolescent participants (80.6% were female). Five trials were from the UK, three were from the US with one each from Australia, New Zealand and Norway. Ten trials randomised child/adolescent participants to intervention and control groups, the other randomised clinicians instead of the participants (Ougrin et al., 2011). All trials focused on psychosocial therapy, none investigated pharmacological treatments. In all trials the primary outcome measured was repetition of self-harm (recorded from either self-report, clinical notes or Emergency Department data). Other outcome measures included: treatment adherence, depression, hopelessness, suicidal ideation, and problem solving.
Results
The authors noted conflicting results regarding the benefit of DBT-A over treatment as usual or enhanced usual care, although one study (Mehlum et al., 2014) did report significant reductions over time in the frequency of self-harm, as well as significant reductions in depression hopelessness and suicidal ideation. Mentalization Based Therapy (MBT) was also found to reduce self-harm repetition (Rossouw & Fonagy, 2012).

Therapeutic Assessment (TA), a form of collaborative psychological assessment which focuses on improving insight, enhancing motivation for change, identifying potential solutions and agreement on strategies between the clinician and (in this case) the young person and their family, was shown to increase adherence to treatment (Ougrin, 2011), but did not reduce self-harm. Nor did brief psychological therapy (consisting of problem solving skills or self-management of emotions and thoughts) impact on self-harm repetition, adherence to treatment or suicidal ideation (Donaldson, 2005).

Of particular note, group-based therapy showed no evidence of impact on repetition of self-harm. Nor did trials of home-based family interventions or the provision of a re-admittance card to hospital.

The review identified that all the included trials were limited in at least one aspect of their design including their small size and quality of evidence (based on the GRADE approach).

Take home messages
Given the limited number of high quality studies available into interventions for children and adolescents who self-harm it is difficult to provide clinical practitioners with any conclusions on evidence-based interventions.

Comprehensive TA would appear to increase adherence to treatment, and DBT-A and MBT show some positive impact on reducing the frequency of self-harm, however further evaluation and research into these interventions is required before the authors could make recommendations about their use in clinical practice. There is stronger evidence to suggest that group therapy is not an effective intervention for adolescents who have a history of repeat self-harm.

In research, larger scale trials and development and testing of new treatments are needed to address the current lack of evidence. Given the high-rate of self-harm among young people these treatments would need to be acceptable and suitable for this age group. Including young people (and their families) with a history of self-harm in this process was therefore recommended.

Future research into self-harm should also include a range of outcome measures, such as mood, attitudes to treatment and adherence, in future trials. This would build the evidence base and assist in future meta-analyses.

We note that a similar meta-analysis and systematic review was published earlier in the year (Ougrin et al., 2015). The findings of this review were not dissimilar to the Hawton et al., (2015) paper, although the conclusions were stronger regarding the effectiveness of therapeutic interventions for self-harm, with the largest effect shown for DBT-A, CBT and MBT.

This critical review identified that after 20 years of research, including the completion of substantial clinical trials, there was as yet no treatment interventions shown to prevent the repetition of adolescent suicidal behaviour.

The review identified 16 RCTs for treatments aimed at reducing suicidal ideation or recurrence of suicide attempts or self-harm in adolescents. Twelve trials focused on treatments with family or social network focus and five trials studied individual skills and behaviour-focused treatments.

Results
The review found studies that showed effect on suicidal ideation, attempts and self-harm, had a significant focus on family involvement and social support. Those with the strongest results, MBT and integrated Cognitive Behaviour Therapy (iCBT), had family components included in the treatment and received a large number of treatment sessions. For example MBT was delivered over a year with weekly individual sessions and monthly family sessions. iCBT averaged 34.5 sessions compared to Treatment As Usual (TAU) at approximately 20 sessions.

Brief interventions such as the single session Therapeutic Assessment (Ougrin et al., 2011) and the one off Family Intervention for Suicide Prevention delivered in emergency departments to suicidal or suicide attempting young people (Asarnow et al., 2011) did show adherence to follow up treatment. However, there was no effect on the recurrence or frequency of self-harming or suicidal outcomes.

The risk of self-harm and suicide attempts is greatest in the 1-4 weeks from discharge from psychiatric hospital or emergency department after a suicide attempt. While intensive treatment at this time was not shown to be effective alone in reducing repeat attempts in adolescents, the review noted there is evidence in adult populations of a reduction in the rate of suicide when combined with coordinated, accessible care.

Finally the review identified there was a strong correlation between alcohol and other drug use immediately before or during a suicide attempt and that Motivational Interviewing interventions directed at reducing alcohol and other drug use also paralleled a reduction in suicide related behaviours.

Take home messages
Overall, high-quality, large dosage and coordinated, integrated care involving family and non-familial support showed the most effect on suicide-related and self-harming behaviours.

The review also proposed areas to be considered in future interventions for self-harm and suicide related behaviours, due to their reported efficacy in speeding up recovery from distress, and improving mood. These include:

- increasing motivation to change (for suicide-related behaviours and for comorbid drug and alcohol use, and family and/or social support);
- promotion of positive affect; and
- improving the quality of sleep to prevent suicidal behaviours.

Finally, the authors noted the difficulty in comparing studies due to inconsistent definitions around these behaviours, the low power of studies, and a lack of clarity around what consisted TAU. They recommend future research address these issues.

Overall, high-quality, large dosage and coordinated, integrated care involving family and non-familial support showed the most effect.
Impact of young people’s self-harm on families

Ferrey, A, Hughes, N, Simkin, S et al., 2016

The authors of this study identified a lack of research into the impact of self-harm by young people on family members (including both parents and siblings). They interviewed 37 parents of 35 young people (of an average age of 15.1 years who had all engaged in repeat self-harm of various levels of severity). The vast majority of those interviewed were mothers and while the parents came from a range of socio-economic and geographical backgrounds across the UK they were all Caucasian except one.

The interviews were conducted in person, video/audio recorded and were guided through a number of semi-structured interview questions to prompt the participant to tell their story of caring for a young person who self-harmed. The research then analysed the interviews by identifying overarching themes and examined the emotional, physical and practical impacts of self-harm on the family.

Results
The study reported a number of impacts experienced by family members described in Table 2. These included experiences of emotional and psychological distress as well as impact on close personal relationships, social and work functioning.

Table 2 – Impact of self-harm on family members

<table>
<thead>
<tr>
<th>Type of impact</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediate impact</td>
<td>Feelings of shock, horror, fearful, angry, frustrated, unsettled (chaotic) and unsure of what to do.</td>
</tr>
<tr>
<td>Ongoing impact</td>
<td>Guilt, shame, embarrassment, stress, exhaustion, physical illness and depression.</td>
</tr>
<tr>
<td>Relationship with partners</td>
<td>Strain, increasingly living separate lives, keeping their child’s behaviours hidden from a partner so as not to cause issues.</td>
</tr>
<tr>
<td>Impact on siblings</td>
<td>Varied responses. Some angry, resentful and abusive towards their sibling (e.g. due to the amount of extra attention they received). Others were supportive and conscious to avoid doing or saying something that might trigger their sibling’s self-harm. Some, particularly those at school, experienced stigma around their sibling’s self-harm.</td>
</tr>
<tr>
<td>Impact on wider family</td>
<td>Varied reactions from supportive, to a lack of understanding. For some parents they were balancing caring for both the mental health of their child and the physical ill-health of their parents.</td>
</tr>
<tr>
<td>Social isolation and support</td>
<td>Consistently reported feeling socially isolated and secretive about their child’s self-harm. However, participating in a social support group and hearing about stories of self-harm from other parents was beneficial.</td>
</tr>
<tr>
<td>Impact on work and finances</td>
<td>Difficult to maintain a full-time job when caring for their child who self-harms. Many took leave and some took a career break entirely. Considerable money was also spent on private psychiatric care (including travel) and private tutoring to compensate for missed school.</td>
</tr>
<tr>
<td>Conception of the future</td>
<td>Hopeful and optimistic, albeit aware of their child’s vulnerability in the future.</td>
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</tbody>
</table>
Parents require information about self-harm and what to expect, particularly to manage their initial reaction

**Take home messages**

Self-harm by young people has a significant emotional, psychological and economic impact on their parents and siblings. There is also a detrimental impact on relationships between family members and social networks. Parents require information about self-harm and what to expect, particularly to manage their initial reaction upon discovering their child is self-harming. They also need ongoing information to support them through their own emotional and psychological reaction, as well as the impact on their relationships (both family and friendship) and their work lives.

It is important that clinicians and any other professional staff working with young people who self-harm consider the impact on families and the needs of both parents and siblings (both in that they may need support themselves and assistance in self-care). For parents, the development of support groups with other parents of young people who self-harm could both provide much needed information and peer-based support.

Finally there is a need for more research into both the impacts of self-harm on family members and the development of effective interventions and supports for family members so as to minimise these impacts.

**Self-reported reasons for self-harm**

Non-suicidal reasons for self-harm: A systematic review of self-reported accounts.  
Journal of Affective Disorders, 191: 109-117

This systematic review analysed personal accounts describing the reasons for self-harm where there was no suicidal intent. It included 152 studies (39 interview-based, 113 questionnaire-based) with participants ranging from 10-92 years of age. Sixty-two of the studies reviewed (40%) focused on student/youth populations.

The authors analysed the studies by ‘theme’ of the reasons given for self-harming (shown at Table 3). These themes were drawn from those identified by Suyemoto (1998) and Klonsky (2007).

**Results**

The review found many studies reported reasons that fitted the eight pre-identified themes particularly: managing distress or affect regulation; interpersonal influence; punishment, and managing dissociation.

<table>
<thead>
<tr>
<th>Reason for self-harm</th>
<th>Percentage</th>
</tr>
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<tbody>
<tr>
<td>Managing distress or affect regulation</td>
<td>93%</td>
</tr>
<tr>
<td>Interpersonal influence</td>
<td>87%</td>
</tr>
<tr>
<td>Punishment</td>
<td>63%</td>
</tr>
<tr>
<td>Managing dissociation</td>
<td>48%</td>
</tr>
<tr>
<td>Sensation seeking</td>
<td>20%</td>
</tr>
<tr>
<td>Averting suicide</td>
<td>15%</td>
</tr>
<tr>
<td>Expressing and coping with sexuality</td>
<td>6%</td>
</tr>
<tr>
<td>Maintaining or exploring boundaries</td>
<td>8%</td>
</tr>
</tbody>
</table>

During the review it became apparent that over half of the studies reported at least one reason for self-harm that did not fit into the themes above. As a result two new themes/groups were described:

1. Self-harm was described as a positive experience. This included reports of self-harm being gratifying (not sexual) such as finding the act comforting and satisfying. Other reasons included making the body less attractive to others as a way to deter unwanted attention or to protect others (e.g. if I hurt myself then I won’t hurt another person). The authors also noted that in 10% of the studies (particularly those involving young people), self-harm was described as experimental.
There is a need for the development and testing of new and innovative treatment approaches

2. It was used as a way to define oneself. This included that it would: show toughness or power; achieve own mastery of self; and define personal boundaries and/or memorialise their experiences and life events. Many young respondents described self-harm as a way to belong and associate themselves with a group, thereby defining an ‘identity’.

Take home messages
This review identified a number of reasons people self-harm that have previously not been articulated/investigated in the literature. It highlighted that this may have been due to:

- Use of current assessment tools and measures, very few of which go beyond understanding self-harm beyond affect regulation, disassociation, the interpersonal and self-punishment.
- Subjectivity in categorising, where a reason will be fitted into a pre-defined framework for understanding the behaviour.
- Large clinical samples in research compared to non-clinical populations which will over-represent: a) clinical populations in research and b) the clinical framework in responding to self-harm.

Research implications
A better understanding of the motivations (including the self-reported potential benefits) for engaging in self-harming behaviours is still required. This presents challenges for research methodologies which involve questionnaires to design questions that could elicit a response that would lend itself to such flexible and sensitive analysis. Structured interviews, while generally limited to smaller samples would be a more appropriate approach.

Clinical/ therapeutic implications
Currently within clinical care, self-harm is responded to within a deficit-centred framework, that is, self-harm is a symptom of poor emotional regulation and thinking and care should focus on cessation of behaviour or frequency reduction. There could be a complementary approach to self-harm that acknowledges the functions of the behaviour as positive to the person who self-harms (e.g. particularly for young people as a way to define themselves and experiment with their own identity and behaviour). This approach might then result in the development of alternative strategies and actions that are meaningful for the individual to respond to self-harm effectively.

There is a need for the development and testing of new and innovative treatment approaches
Conclusions

While there have been many studies on the epidemiology of self-harm, there are minimal studies and limited evidence available for effective treatment of self-harm among adolescents and young people. This makes it difficult to provide clinicians with any definitive advice at this time.

Treatment approaches that show some promise appear to be highly intensive and delivered over long periods of time. As a result they are expensive and require highly skilled and trained individuals to deliver and treatment adherence. Briefer interventions may increase treatment adherence but appear to have little direct impact on the behaviour.

Treatment that involves the family also appears to be more effective. As such it is important to respond to the impact of self-harming behaviours on family members, many of whom are experiencing stigma, compromised relationships and difficulties with work functioning.

There is a need for the development and testing of new and innovative treatment approaches to build the evidence base. There is also a need to better understand the impact of intervening in other self-harm associated outcomes including self-esteem, motivation, depression and substance use.

In developing new treatment approaches there is an opportunity to extend the framework for the way some self-harming behaviours are understood, in that they may serve a self-identified positive function. Developing alternative strategies to deliver the same positive outcomes is one approach that warrants further investigation and research.

Where to from here for future research?

From the reviewed literature we recommend the following research priorities.

- Develop consistent definitions around self-harm; better describe the components of treatment as usual.
- Undertake systematic and large scale trials to improve the quality and power of study results; include self-harm as an outcome in treatment studies of high prevalence disorders such as depression and substance use.
- Develop and trial new treatment approaches specific to the adolescent age group. Given the high-rate of self-harm among young people these treatments would need to be acceptable and suitable for this age group. As such young people (and their families) with a history of self-harm should be included in their design.
- Explore the reasons for self-harm, extending the current framework to include a broader range of reasons for self-harming behaviours. The research design will need to be carefully developed in order to identify nuances in motivations. Semi-structured interviews might be the best approach.
- Examine the impacts of self-harm on family members and trial effective family focused supports and interventions to minimise these.
References


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Research bulletins are designed to so that clinicians and researchers can access an overview of recent research on a specific topic without having to source the primary articles. The implications of the research for clinical practice and opportunities for future research to advance knowledge in the particular topic area are also canvassed.

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