# Service User Involvement in the Evaluation of Psycho-Social Intervention for Self-Harm: A Systematic Literature Review.

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#### Abstract

# Background:

The efficacy of interventions and treatments for self-harm is well researched. Previous reviews of the literature have highlighted the lack of definitively effective interventions for self-harm and have highlighted the need for future research. These recommendations are also reflected in clinical guidelines published by the National Institute for Health and Clinical Excellence (NICE, 2004) which also call for service user involvement in studies of treatment efficacy.

#### Aims:

A systematic review was undertaken to determine i) what contributions service users have made to the evaluation of psychosocial interventions ii) by what methods have service users been involved iii) in what ways could service user involvement supplement empirical evidence for interventions.

# Methodology:

Electronic searches were completed on the 28<sup>th</sup> January 2011 of the Medline (1950-present), Web of Science (1898-Present) and Psychinfo (1979-present) databases using 13 separate search terms. References were independently sifted according to set criteria by two of the authors to ensure inter-rater reliability.

#### Results:

65 references were included in the review. 59% of studies were empirically based, 26% used qualitative data collection methods to gather service user narratives. Only 8% of studies used a mixed-methodology to combined qualitative and quantitative data collection.

#### **Conclusion:**

Service user involvement is a rarity in the evaluation of psycho-social interventions despite its use being mandated by the NICE and evidenced as effective in other areas of mental health (Leader, 1998). The authors make a number of recommendations for future involvement in self-harm research.

#### **Declaration of Interest:**

None.

#### Introduction

Self-harm is well researched area. This reflects the prevalence of the 'risk' behaviour which is estimated to range between 4% and 6% in the general population (Brier & Gill, 2003, Meltzer *et al.*, 2002b) to 17% in university students (Whitlock et al, 2006) 21% in the adult psychiatric population (Nock & Prinstein, 2004) and 27% in the female prison estate (Ministry of Justice, 2008). Self-harm has been linked with a significantly increased risk of completed suicide (Appleby *et al.*, 1999; Royal College of Psychiatry, 2003) especially amongst women who self-harm repeatedly (Zahl & Hawton, 2004). Research has focused on identifying the underlying causes of self-harm, acknowledging that the behaviour is often a method of communication (Pembroke, 1994) or an attempt to manage often overwhelming emotions (Klonsky, 2007). Increasingly the self-harm literature draws a link between the behaviour and the previous experiences of trauma (Ringell & Brandell, 2011; Tantum & Hubband, 2009; Simpson 2004) and/or experiencing personality 'difficulties' (Crowe & Bunclark, 2000).

Despite the wealth of research, the prevalence of the behaviour and the public health impetus to improve outcomes for those who self-harm an evidence base for effective interventions for self-harm remains elusive. In a meta-analysis of psychosocial and pharmacological treatments Hawton *et al.*, (1999) concluded that "more evidence is required to indicate what the most effective care is for this large patient population" (p.2). The main reason cited for the lack of evidence was small sample sizes resulting in a lack of statistical power. The dearth of evidence for effective interventions has been reinforced by the existing clinical guidelines for the management of self-harm. The National Institute for Health and Clinical Excellence (NICE) routinely grades its recommendations according to a "hierarchy of evidence" (p. 44, NICE, 2004). Recommendations are graded A-C or as a Good Practice Point, those

receiving an 'A' grade include at least one randomised control trial (RCT) as a part of an overall body of literature which indicates a treatment effect. Those achieving a 'B' grade demonstrate a similar body of evidence but is lacking the inclusion of an RCT. Of the institutes five recommendations for psychological, psychosocial or pharmacological interventions for the short – term management of self-harm none achieve a 'Grade A' or 'B' rating. Three recommendations were graded as 'C' indicating evidence was based upon clinical experience from respected authorities<sup>2</sup>. The other two recommendations were classified as 'Good Practice Points' based upon the clinical experience of the Guideline Development Group. This has lead to recommendations for more RCTs to assess the effectiveness of intensive interventions<sup>3</sup> combined with assertive outreach and group therapy for people who self-harm. Despite the NICE recommendations being made in 2004, six years later the Royal College of Psychiatrists remained unconvinced of the efficacy of treatment approaches

"Although an empathic approach is essential in dealing with people who self-harm, it is not clear that any one form of treatment is particularly effective, and in some cases, the most pressing need is to address the underlying social issues" (RCP, 2010, p.37)

Whilst promising interventions are commonly reported (Prinstein, 2008), often including treatments such as problem solving therapy (Hawton & Kirk, 1989a), cognitive-behavioural approaches (Spirito & Esposito-Smythers, 2006) and Dialectical Behavioural Therapy (DBT) for those diagnosed with borderline personality disorder (Linehan *et al.*, 1991). However as highlighted by the RCP report these are not held to be consistently 'effective'. This maybe, as Hawton reports, a product of inadequate sample sizes or poor experimental design. Given the complexity and the different psychological functions that self-harm can serve (Prinstein, 2008) the authors suggest that the phenomenon can not be properly understood, nor effective outcomes of interventions measured, through empiricism alone. This is clearly

<sup>2</sup> The NICE does not define what constitutes a respected authority.

<sup>&</sup>lt;sup>3</sup> The NICE does not define what it considers to be an intensive intervention.

demonstrated by the assessment of treatment success being based upon the client's cessation from self-harm. The literature testifies that those who selfharm often describe their behaviour as a survival technique (Cresswell, 2006) and although the individual may have long-term ambitions to find alternative strategies to manage their emotional distress the use of self-harm is considered vitally important for coping in the present. Treatment outcomes that focus solely upon the cessation of self-harm may therefore be colluding with unrealistic expectations of the intervention or of the client in treatment (Kelly et al., 2008). This is particularly likely to be the case where self-harm is symptomatic of underlying trauma (Tantam and Huband, 2009). If cessation is an unrealistic treatment target then more personally relevant evaluations of treatment effect should be considered in efficacy research. These may include factors such as a perceived reduction in the severity of self-harm incidents, or an increased control over the behaviour. Service user satisfaction of interventions and perceptions of whether overall quality of life has been impacted upon by psychosocial treatments should also be considered in efficacy research (Kapur, 2005). These would also give insight into whether interventions adequately address the underlying social issues surrounding self-harm as highlighted by the RCP (ibid). To capture such personal experiences the authors advocate the use of narrative analysis (Roberts, 2002) or mixed methods in order to enhance the depth and validity of research evaluating self-harm interventions (Hanson, 2008).

The NICE guidelines also call for qualitative methods to be employed, most significantly for service user led research into the benefits and adverse consequences of services received. Service user led research is described as the democratization of research (Hickey & Kipping, 1998) through which power is redistributed to those who access the services in question. This equates to the research process, usually involving the investigation of services, being incepted and controlled by those who access the service in question. Such approaches are established within government policy (Smith & Bailey, 2010) and are reflected in the field of mental health research (Faulkner & Thomas, 2002). These approaches could also conceivably involve existing, active service user led organisations such as the National

Self-Harm Minimisation Group. To date however the recommendation for service user led research do not appear to have been fulfilled. Instead the focus upon service user's experiences has been the traditional investigation by academics or practitioners of healthcare provider's attitudes towards self-harm, and how these impacts upon primary care (Treloar & Lewis, 2008; McAllister *et al.*, 2002). The findings of which have merely confirmed the experiences that service users have been highlighting ten years prior to the NICE guidelines (Pembroke, 1994). The authors however posit that service user led research as recommended by the NICE will provide unique experiential insight (Beresford, 2000) in to what is beneficial and what is not, providing increased validation to support and go beyond statistical analysis of rates of self-harm.

Service user involvement (SUI) features in a number of fundamental recommendations in the NICE guidelines including involvement in the commissioning, planning and evaluation of services. This reflects the literature which documents service user's experiences of primary care as often substandard, as confirmed by the lived experiences of individuals who have self-harmed (Pembroke, 1994; LeFevre, 1996). Less well reported however are service user's experiences of secondary healthcare services, particularly those receiving out-patient treatment such as psychosocial therapies.

Given the number of interventions that have been reported to be 'promising' but have not been conclusive the authors wanted to explore whether service users had, to-date, been involved in the evaluation of psychosocial interventions for self-harm and, if so, in what ways. Therefore a systematic review was undertaken specifically with the aim of answering three questions identified by the authors:

- 1. What contributions have service users made to the evaluation of psychosocial interventions?
- 2. By what methods have service users been involved?

3. In what ways could service user involvement supplement empirical evidence for interventions?

It was not the aim to replicate the work of the previous Cochrane review (Hawton, 1999) by commenting upon experimental validity, sample power or the efficacy of the intervention.

#### Method

For the purpose of this review Morgan's (1979) definition of self-harm has been slightly adapted to "a non-fatal act, whether physical, drug over dosage or poisoning, done in the knowledge that it was potentially harmful" (p.88). The adaptation being the removal of the word deliberate due to the negative connotations with which it is often associated (see Pembroke, 1994). This definition was chosen to be inclusive of the range of behaviours including, but not limited to, self-laceration, drug overdose, head banging and ligaturing.

All research of therapeutic interventions necessarily 'involve' those who are receiving the intervention by virtue of their consent to participate in research. The definition of involvement for this review however derives from works such as those by Beresford (2000), Faulkner (2004) and Wallcraft & Nettle (2009) in that 'involvement' aims to empower service users as well as gather and validate their experiences of, in the case of this review, treatment.

Given the individual and cultural factors that may impact upon self-harm (Hjelmeland *et al.*, 2000, 2002) and the use of Morgan's (1979) definition of self-harm the following inclusion criteria laid out in figure 1 were used.

Figure 1 Criteria for Article Inclusion to Guide Selection of Studies

- a) Human Adults (18+)
- Sample from countries in which a 'western culture' is the dominant culture (i.e. European Countries and Countries marked by European immigration such as North America and Australasia)
- c) Post 1979 (consistent with Morgan's definition of self-harm)
- d) Self-harm (as defined by Morgan) is the primary focus of the article (i.e. the focus is not substance misuse or eating disorders)
- e) Self-harm was not a result of organic or developmental disorders
- f) Articles written in English
- g) Related to psychosocial interventions. (Given the possible positive impact of opportunities to discuss issues around self-harm (Read, 2007) the authors have defined 'interventions' as including psychosocial assessment and have not limited it to therapies)

Electronic searches were completed on the 28<sup>th</sup> January 2011 of the Medline (1950-present), Web of Science (1898-Present) and Psychinfo (1979-present) databases using the search terms in table 1.

**Table 1. Search Terms Used to Complete Database Searches** 

Primar	y Search-Terms	Secondary Search Term				
1.	Self-harm*	6.	Intervention*			
2.	Self-injur*	7.	Psychosocial			
3.	Deliberate self-harm	8.	Cognitive			
4.	Parasuicid*		Behavioural Therapy			
5.	Self-mutilation*		(CBT)			
		9.	Dialectical Behaviour			
			Therapy (DBT)			
		10.	Family Therapy			
		11.	Counselling			
		12.	Psychother*			
		13.	Art Therapy			

Primary search terms were initially run alone and then re-run to include each of the secondary search terms, for example 1, 1&6, 1&7, 1&8...1&13, 2, 2&6, 2&7 etc. This resulted in 45 searches being completed.

1440 references were returned and independently sifted in line with the inclusion criteria, discussed and re-sifted by two members of the study team. This was repeated three times until a final consensus of 65 papers were identified for inclusion in the review. The inclusion of papers had to be agreed by both members in order to ensure reasonable inter-rater reliability.

The 65 papers were then independently read by the two member of the research team with notes made in relation to the research questions identified above. Seven of the papers were systematic reviews and/or meta-analysis of interventions. Thematic reviews of qualitative findings were similarly checked and discussed to achieve inter-rater reliability.

# **Findings**

Table 2 summarises the number of each type of methodology used to investigate interventions in relation to self-harm and the reported significance of the treatment effects in each. A complete table of studies can be found in appendix A. As can be seen 42 (59%) studies are empirically based and of these only six (8%) used a mixed methodology to incorporate a qualitative element. Only those studies employing an A-B design, most commonly measuring incidents of self-harm pre and post treatment, used a mixed methodology. Four supplemented quantitative information with interviews and two reported case studies of intervention. 17 (24%) studies reported a significant treatment effect compared to 26 (37%) studies which reported non-significant treatment effects for the outcome measure of a reduction in self-harm.

Table 3 summarises the seven existing reviews of psych-social intervention. Three types of existing review were identified, meta-analysis, systematic literature review or systematic literature review incorporating meta-analysis. The most common conclusion of the meta-analyses was that sample sizes were too small to evidence treatment effects. Similar findings were reported in a number of individual studies from this review (e.g. Evans *et al.*, 2005; Hepp *et al.*, 2004)

**Table 2 Summary of the Systematic Review** 

Research methodology	No. of studies	No. reporting significant treatment effects <sup>4</sup>	No. reporting non-significant treatment effect <sup>5</sup>	No. reporting no treatment effect <sup>6</sup>	No. incorporating service user involvement or experience of treatment	Methods used to engage service users
RCT	19	5	11	3	0	N/A
A-B design	14	6	7	1	6	Interviews (4 studies) Case studies (2)
Mixed factorial design	9	3	4	2	0	N/A
Interview	6	0	1	2	N/A	N/A
Case study	5	N/A	4	0	N/A	N/A
Reviews of interventions	8 reviews	N/A	N/A	N/A	0	N/A
Other	4	0	3	1	1	Delphi Process (1) Staff based action research (1) Audit (2)

<sup>&</sup>lt;sup>4</sup> Significant treatment effects are reported statistically significant result in experimental designs and in one case study,

<sup>&</sup>lt;sup>5</sup> Non-significant treatment effects include research which the authors assert an effect of intervention despite not reaching the requirement of statistical probability. This category also includes empirical studies in which statistical probability is not reported and observed or self-reported change in qualitative designs.

<sup>&</sup>lt;sup>6</sup> Treatment effect was not always sought in qualitative reports, for example interviews about the functions of self-harm in the course of psychosocial intervention, therefore the figures reporting significant, non-significant or no treatment effects will not sum to the total number of papers included in the review.

Table 3 Summary of Existing Reviews of Psych-Social Intervention

Review conducted included  Arensman et al., (2001) Meta- analysis  Arumanayagam et al., (2004) Eliterature analysis  Comotois (2002) Literature Review & Meta- analysis  Evans (2007) Review & Meta- analysis  Evans (2002) Literature Review & Meta- analysis & RCT only Evidence is lacking to indicate effective treatment due to too few participants  Hawton et al., (1999) Analysis RCT only Further larger trials are required.  Hawton et al., (1998) Review Muehlenkamp Review information information Given the heterogeneity of the behaviour psychotherapy will be most effective when self-harm is understood from the	Review authors	Type of	No. of	Type of method	Key conclusions
Arensman et al., (2001)		Review	studies	included	from the review
Arumanayagam et al., (2004)   Comotois (2002)   Literature Review & Meta-analysis   RCT only   Meta-analysis   RCT only   Literature information will prove effective treatment due to too few participants   Full treature information will prove effective treatment due to too few participants   RCT only   Company		conducted	included		
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al., (2004)  review + Meta- analysis  Comotois (2002)  Literature Review  Review  Literature Review  Review  Meta- analysis  Evaperimental and quasi-experimental control trials control trials  Review  Revie	(2001)	analysis			participants
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analysis  Comotois (2002)  Literature Review  Crawford et al., (2007)  Evans (2002)  Literature Review Berimental control trials  Evaluation of outcomes and staff training is required.  Review Berimental control trials  Review Berimental and quasi-experimental training is required.  Review Berimental and quasi-experimental control trials  Review Berimental and quasi-experimental trianing is required.  Many trials had too few participants.  What a single intervention will prove effective for all.  A number of trials should be further investigated.  Hawton et al., (1999)  Hawton et al., (1999)  Review Berimental and quasi-experimental and poutcomes and staff training is required.  No information Few participants  Evaluation of outcomes and staff training is pourted.  Review Participants  Evaluation of outcomes and staff training is pourted.  Review Participants  Further larger trials are required.  Review Participants  Further larger trials are required.  No information Given the heterogeneity of the behaviour psychotherapy will be most effective when self-harm is understood from the	al., (2004)	review +	information	epidemiological	single RCT studies
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Comotois (2002)  Literature Review  Crawford et al., (2007)  Evaluation of Quasi-experimental and quasi-experimental control trials  Evaluation of Quasi-experimental control trials  Crawford et al., (2007)  Review & Meta-analysis  Evans (2002)  Literature Review information  Review  Re		analysis			
Comotois (2002)  Literature Review  Crawford et al., (2007)  Review  Literature Review & Meta-analysis  Evans (2002)  Literature Review  Meta-analysis  Evans (2002)  Literature Review  Meta-analysis  Evans (2002)  Literature Review  Information  Review  Meta-analysis  Evans (2002)  Literature Review  Information  Review  Meta-analysis  Evans (2002)  Literature Review  Information  Review  Review					Effect of psychiatric or
Comotois (2002)  Literature Review  Crawford et al., (2007)  Review & Meta- analysis  Evans (2002)  Literature Review  Evaluation of outcomes and staff training is required.  Review & Meta- analysis  Evans (2002)  Literature Review information  Review  R					community follow-up is
Review   quasi-experimental control trials   training is required.					poorly understood.
Crawford et al.,  (2007)  Review & Meta- analysis  Evans (2002)  Literature Review information  Hawton et al., (1999)  Hawton et al., (1998)  Review  Meta- analysis  Evans (2007)  Review  Re	Comotois (2002)	Literature	5	Experimental and	Evaluation of
Crawford et al.,  (2007)  Review & Meta- analysis  Evans (2002)  Literature Review  Review  Information  Review  Revie		Review		quasi-experimental	outcomes and staff
(2007) Review & Meta- analysis  Evans (2002) Literature Review Review Information Review Revi				control trials	training is required.
Evans (2002)  Literature Review Information  Meta- Review Information  No information  No information  Unlikely that a single intervention will prove effective for all. A number of trials should be further investigated.  Hawton et al., (1999)  Analysis  RCT only  Evidence is lacking to indicate effective treatment due to too few participants  Hawton et al., (1998)  RCT only  Further larger trials are required.  Klonsky &  Literature Muehlenkamp (2007)  Review  No  No information  Given the heterogeneity of the behaviour psychotherapy will be most effective when self-harm is understood from the	Crawford et al.,	Literature	18	RCT only	Many trials had too
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Evans (2002)  Literature Review  Review  Information  No information  No information  Unlikely that a single intervention will prove effective for all.  A number of trials should be further investigated.  Evidence is lacking to indicate effective treatment due to too few participants  Hawton et al., (1999)  Hawton et al., (1998)  RCT only  Further larger trials are required.  Klonsky & Literature No No information  Review  No information  Given the heterogeneity of the behaviour psychotherapy will be most effective when self-harm is understood from the		Meta-			
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psychotherapy will be most effective when self-harm is understood from the	Muehlenkamp	Review	information		heterogeneity of the
most effective when self-harm is understood from the	(2007)				behaviour
self-harm is understood from the					psychotherapy will be
understood from the					most effective when
					self-harm is
					understood from the
client's perspective.					client's perspective.

		The key to effective
		treatment is the
		empathic relationship
		between therapist and
		client.

No RCT studies incorporated service user experience of intervention in their analysis. Four RCT studies reported a treatment effect of cognitive behavioural based interventions (including DBT) but concluded they were unable to determine the cause of the effect (Linehan, 1991; Slee *et al.*, 2008; Spinhoven *et al.*, 2009; Weinberg *et al.*, 2006).

Treatment compliance was also a factor that reportedly impacted upon measurement of treatment effect (Congdon & Clark, 2005). For example only 70 (17%) of 417 participants made use of the crisis card intervention (Evans *et al.*, 2005) whilst attrition rates in one manualised cognitive therapy was reportedly 40% (Tyrer *et al.*, 2004).

The five case studies all reported service user progress in relation to self-harm during and post intervention. All five reported positive change. Non-coercive, non-judgemental and empowering relationships were reported by services users to be instrumental in effecting change. Whether these be with individual therapists (Brown & Bryant, 2007; Levy, Yeomans & Diamond, 2007; Malon & Beradi, 1987) or through group peer support (Concoran *et al.*, 2007; Katz & Levendusky, 1990). The importance of client-therapist relationships were also echoed by qualitative studies examining the reasons for desistance of self-harm in those who had already done so (Kool, van Meijel & Bosman, 2009; Shaw, 2006; Zich, 1984) and in mixed methodological designs of intervention efficacy (Cremin *et al.*, 1995; Low *et al.*, 2001)

Methodologies included in the 'other' category in Table 2 included an action research approach for the development of psycho-social assessment of self-harm (McElroy & Sheppard, 1999) a Delphi process with service users and healthcare professionals in the development of guidelines relating to self-harm (Kelly, *et al.*, 2008) and two audit processes of pathways of care both of which

highlight a need for adequate psycho-social assessment in primary care to improve outcomes for service users (Kapur *et al.*, 2008; Kriplani *et al.*, 2010).

### **Discussion**

The purpose of this systematic literature review was not to identify or recommend interventions for self-harm, nor critique the methodology or findings of previous research. This has previously been done (Hawton et al., 1999; Arensman et al., 2001; Crawford et al., 2007) and recommendations made. The review rather stemmed from such meta-analyses which consistently fail to definitively report effective interventions, usually due to insufficient sample sizes (Hawton et al., 1999) or due to participants in trials not being 'homogenous' enough (Arensman et al., 2001). Small participant populations are surprising given the large numbers of patients who present to healthcare providers following an episode of self-harm (Brier & Gill, 2003) however may reflect a population that is difficult to engage in scientific research, possibly as a result of the stigma that service users often feel following self-harm (Balsam et al., 2005). This suggests that, perhaps, randomised clinical control trials are not the most effective way of evaluating psychosocial interventions for self-harm. With regards of the confounding variable of heterogeneity surely diversity in people who self-harm needs to be accounted for in interventions if they are to prove effective? As such the purpose of this review was to consider the extent of the use of other methods for evaluation and in particular to what extent have the experiences of service users been incorporated into evaluation studies. We shall consider this in the framework of the three questions posed earlier.

# 1. What contributions have service users made to the evaluation of psychosocial interventions?

The literature search reveals that the majority (69%) of studies (n=61) used an experimental or quasi-experimental design, with just six of these employing mixed methodologies. 11 sought to engage service users through qualitative methods including interviews and case studies involving participant checking.

All studies using an empirical design used repetition of self-harm as an outcome measure. This outcome measure however may represent an artifact of the experimental process given that service users do not consider cessation of self-harm to be a useful treatment target (Kelly *et al.*, 2008). Previous literature has suggested that repetition (or more commonly representation at primary care services) should just be one measure amongst others that consider holistically how intervention may impact upon other aspects of the service users quality of life (Kapur, 2005). The expectation of total abstinence from self-harm negates the importance of the behaviour as a coping or survival strategy for those who use it (Cresswell, 2005; Pembroke, 1994). These outcome measures are also at odds with those for service users who demonstrate other high risk behaviours such as substance misuse in which, although cessation may ultimately be the desired outcome, safer behaviours such as using sterilised equipment or methadone programmes are also widely accepted as indicators of treatment efficacy (McDermott, 1997).

Where service user's narratives have been included either through qualitative or mixed methodologies it is rarely the intervention per se that features as important for the individual. With the exception of Eccelston and Sorrbello (2002) who reported that those taking part in the adapted version of DBT stated the intervention improved emotional management and relieved symptoms of depression and anxiety. More commonly however treatment effects were attributed to the relationship the service user had with the service provider (Kool, van Meijel & Bosman, 2009; Cremin *et al.*, 1995; Brown & Bryant, 2007). Collaborative and non-coercive relationships were reported to be most beneficial (Shaw, 2006) as were ones that validated the service users experiences (Low *et al.*, 2001). This is not a new finding with Nelson and Grunebaum (1971) reporting an 'equal' patient-doctor relationship as being the most important aspect in the treatment of self-harm. This finding however that appears to have been lost or overlooked in the majority of efficacy studies.

# 2. By what methods have service users been involved?

The review provides evidence that the involvement of service users is far from common practice in the research literature. This is despite the NICE guidelines recommending

"User-led, qualitative research into the experience and views of people who self-harm... examining the benefits and adverse consequences of the services they receive and the treatments they have undertaken" (p.179)

Where service user's experiences of interventions have been explored, either through qualitative or mixed methodologies, this is commonly in the form of case studies (e.g. Congdon & Clarke, 2005; Wallenstein & Nock, 2007). Interview and semi-structured interviews were also commonly used (e.g. Klonsky & Glenn, 2008). No accounts of service user consultation or involvement let alone user led research in the design or conducting of research was found from the searches. One study (McElroy & Sheppard, 1999) reported the use of an action research project to develop policy in the assessment and management of self-harm in an Accident and Emergency department. However the involvement did not extend to include service users despite the different perspectives this would have contributed (Maddock *et al.,* 2004) and the emphasis on service user involvement being a significant feature of mental health policy since the National Service Framework was introduced in 1999 (Bailey, 2011).

# 3. In what ways could service user involvement supplement empirical evidence for interventions?

From the results of this review the authors suggest that empirical research into the efficacy of psychosocial interventions for self-harm would benefit from more systematic involvement of service users in a number of ways.

Firstly a number of studies report a treatment effect but are unable to determine which particular aspects of the intervention are most useful

(Linehan, 1991; Slee *et al.*, 2008; Spinhoven *et al.*, 2009; Weinberg *et al.*, 2006). Given the expertise and unique perspective of those with lived experience (Beresford, 2000; Maddock *et al.*, 2004) involving service users to answer the question of what is and what is not useful about intervention is likely to be enlightening. Lamprech *et al.*, (2007) in their study of solution focussed behavioural therapy for self-harm concluded that the approach has shifted the philosophy of therapies for self-harm towards *"the patient as expert on themselves"*. This was despite not involving service users in their research. In addition to interviews data collection methods could include therapy diaries in which service users could reflect on aspects of the therapy. This method is commonly used in cognitive-behaviour based interventions for substance misuse (McMurran, 2007). Such techniques could be equally useful in research which does not recruit sufficient participants to reach statistical power despite showing some treatment effect (e.g. Evans *et al.*, 2005; Hepp *et al.*, 2004).

Secondly, a number of studies suffered from high attrition rates or poor treatment compliance (e.g. Evans *et al.*, 1999; Crawford & Wessely, 2000; Tyer *et al.*, 2003, 2004). All three of these studies related to therapies delivered at a distance, for example the use of telephone help lines, provision of a 'green card' allowing access to services or self administered manualised cognitive behavioural therapies. Given the reports of the importance of therapeutic relationships to clients previously discussed it could be postulated that high attrition may be a result of the lack of relationship building these approaches take. Again the involvement of service users who receive such interventions could uncover any reasons for treatment non-completion. In one instance (Beautrais *et al.*, 2010) postcard intervention trials had to be stopped due to staff reluctance to employ the technique, despite some effect for self-poisoning being found. Qualitative enquiry to uncover the reasons for staff reluctance as well as client's experiences would be useful in such instances.

The authors recognise that the recommendations made for increased service user involvement make a number of assumptions. One assumption is that service users are able to fully understand and articulate reasons for their self-harming behaviour. Given that emotional inexpressivity is associated with

more frequent self-harm (Gratz, 2006) it may be expected that those accessing services be less able to articulate how intervention impacts upon their self-harming behaviour or complete tools such as diaries. The authors would argue however that this is simply an issue of ensuring data collection methods are responsive to the needs of the service user to guarantee differing styles of communication are catered for (Ward & Bailey in press). It is also worth noting that those studies which utilised interviews or participant checking did not report any difficulties in the use of these methods.

Another assumption is that service users would engage in research which actively seeks to involve them. Feelings of stigma or shame (Balsam *et al.*, 2005) or attitudes to self-harm encountered during care (Kenning *et al.*, 2010; Pembroke, 1994) may act as barriers to engagement. Again this was not reported in the studies that employed data collections techniques such as interviews. Nor is this the finding of participatory action research projects which have sought to engage and empower service users (Ward & Bailey, 2011)

The findings of the literature review do not account for all the ways in which service users can be involved in the services which they access. Studies were not included which described or evaluated the development of staff training packages with the involvement of service users (e.g. Rea *et al.*, 1997). The authors acknowledge that service user consultation is often a feature of service development however the results of the current review indicate that this could be further expanded to the evaluation of interventions for self-harm.

To summaries the recommendations the authors endorse for future research include:

- The involvement of service users in the design and implementation of research to ensure outcome measures are meaningful and representative of personal treatment goals.
- The use of mixed methodologies to explore service user's experiences
  of psychosocial interventions and what they find helpful and unhelpful.

This may be particularly useful in the development of interventions which seek to address the 'underlying social issues' that surround self-harm (RCP, 2010).

- Further exploration of the way in which professional relationships can be fostered through interventions which show promise such as CBT and DBT and also distance interventions such as postcard therapy.
- The use of participatory action research approaches in the development of services and particularly secondary mental health interventions. It is anticipated that such an approach would promote a sense of ownership and possible improve service uptake (Foster et al., 2005)

### **Conclusion**

Definitively effective psycho-social interventions for self-harm remain elusive. This however may be an artifact of the consistent failure to actively involve service users in efficacy research. The use of repetition of self-harm as an outcome measure is considered an invalid measurement of success by those who self-harm. Interventions that do report some degree of treatment effect suffer from lack of statistical power and an inability to pin point the effective aspects of treatment whilst others suffer from high attrition rates. The involvement and collection of user narratives would however provide depth of validity to empirical research and provide insight in to what is helpful in the management of self-harm or provide reasons for high drop out rates. Developing the concept of involvement further to empower service users to lead research and subsequent service design will promote ownership and uptake of services and may positively impact upon treatment efficacy.

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# Appendix A

	Author s	Year	Journal	Gender of participa nt	Samp le Size	Representativene ss? (comments)	Methods used to investigat e interventi on (RCT, Qual, etc)	Outcome measure	Limitations identified by authors	Comments (how has PAR methods differed from positivistic approaches? Might PAR address some of the limitations of the study?)
1.	Aoun	1999	Australia n and New Zealand Journal of Mental Health Nursing	Male 38% Female 62%	208	Age of patients ranged from 12-66 years.	Non- randomize d interventio n trial	The number of reattempts of self harm or suicide		High intervention significantly reduces hospitalization. 15-24 age groups had highest proportion of risk of self harm, with attempts and risk steadily declining with age. Employed a suicide prevention counselor to provide intensive outreach and professional and community based education for intervention strategies.
2.	Arens man et al	2001	Suicide and Life Threaten ing Behavior	N/A	31 report s in total	RCTs (25) Nonrandomized clinical trials (6)	Systemati c review of the effectivene ss of RCT treatments .  Effectiven ess and quality of the RCT was assessed.	Treatment for DSH that have been used over the past 30 years that have used RCTs. Repetition of DSH	N/A	Limitations of past RCTs included too few participants to detect clinically important differences in rates of repeated self-harm.  Future trials should include calculations to determine the number of subjects necessary to detect clinical effects; provide information on methods of randomization and interventions; use standard measures of outcome; focus on homogeneous subgroups of patents.

3.	Arnevi k et al	2009	Europea n Psychiat ry	Not stated	114	Only patients with PDs were included in the study. Exclusion criteria were schizotypal PD, antisocial PD, ongoing alcohol or drug dependence, psychotic disorders, bipolar I disorder, untreated ADHD (adult type), pervasive developmental disorder (e.g., Asperger's syndrome), organic syndromes, and being homeless.  60 patients in Day Hospital Psychotherapy and 54 in Outpatient Individual	RCT	attrition rate, suicide attempts, suicidal thoughts, self-injury, psychosocial functioning, symptom distress, and interpersonal and personality problems.	Changes over time may be due to natural recovery process, not treatment.  No treatment group, so change may not be attributed to treatment.  Staff were not allowed to be as 'confrontational' as in a usual session to avoid drop out.	
4.	Aruma nayaga m et al	2004	Australia n and New Zealand Journal of Psychiat ry	N/A	N/A	Psychotherapy.  Literature review on treatment for deliberate self harm.	Literature review + meta analysis			Evidence for the effectiveness of psychological treatments is based on single RCTs without replication.
5.	Atha et al	1992	Journal of Psychos omatic Researc h	Male (16) Female (16)	32	Patients showing characteristic related to psychopathy and repeated attendance at a	RCT Randomly allocated to either TREATME	Reduction in hospital attendances through identifying and solving	The patents were not a specific group.	

						medical emergency facility	NT AS USUAL or PSYCHOL OGICAL TREATME NT	patient problems.		
6.	Beautr ais et al	2010	The British Journal of Psychiat ry	Male & Female	700 (350 contro I group, 350 interv ention )	Individuals who were 16 or older and were presented to psychiatry emergency services following self-harm or attempted suicide.	RCT  To examine whether a postcard interventio n reduces self-harm representa tions in individuals presenting to the emergenc y departmen ts	The proportion of participants representing with self harm and the number of representation s for self-harm in the months following the initial presentation.	The trial was stopped early after 8 months due to the reluctance of staff to recruit individuals to the trial.  Despite strong randomization, the distribution of prior self-harm visitations to the hospital appeared to be skewed. This meant that a group of participants with very high history of self-harm were clustered in one experimental group – affecting overall rates.	Postcard intervention did not significantly reduce self-harm.  Postcard intervention is more effective following self-poisoning.
7.	Benne with et al	2002	British Medical Journal	Male and Female	1932	patients registered with the study practices who had attended accident and emergency departments at one of the four hospitals after an episode of deliberate self harm.	Cluster RCT	Primary outcome was occurrence of a repeat episode of deliberate self harm in the 12 months after the index episode. Secondary	did not reduce the incidence of repeat self harm.  a short delay occurred between the index episode and the general practitioner receiving the letter and	The intervention had no significant effect on patterns of repetition of deliberate self harm. If anything, the risk of repetition was slightly higher in the intervention group than in the control group.  This delay may be critical when we consider the increased risk of repeat episodes in the weeks immediately after the index event; in one study more than 10% of patients who deliberately harmed themselves again did so within one week of the index episode

8.								outcomes were number of repeat episodes and time to first repeat.	guidelines.	
6.	Bergen	2010	Journal of affective disorder s	Male 41.8% Female 58.2%	13,96 6	Took data from the three centres currently involved in the Multicentre Study on Self-harm for the years 2000 to 20073208 in Oxford 3724 in Derby 7034 in Manchester  The median age was 30	Pre and post treatment assessme nt	Repetition of self harm	There was some missing data on psychiatric treatment for non-assessed patients  A lack of diagnostic information on persons.	Psychosocial assessment appeared to be beneficial in reducing the risk of repetition, particularly in the short term.  Highlighted the importance of choosing appropriate methodology in the survival analysis of repeated self-harm
9.	Bohus	2004	Behavior research and therapy	Female	50	Chronically suicidal patients meeting criteria for BPD	Pre and post treatment compariso n of DBT	Reductions in psychopatho logical variables including self mutilation.	Individuals who did not complete treatment were excluded from the analyses  It did not include random assignment to DBT vs. waiting list. Thus, selection bias is a threat.	The results suggest that 3 months of inpatient DBT treatment is significantly superior to non-specific outpatient treatment.

10.										
	Brown & Bryan	2007	Journal of Clinical Psycholo gy	Female	1 (case study)	32 years old Euro American Poverty stricken Physical abuse from mother Sexual abuse from father Sexually exploited and trafficked from a young age Foster care Prostitution in late teens Experience sexual harassment in work Triggered post traumatic symptoms	Feminist psychothe rapy approache s to self harming Longitudin al (10 years)	Taking independent control of her life and controlling the self harm.		Feminist theory/ approach
11.	Byford & Knapp	2003	Psycholo gical Medicine	Male & Female	397	All had a history of reoccurring deliberate self harm	RCT	No. of patients having a repeat episode of deliberate self harm and their quality of life	Quality of life results were not conclusive.	Although the results presented here are not entirely conclusive, exploration of the uncertainty surrounding the relative costs and effects suggests that there is at least a 90% probability that MACT is a more cost-effective strategy for reducing the recurrence of deliberate self-harm in this population over 12 months than treatment as usual, and the relative brevity of the treatment, its use of existing therapists, and the easy applicability of the intervention in a service context, make a strong case for its selection.
12.	Carter et al	2010	Australia n & New Zealand Journal of	Female	73	All met criteria for BPD	RCT	Outcomes measured after 6 months.	Too short comparison duration time – other studies suggest 12–18	Primary outcomes:

			Psychiat ry					Both primary and secondary outcome measures  *See comment box	months	Secondary outcomes:  Disability and quality of life measures
13.	Chiesa & Fonag y	2007	Psychot herapy and Psychos omatics	Male 25% Female 75%	137	Inclusion criteria: (Aged between 19- 55 years; IQ>80; Presence of at least on PD)  Exclusion criteria: (Diagnosed schizophrenics; psychoactive substance addiction; evidence of an organic brain disorder).	Predictor analysis  Structured interview based on the Suicide and Self Harm inventory was applied to obtain details of self harm episodes, number and length of psychiatric inpatient episodes and of psychiatric outpatient attendanc e.	Outcome was assessed in the three main areas of functioning (severity of symptom presentation; social adjustment; global assessment of functioning).	None specified	Significant predictors of medium term outcome in a cluster B PD sample after 24 months follow up:      Younger Age     Higher Global assessment Scale intake scores     Longer length of treatment     Absence of self mutilation     Avoidant PDs  Self harming patients allocated to the 'step down' program had higher rates of improvement compared with patients allocated to the LT inpatient model.
14.	Comtoi s	2002	Psychiat ric	N/A	N/A	Peer-reviewed journals were	Systemati c review	Treatments demonstrate	Few efficacy trials are conducted.	The author suggests eight practical steps, based on the literature and established health services strategies, for

			Services			searched by using MEDLINE and PsycINFO from 1970 to 2001. Only experimental and quasi- experimental controlled trials of treatment for Para suicidal individuals were selected for review. Presentation of the results focuses on health services planning issues to reduce the prevalence of parasuicide		d in randomized trials to reduce repetition of parasuicide		improving services to parasuicidal individuals. These steps are establishing case registries, evaluating the quality of care for parasuicidal persons, evaluating training in empirically supported treatments for parasuicide, ensuring fidelity to treatment models, evaluating treatment outcomes, identifying local programs for evaluation, providing infrastructural supports to treating clinicians, and implementing quality improvement projects.
15.	Congd on & Clark	2005	Public Health	Male & Female	467	all patients had access to routine care while patients in the intervention group were offered an additional treatment package comprising a psychosocial assessment, a negotiated care plan and direct access to a case manager.	RCT	The main outcome measure was binary, re-attendance or not at an accident and emergency (A&E) department within 12 months of the index event.	One problem with the study was the low re-attendance rate (averaging 10%). This, together with the fact that some of those assigned to treatment refused it, reduced the power of the trial to detect a significant effect.	
16.	Corcor an et al	2007	Journal of Commun ity & Applied Social Psycholo	Female	7	Recruited from existing self-injury groups Aged between 21- 44 years (M=36)	Semi- structured interviews to investigate the role of self-injury		Small sample size and were similar cases. This resulted in a lack of information to challenge or enrich theories.	Recommendations include an instant referral to a female-support groups may empower the women, as they were generally valued by the female service users.  Sharing self-injury stories with those who may 'understand' may reduce the associated effects that it has on women, such as secrecy, isolation, shame, guilt and possibly the

			gy			All had current contact with professional services regarding self-injury and/or associated difficulties.	support groups in women's managem ent of self- injury			perceived need to self-injure.
17.	Crawfo rd et al	2007	British Journal of Psychiat ry	N/A	3918 (18 studie s)	Studies were eligible for inclusion in the review if they were randomized controlled trials; involved patients who had harmed themselves in the period prior to entry into the trial; and compared additional or enthe trial; and compared additional or enhanced intervention with a form of control or standard care.	Systemati c review and Meta analysis of RCT interventio ns	Psychosocia I treatment interventions had an impact on the likelihood of suicide		Individual randomized trials of psychosocial treatments have demonstrated statistically statistically significant reductions in the significant reductions in the likelihood of repetition of non-fatal self harm, but such findings do not necessarily mean that these treatments would reduce the likelihood of subsequent suicide.
18.	Cremin et al	1995	Journal of Psychiat ric and Mental Health Nursing	Not stated	4	All persistent users of typical in-patient psychiatric care, with a history of repeated self-harm.  Diagnosed with Personality disorders	Quantitativ e  Repeated measures  4 case studies  Data collection	Reduction in self harm and challenging behaviors towards staff.  Ego competency Scale	Took a lot of staff energy.  Time consuming.  3 week data collection period was too short to have any impact, and only offered a snapshot.	Patients with sever personality disorder who self harm pose a major challenge to staff and successful treatment.  Identification of the challenges and risks that the patient posed through a 'pre-admission assessment interview' prepared the staff for future incidents with this patient, resulting in improved staff responses and a reduction in self harm.  There were no sudden changes or reduction in self harm following the 3 week period.

							enabled measures of key IV's proposed to reduce self harm.  Psychody namic perspectiv e to treatment.	(suicide intent; self- harm lethality; hopelessnes s and depression).		Patient's satisfaction with life was a result due to the nurses carrying effective responsibility and showing anxiety for the patient.
19.	Evans et al	1999	Psycholo gical Medicine	Male & Female	34	Aged between 16-50 Had suffered an episode of deliberate self-harm All had personality disturbances Exclusion criteria included alcohol and drug dependence and those diagnosed with schizophrenia.	RCT  Patients were allocated to either the experimen tal group, the manual assisted cognitive behavior therapy group (MACT) or the treatment as usual group (TAU).  Pre and post treatment effectivene ss	The amount of time to the next Para suicidal act.  Rates of acts per month, depressive and anxiety symptoms, social functions and cost of care were secondary outcome measures.	Small sample size	The treatment had a modest effect  Intervention may be effective in reducing the number and frequency of self-harm episodes with simultaneous reduction in depressive symptoms.  The efficacy of the treatment is probably best measured by the rate of suicidal acts, rather than the amount time to prepare to repeat.

20.	Evans et al	1999	British Journal of Psychiat ry	Male & Female	827	Those recruited represent 64% of the total number of patients admitted to the hospital wards, but only this amount fitted the inclusion criteria.	RCT To investigate the effect on offering emergenc y telephone support in a group of hospital admitted DSH patients.	DSH repetition within 6 months	Health service information was used to define repetition of DSH, this will underestimate repetition on 3 accounts.*  The green card did not offer overnight admission to a psychiatric hospital which may have reduced its potential efficacy.	* Repetition will be underestimated due to some patients admitted to other hospitals than the three identified for this study; services may not identify repeat acts and finally self-laceration is hard to identify.  Green card and crisis telephone intervention did not result in a reduction of DSH
21.	Evans et al	2005	British Journal of Psychiat ry	No info	827 417 Exp grp 410 TAU ctrl		RCT TAU Vs TAU + Crisis card	12 mth repition of SH	Sample not large enough to exclude a clinically important effect in those with 1 <sup>st</sup> time presentation.  Question about whether telephone contact evokes rejection	** "Many trials have been too small to identify clinically important effects" (p.186)  Those found to use the card were assessed as at greater risk. Did the cards therefore prevent suicide or more serious SH, although didn't stop it all together?  Case studies or qualitative enquiry would answer the question above and the one about rejection.
22.	Glenno n et al	2008	Internati onal Journal of Mental	Male & Female		Individuals who present at emergency departments who have DSH	Quantitativ e	Mood assessment over three sessions and followed	•	Mental health services can offer a clinical pathway for DSH at emergency departments.  Self harm reduction and service user satisfaction with mental health services

			Health Nursing					up after three and six months.		Main focuses of the intervention included review progress in problem areas, develop interventions, plans for future treatment and care plan in collaboration with the patient and their GP.
23.	Gratz et al	2006	Behavior Therapy	Female	22	Inclusion criteria: Meeting five or more criteria for BPD History of DSH Has an individual therapist Between 18-60 years	RCT  Randomly assigned to either group treatment plus treatment as usual (TAU) or TAU waitlist condition.	The use of DSH Difficulties in emotional regulation Rate of avoidance undesirable feelings BPD Depression and anxiety (all scales)	Requires replication in a larger scale RCT	Group intervention had positive effects on self harm and emotional dysregulation, BPD symptoms, depression, anxiety and stress.
24.	Gratz et al	2006	Behavior Therapy	Female	22	Independent Measures Randomly assigned to group intervention plus treatment condition, or the condition of treatment alone.				
25.	Gratz et all	2007	Journal of Clinical Psycholo gy: In Session	N/A	N/A	Individuals who engage in self- injury and DSH	Reduction of self- injury through emotional regulation		Debates over emotional regulation and emotional temperament.	Case illustration of two treatments  Treating self-injury through regulation of emotions

26.	Gunnel et al	2004	Journal of Public Health	Male & Female	31 hospit als 4033 episod es of self- harm	Number of episode of self harm presented to accident and emergency at the identified sites.  Male (45.2%) Female (54.8%)  Male age range (18-95)  Female age range (18-90)	Meta analysis	Patterns of self harm in presentation to emergency services	Data was collected on forms will little room for text to be received. This meant that detailed information and demographic on each individual and their circumstances could not be collated.	Peak times for self-harm are outside the normal working hours, peaking between 8pm and 1am.  Self-harm episodes occurred on an average of 2.3 episodes per day
27.	Guthrie et al	2001	British Medical Journal	Male & Female	119	Adults who had deliberately self-poisoned and presented to the emergency department of a teaching hospital.  Inclusion criteria included able to read and write English, living within the catchment area of the hospital, have a registered GP and not need inpatient	RCT	Severity of treatment 6 months after treatment  Six month follow up including depressive symptoms, patient's satisfaction with treatment and self-reported attempts at self-harm.	Inclusion criteria meant that individuals who were at a higher risk of suicidal behavior in the future were excluded	Inpatients who poisoned themselves or have suicidal ideation and self reported self harm was reduced after psychological interventions.

						psychiatric treatment.				
28.	Guthrie et al	2003	Australia n and New Zealand Journal of Psychiat ry	Male & Female	119	Patients presenting at accident and emergency with deliberate self- poisoning	RCT Assigned to psychodyn amic- interperso nal therapy or usual care	Reduction in severity of suicidal ideation, anxiety and prior history of self harm		Four sessions of psychodynamic-interpersonal therapy for deliberate self-poisoning is effective in reducing suicidal ideation in less severe cases with no previous history of self-harm.  Repetition of self-harm is the main predictor variable.  Age and gender was not a predictor variable
29.	Hawto n et al	1998	British Medical Journal	Male & Female	2452	Patients who had deliberately self-harmed themselves shortly before entry into the trials with information on repetitive behavior	Systemati c review of RCT	Repetition of self-harm	Results show considerable uncertainty as to whether physical or psychosocial treatments are most effective for DSH	
30.	Hawto n et al	2000	Cochran e Databas e System review	Male & Female		Prior to the study had engaged in any form of deliberate self harm or self poisonous behavior	RCT Meta analysis	The efficacy of treatment interventions for DSH and the rate of repeated self-harm within a year follow up period.	Some methods of DSH were not specified in the studies	Insufficient evidence to make firm recommendations about the most effective form of treatment for patients who DSH.
31.	Hawto n	2000	Europea n Psychiat ry				Systemati c review of literature	Prevention of suicidal behavior in DSH patients	Insufficient numbers of subjects in the trials limit the conclusions	Promising results for problem-solving therapy

32.	Hepp et al	2004	Crisis	Male & Female	25 studie s	Inclusion criteria:  If they had recently attempted suicide, DSH or selfpoisoning	An overview of treatment studies  RCT  Assigned to a psychologi cal or psychosoc ial approach	Recurrence of attempted suicide, suicide, DSH or self- poisoning	Too small sample  — leads to type II error and the assumption that there is no effect when there may be in a larger sample size	Although not statistically significant, a reduction in DSH was found and can offer insight in future strategies for preventing repeated DSH
33.	Hoch et al	2006	Psychiat ric Services	Male (2) Female (25)	27	Diagnosed with BPD		Incidents of self-harm Hours of seclusion Restraint Number of nursing observations Number of hospital admissions Inpatient length of stay	Small sample  Retrospective design  Lack of randomization	Relationship management therapy reduced the frequency of restraints and seclusion.  Suggestion of a reduction in suicidal behavior
34.	Kapur et al	2008	J. of Affective Disorder s	Female (4186)  Male (3148)	7334	Multi-site A&E admissions	Audit of psychosoc ial assessme nt after SH	Repetition of SH	Variability of assessment – how and when its carried out	Conclude that psychosocial assessments may be protective against SH but this is far from definite. — PAR to ask about experience of assessment and whether there is any effect.  Given the importance of listening and empathy is this the effect?

35.	Kapur	2005	British Journal of Psychiat ry	N/A	N/A	N/A	N/A	N/A	N/A	Review of policy and research literature.  Recommends repetition of repeat presentation shouldn't be the only outcome measure but also quality of life and user satisfaction.  Also recommends alternative methods of investigation such as qualitative and cohort studies.
36.	Katz & Levend usky	1990	Bulletin of the Menning er Clinic	Female	3	All diagnosed BPD  All in patient at single site	Case studies	None	None	"patient as collaborator whilst treater uses expertise to help the patient who is at that point" – highlights the need for a collaborative approach.
37.	Kelly et al.	2008	BMC Psychiat ry	N/A	N/A	N/A	Delphi process	N/A	The difference between professional accepted statements and service user accepted statements	SUs priorities were around rights to choose and receiving empathic understanding.  Professional priorities were around emergency care and risk assessment.  Disagreement between SUs around the carrying of 1st aid kits and whether interventions can, over time, remove the need to SH.  *SUs all agreed that stopping SH is not and should not be a treatment target.
38.	Klonsk y & Muehle nkamp	2007	J. Clinical Psycholo gy: In Session	N/A	N/A	N/A	N/A	N/A	N/A	The paper is a literature review aimed at being practically applied by practitioners. There is no discussion around SUI or effects of poor service delivery. There is also no mention of NICE clinical guidelines.
39.	Klonsk y & Glenn	2008	Behavio ural & Cognitiv e Psycholo gy	Female (30) Male (9)	39	College students screened for NS DSH. All SH by cutting, although did report other methods	Structured interview	N/A Exploring usefulness of strategies to resist urge to SH	1. College students  2. No access to psychopathology  3. Valid & reliable psychometrics nor used  4. Use of diary rather than	Wouldn't need to validate tools if just explored coping strategies in a less structured way. PAR to draw up the original list.  Explore why most useful strategies aren't the most commonly used.

									retrospective reporting	
40.	Kool, van Meijel & Bosma n	2009	Archives of psychiatr ic nursing	Female	12	Single site intensive psychiatric treatment centre.  All participants have a long history of SH.  Based in Holland	Qual SSI and timeline of SH	Understandi ng of the process of stopping SH	Small, select group of pp's all able to describe the recovery process	'Member checking' was used to validate facts and interpretation of interviews.  Patient feeling connected to treatment providers was a key factor in cessation of SH. If clinicians are doing the research, as is often the case, could PAR aid in the connection with another person who has similar experience and thus provide a positive effect from the research process.  PAR increasing validation of identity and so possible positive impact upon self-esteem.
41.	Kriplan i, Nag, Nag, & Gash	2010	Emergen cy Medicine Journal	Female (121) Male (107)	221	All presenting at A&E following episode of SH	Report on quantitativ e info	A&E waiting time	None	Claims excellent patient and staff feedback – none of this reported though.  PAR to explore experience of treatment, especially given previous concerns raised at A&E (Pembroke, 1994)  Asserts admission allows for 'time out' – is this the experience of SUs?
42.	Lampr echt et al.	2007	J. Psychiat ric and MH nursing	Female (15) Male (17)	32	No info – See Wiseman 2003	SFBT vs TAU	Repetition of SH after 1 year	Can't draw conclusion from pilot study	Suggests SFBT has shifted philosophy towards 'the patient as expert on themselves'. If this is the case then why not ask if it was useful?
43.	Levy, Yeoma ns, & Diamo nd	2007	J. Clin. Psycholo gy	Female	1 single case study	BPD	Case study	Case study of TFP	None	No account of service users experience of therapy?

44.	Lineha n et al	1991	Archives of General Psychiat ry	Female	22 in DBT 22 in Ctrl	All diagnosed BPD	RCT DBT vs TAU	Parasuicide  Therapy maintenance  Inpatient admission	Unable to determine what causes the treatment effect  Unclear why the low attrition	Ask why?  19 (almost 1/3 of original referrals) potential participants dropped out before intervention began – why?
45.	Low et al	2001	Clinical Psycholo gy and Psychot herapy	Female	15	BPD in Rampton	A-B design Individual case studies presented	Numerous including repetition of SH	None	Ms A – Therapeutic relationship and validation of her experiences were important in treatment.  Ms L – masked her feelings behind a smile when presenting for first aid following SH, this resulted in staff viewing her behaviour as manipulative and attention seeking. Introducing opportunities to talk to staff about how she was really feeling addressed this issue.  All three case studies presented show what aspects of intervention were useful for the individual. It is unclear what input the patient had in each of these formulations and agreement 'member checking' would add validity.
46.	Malon & Beradi	1987	America n J. of Psychot herapy	Female	3	Case vignettes			None	**Nelson & Grunebaum (1971) reported equal patient-doctor relationship as being the most important aspect of treatment. This doesn't seem to have been reflected in studies after this date.  Hypnotic techniques used were individual to the client.
47.	Marriot t et al	2003	Internati onal J. of Geriatric Psychiat ry	Female (84) Male (57)	141	All over 55 presenting to A&E in Leeds over a 12 month period.	Audit of A&E records	Whether psychosocial assessment was given Whether	None	?

								person was admitted		
48.	McElro y & Shepp ard	1999	J. of Clinical Nursing	All medical staff, gender not disclosed	22	N/A	Action Research Structured interviews and vignettes	Attitudes and knowledge towards SH Policies and procedures for SH managemen t	None	Confounds SH and suicide  There is little reporting on the findings of the research phase of the AR cycle  There is little critical review of the action stage.  No use of SUs in the process.  Attitudes towards SH & suicide were mixed and a result of personal history rather than background. No attempt to address attitudes though through the AR.
49.	McMai n et al	2009	America n J of Psychiat ry	Female (155) Male (25)	180	All diagnosed BPD	RCT  DBT vs  General  Psychiatric  Managem  ent (also  manualise  d)	Frequency of suicidal & NSSI	Both interventions show an effect but it is unclear why No control for co- interventions	Again accessing SUs subjective experience of intervention, what worked and what didn't work would help understand treatment effect.
50.	Myriam & Moffae rt	1991	General Hospital Psychiat ry	Female (184)  Male (61)  208 entered Integrate d Medical/P sych treatment  37 Sequenti al Medical/p sych	245	All presenting at University Hospital Ghent (single site) Psychotic patients excluded	Between groups design IT vs ST	1. Treatment compliance 2. Evolution of cutaneous legions 3. Occurrence of psychiatric complication s 4. Medical consumption	None	"Neither did we have much difficulty in motivating the self-mutilators to complybecause we took advantage of their avidity to be the focus of medical attention"  "Even patients whose lesions are particularly extensive and deep often do not acknowledge any pain and tolerate painful diagnostic procedures or treatment without analgesia"  Both evidence of a less than patient focused approach.

				treatment (TAU)						
51.	Nee & Farma n	2005	Criminal Beh. & M.H.	Female	16	All in prison, all diagnosed with BPD		Multiple including SH incidents, suicide ideation, & impulsivity.	Speculation about why there was a post treatment increase in SH c/f during treatment	There were qualitative measures but these aren't reported – why?
52.	Ryan, Park, & Babidg e	1998	Australia n Health Review	Male (28) Female (23)	51	All referred to Psychiatric Liaison Team from A&E over a 3 month period	Retrospect ive clinical study.  Data collected on suicide attempts	N/A	No inclusion of those completing suicide or rapid discharge from A&E	N/A But would PAR add validity to the model if it was presented to SUs?
53.	Shaw	2006	Women & Therapy	Female	6	College students with short duration of SH (max 50 incidents). All participants not currently	3 x interviews  1. Life context  2. Details of use of SH  3. Meaning & impact of SH	N/A Exploring reasons for desistance	None	"All women spoke of taking control of their lives as essential in their journey toward stopping" (p.162)  "key features women found useful in stopping SI included empathic relationship with a professional who sees strengths beyond diagnostic labels" (p.167)  Some preferred a directive approach like DBT whilst others a more client centered approach.  *Women's sensitivity to common unease with SI was evident – If interviewed by a woman with a history SH this might have been different.
54.	Slee et al	2008	Clinical Psycholo gy & Psychot herapy	Female (84) Male (6)	90	Aged 15-35	RCT CBT+ TAU Vs TAU	DSH over 3 months	1. Mediating variable that makes CBT effective is unknown.  2. Unable to distinguish between suicide	Are treatment effects due to CBT having an impact on levels of anxiety and depression?  Authors suggest its due to teaching emotion regulation, however this has been suggested to be overly emphasized as a cause of SH

									and SH	
55.	Slee et al	2008	British Journal of Psychiat ry	Female (72) Male (5)	77 40 experimenta I grp 37 ctrl	All aged 15-35 referred from single Dutch site	RCT TAU + CBT Vs TAU	Repetition of SH over 3 months	Assessment of SH not a well validated tool and no instruments to assess function and motive for SH were available at the time.	SSI exploring SH would serve as a valid tool.
56.	Spinho ven et al.	2009	J. of Nervous and mental disease	93% Female	90	All aged 15-35 taken from Slee et al (2008)	RCT TAU Vs TAU+ CBT	Multiple	Unclear which aspects of the experimental group was useful, CBT or parts of TAU	ASK!
57.	Steven son & Meare s	1992	America n J. of Psychiat ry	Female (19) Male (11)	30	All BPD	A-B design	Multiple including episodes of SH, drug misuse, hospital admission and BPD symptoms	Again limitations around why there was a treatment effect	ASK!
58.	Steven son et al	2005	Psycholo gical Medicine	Female (19) Male (11)	30	All BPD and referred for psychotherapy	Therapy Vs Control of assessme nt data	Numerous including repetition of SH		?
59.	Tyrer et al	2004	J. Personal ity Disorder	No info see Tyrer et al (2003a)	480 239 (MAC T) 241	No info	Between groups MACT Vs TAU	Anxiety & depression symptoms     Social	Only 60% compliance with MACT	PAR to explore why such a low compliance? Due to being given a manual and asked to attend the sessions? Too impersonal?  No exploration of motives for SH

					(TAU)			functioning 3. Episodes of DSH (12 mth) 4. Economic costs 5. Clin diag on ICD-10 6. Proportion of patients		"The results of our study do not give a clear indication of the place of CBT in the condition" PAR to ask what is/isn't useful in the CBT approach.
60.	Wallen stein & Nock	2007	America n J. Psychiat ry	Female	1	Single case study	A-B design	repeating SH Self-report repetition of SH.	None	As previous it would have been interesting to know in what ways the woman found exercise useful. Especially given a reportedly very strong treatment effect.
61.	Walter s	1983	Nursing Times	Female	1	No info on sampling	Case study/ethn ography	None	None	Approach was informed family therapy via nurses, registrar and social workers. Although aim of intervention was to improve family communication the patient still seemed to be a passive recipient of this plan.
62.	Weinb erg et al	2006	J. Personal ity Disorder	Female	30	All diagnosed BPD	Between groups design, random allocation to MACT or TAU	1. Frequency of SH  2. Severity of SH  3. Suicide ideation	Adjunctive treatment co- occuring with other interventions	Ask what aspects of treatment the person found most useful.
63.	Wheatl ey	2005	Behvaio ural and Cog Psychot herapy	Female	1	Single case study. Medium Secure Adolescence service BPD	A-B case design	Repetition of SH.      Use of coping skills through self-report and staff	Revision of treatment goal from release to reduced security may alleviate stress	+Coping skills were developed in conjunction with the participant  Asking the patient why use of coping skills and associated reduction of SH.

								corroboratio n		
64.	Wisem an	2003	Nursing Times	Not stated	40	All referred to Psychiatry Liaison Team.  No previous history of SH.	A-B design	Repetition of SH	Being sent for therapy may mean the person isn't motivated to engage	Perhaps if the PLT offered a choice of intervention then this wouldn't be an issue?
65.	Zich	1984	Suicide and Life Threaten ing Behavio ur	Female	1	Case study 21 yr old college student	Qualitative account of interventio n	1. Parasuicidal Beh. 2. Use of restraint on patient	Ward staff were wary of giving the patient autonomy	PAR in the sense of collaborative therapeutic relationship. Patient able to set level of intervention/observation.  Self determined level of intervention were agreed as suitable by staff 100% of the time.  MH workers as 'listeners' most common form of prevention requested by the patient. Patient able to select the member of staff to talk to.  Would more involvement of the staff have overcome the identified limitation?