# Mindfulness as a Psychological Approach to Managing Self-Harming Behaviours: Application and Review within Clinical Settings

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## Abstract

Given the prevalence of suicide and self-harm throughout global societies, the need to more readily manage associated behaviours is of central importance. Particularly as in many countries and cultures harmful acts towards oneself remain a prosecutable crime if the person in crisis survives. Yet despite once constituting a novel approach, mindfulness techniques within clinical settings have rapidly grown in popularity and become an integral component of behavioural regulation and management. Recognising the potential benefits of mindful techniques including increased self-awareness and enhanced coping strategies, application of the technique has now been widely used as a tool to help individuals desist from engaging in deliberate self-harm and experiencing suicidal ideations. Addressing the need for a comprehensive review of the effectiveness of mindfulness applications within clinical settings as an approach to managing self-harming behaviours, the present exploration concludes mindfulness techniques are an appropriate intervention but on-going evaluation is required to provide greater clarity in explaining the specific link to effective emotional management.


**Key Words:** Mindfulness, Self-Harm, Emotional Management, Affective Disorder, Therapeutic Intervention.

## Introduction

Deliberate self-harm is a behaviour commonly characterised by intentional, direct and immediate destruction to an individual's body engaged in without an immediately apparent intention to die (Brausch & Muehlenkamp, 2013; Klonsky, Oltmanns, & Turkheimer, 2014; National Health Service [NHS], 2015). In many countries and cultures such acts remain a criminal offence which the person in crisis may be prosecuted for if they survive (Omerod & Laird, 2015). The United Kingdom has one of the highest rates of deliberate self-harm in Europe with 400 in every 100,000 people engaging in self-harming behaviour (Office for National Statistics [ONS], 2016; Samaritans, 2017). Alongside such figures, lifetime prevalence estimates suggest self-harm occurs in 19% to 60% of all patients treated within clinical settings (DiClemete, Ponton, & Hartley, 1991; Sansone & Sansone, 2010; Thomson, 2006) and within approximately six percent of the general population in the UK and USA (Health & Social Care Information Centre, 2009; Klonsky, 2011; NHS, 2015; Samaritans, 2016; Whitlock & Selekman, 2014). However, despite increasing concern given to the prevalence of self-harm and suicide, current literature lacks a comprehensive theoretical framework within which to understand the complex array of risk factors associated with this behaviour.

## Self-Harm: An Outcome of Affective Disorder

One of the first major contributions to our understanding was Linehan's (1993) description of the development of Borderline Personality Disorder (BPD), which also suggested the potential function of self-harming behaviour (Figure1). In particular, Linehan proposes that individuals who have had negative experiences during childhood may not have been taught ways to

manage difficult emotions and may find it harder to tolerate distress (Linehan, 1993). Furthermore, trauma during childhood may contribute to hyper-arousal and, consequently, increased risk for emotion dysregulation, given that high levels of arousal are more difficult to regulate (Debowska et al, 2017, 2018; Eisenberg, Cumberland, & Spinrad, 1998; Flett, Blankstein, & Obertynski, 1996; Spink et al, 2017). Moreover, emotional vulnerability in the form of emotional reactivity and intensity may also contribute to emotion dysregulation (Calkins & Johnson 1998; Debowska, Boduszek, & Dhingra, 2015; Dhingra et al, 2016; Eisenberg et al., 1998; Melnick & Hinshaw, 2000; Ryan et al, 2017; Thompson, 1994), as more intense emotions pose a greater challenge for emotion regulation (Flett, Blankstein, & Obertynski, 1996). Support for this function of self-harm comes from multiple lines of research suggesting feelings such as sadness, anger and tension, precede self-harming behaviours (Kamphuis, Ruyling, & Reijntjes, 2007; Klonsky, 2009). Thus, the interaction of these factors increases the likelihood of emotion dysregulation, which, in turn increases the risk for deliberate self-harm, as self-harm may function to regulate painful emotions that cannot be tolerated (Linehan, 1993). Although Linehan's (1993) work is supported by both clinical and empirical literature and offers the most detailed and comprehensive description of the emotion regulating function of self-harm behaviour, other researchers have also conceptualised self-harm as an emotion regulation strategy (Haines & Williams, 1997; Van der Kolk, 1996; Klonsky, 2007).

**INSERT FIGURE 1 ABOUT HERE**

The Experiential Avoidance Model (EAM; Chapman, Gratz, & Brown, 2006), which takes a more behavioural approach, is based on the proposition that self-harming behaviours

are negatively reinforced strategies used in order to reduce unwanted (and often negative) emotional arousal (Figure 2). The EAM proposes that experiential avoidance represents a set of behaviours that serve similar functions (Chapman et al., 2014; Nelson, 1988). It is suggested that particular responses in relation to deliberate self-harm, which are identified within the experiential avoidance model, include behaviours that function to avoid unwanted emotional experiences (Chapman et al., 2006). Deliberate self-harm is conceptualized within the EAM as a behaviour that leads to the elimination or at least the reduction of unwanted emotional responses, where it is suggested that temporary relief from negative emotional responses reinforces the behaviours of deliberate self-harm (Chapman, Dixon-Gordon, & Walters, 2011). Due to the theorised reinforcement of these behaviours, it is therefore posited to be considerably more likely that deliberate self-harm will occur in the future when individuals experience similar conditions (Chapman et al., 2006).

Alongside this, numerous reasons for deliberate self-harm, relative to experiential avoidance, have been cited within research endeavours. Notably, in their systematic review Edmondson, Brennan, and House (2016) identified numerous reasons for deliberate self-harm including, but not limited to; managing distress/affect regulation, exerting interpersonal influence, punishment, dissociation, sensation-seeking and maintaining or exploring boundaries. Research conducted by Bentley, et al. (2015) also suggests that deliberate self-harm is a phenomenon that occurs across a range of emotional disorders. It is stated that emotional disorders refer to psychopathology characterised by frequent and intense negative emotions, strong aversive reactions to negative emotions and efforts to avoid or escape these emotional experiences.

**INSERT FIGURE 2 ABOUT HERE**

Accordingly, the suggestion is that individuals who engage in deliberate self-harm do so as they appear to prefer to deal with physical rather than emotional pain. Moreover, as a means of managing the distress experienced, self-harming behaviours are thereby reducing or detracting from the emotional pain (Edmondson et al., 2016). Research has supported such a notion with a wealth of studies drawing similar conclusions surrounding the function of self-harm and importance of such behaviours in the regulation of emotion and reduction of aversive affective states (Berking, Neacsiu, Comtois, & Linehan, 2009; Chapman, Gratz, & Brown, 2006; Gratz, 2006; Lundh, Karim, & Quilisch, 2007; Whitlock & Selekman, 2014).

The totality of such research demonstrates a clear and conceptual overlap between emotional disorders and the phenomenon of deliberate self-harm (Barlow, Sauer-Zavala, Carl, Bullis, & Ellard, 2014; Bentley et al., 2015; Edmondson et al., 2016; Voon et al., 2014). Accordingly, individuals who have chronic avoidance, increased distress, and who are unable to avoid negative thoughts and emotions, may feel the need to exert extreme efforts to regulate their experiences – in turn, increasing the risk of harmful dysregulated behaviours such as deliberate self-harm (Wupperman et al., 2013). Through the practice of mindfulness, an individual may be able to experience dysregulated and intense emotions without resorting to deliberate self-harm (Wupperman et al., 2013). Alongside such a notion, Wupperman et al. (2013) also suggests that mindfulness techniques may enable the individual to utilise adaptive coping mechanisms for the intense emotions that they experience which would involve regulating or tolerating these emotions. Brown, Comtois, and Linehan (2002) suggest that emotion relief is reported as the most common reason for engagement in deliberate-self harm and therefore mindfulness may reduce over-engagement in negative emotions and avoidance of negative experiences by focusing the individual's attention in onto the present. A premise seemingly substantiated by Baer (2003) who suggested that mindfully focusing attention on

experiences, with minimal effort to act on the experiences, should lead to the exposure of the underlying problem and extinction of the negative experiences.

## Mindfulness as a Treatment Approach

Mindfulness is described as a process in which someone's attention is intentionally focused on the present moment, in an accepting and non-judgemental manner. Mindfulness approaches are currently applied across a wide range of populations, including, but not limited to, those diagnosed with a mental illness and individuals seeking stress-reductions (Baer, 2015). Designed to facilitate the acceptance of change, such techniques are applicable within both community and inpatient clinical settings (Baer, 2015; Wupperman et al., 2013) and to date are deemed to be one of the most effective interventions for managing deliberate self-harm (Wupperman, Fickling, Klemanski, Berking, & Whitman, 2013).

Moreover, the technique involves self-observation of an individual's thoughts, emotions and actions, and involves learning to accept past experiences as well as enabling the individual to continually reflect on experiences whilst maintaining awareness of the events that created these specific experiences (Cameron et al., 2012). The six key components of mindfulness, as suggested by Cameron et al. (2012) are; the promotion of emotion regulation, aid in tolerating distress, reducing impulsivity, promote acceptance of reality, reduce dissociation, and promote acceptance. Wupperman et al. (2013) suggest that practising mindfulness can act as a protective factor against harmful dysregulated behaviours such as deliberate self-harm. In support of this notion, it is proposed that mindfulness facilitates emotional processing and distress tolerance by raising attention to, and awareness and acceptance of ongoing experiences (Teasdale et al., 2002). In addition, mindfulness techniques are thought to promote the ability to mentally withdraw from automatic judgements and

reactions, in order to increase awareness of alternate ways of responding to a given situation (Bowen et al., 2009).

Through the use of mindfulness techniques, it is argued, individuals can learn to recognise their urges to engage in deliberate self-harm and view this dysregulated behaviour as one possible reaction whilst being aware of more adaptive and appropriate mechanisms of coping (Wupperman et al., 2013). By practising mindfulness techniques, initial distraction techniques which are instilled to manage self-harming behaviours can be replaced with more adaptive coping skills (Stanley, Brodsky, Nelson, & Dulit, 2007). Mindfulness increases the ability of an individual to recognise early signs of heightened negative arousal which in turn, enables the individual to engage in adaptive coping strategies and manage their emotions and urges to self-harm more appropriately (Bowen et al., 2009). Accordingly, mindfulness seemingly plays a very important role in emotional regulation and is suggested to positively influence stress response and regulation of emotion as it focuses on the practice of redirecting an individual's attention to the present moment (Bullis, Bøe, Asnaani, & Hofmann, 2014). In regards to emotional regulation and management, individuals who engage in deliberate self-harm often have a lack of skills in managing and expressing their emotions (Chapman et al., 2006). Borrill, Fox, Flynn, and Roger (2009) suggest that an important factor in building upon emotional regulation and distress tolerance, both of which are usually lacking in individuals who engage in deliberate self-harm, may be the need to help people reduce avoidance levels and learn mindfulness techniques so that they are capable of acknowledging their own thoughts and feelings without amplified self-judgement.

## Therapeutic Intervention & Mindfulness

There currently exists a clear evidence base for the efficacy of mindfulness based treatments across various psychopathologies, as well as an apparent indication that this may also translate into the use of mindfulness-based therapy for management of acute self-harm (Luoma & Villatte, 2012; Razzaque, 2013). Research suggests that mindfulness underpinnings may prove to be the principal component of future therapies for self-injury (Martin, 2010) and that when incorporated with other therapies such as, dialectical behaviour therapy, trials of this therapy show significant reductions in the repetition of self-harming behaviour (Verheul et al., 2003).

Therapeutic interventions for deliberate self-harm should not however primarily focus upon the mental disorders associated with deliberate self-harm, such as borderline personality disorder and major depression, but should in fact be specific to the nature of the self-harm specifically targeting emotional-regulation difficulties present in the individual (Slee, Spinhoven, Garnefski, & Arensman, 2008). Supporting such a premise, Forkmann et al. (2014) state that suicidal ideation may be more than just a symptom or consequence of an affective disorder. The authors state that treatments aimed at reducing depression may not also target an individual's suicidal ideations, meaning that self-harm and suicidal ideation need to be treated in isolation rather than in conjunction with, or as part of, a particular disorder. Gratz and Tull (2010) suggest that mindfulness-based treatments teach clients that connecting with and acting upon the information provided to them by their emotions in an adaptive way, will likely facilitate more effective engagement with their environment along with more effective and appropriate responses to the environment within which they are operating.

Kok, Kirsten, and Botha (2011) and Klonsky and Muehlenkamp (2007), found direct evidence that mindfulness interventions delivered to adolescents in a psychiatric setting successfully led to a reduction in self-harming behaviour. Based upon such findings Kok et al. (2011) suggested that the clinical use of mindfulness should emphasize developing the ability

to accept thoughts and emotions and therefore this form of intervention may benefit adolescents who engage in deliberate self-harm since they need skills to tolerate distress and regulate emotions. Other research suggests that participation in a brief acceptance and mindfulness based behaviour intervention is associated with reduction in emotion regulation difficulties that play a major role in deliberate self-harm (Tull, Schulzinger, Schmidt, Zvolensky, & Lejuez, 2007). A positive association was also found between mindfulness and self-control towards aggression and self-harming behaviours (Yusainy & Lawrence, 2014). This is supported by Wongtongkam, Day, Ward, and Winefield (2015) who conducted a study involving delivering mindfulness meditation to Thai students that targeted violence, and found that mindfulness meditation has some positive impact on anger expression.

Yusainy and Lawrence (2014) also suggest that aggressive individuals may lack the inhibition that may otherwise prevent them from harming themselves, and individuals who ruminate on intense negative emotions may engage in dysregulated behaviour in order to distract themselves. However, those who engage in mindfulness may experience these habitual responses to a reduced extent overall. In addition to this, Gratz and Gunderson (2006) found a clinically significant improvement in emotion regulation for females who engage in deliberate self-harm following completion of a fourteen-week acceptance-based emotion regulation group therapy. They also found that 42% of participants showed a 75% or greater reduction in self-harm, 17% of participants showed a reduction between 45% and 57% in incidents of self-harm, and 16% of participants showed a reduction in self-harm between 25% and 33% following therapeutic group intervention that incorporated dialectical behavioural therapy and mindfulness techniques.

The aforementioned research directly displayed that following dialectical behavioural therapy, where the core mindfulness techniques are taught as the first set of skills in training, incidents of deliberate self-harm and suicidal ideation dramatically dropped four months post-

treatment (Low, Jones, Duggan, MacLeod, & Power, 2001). Low et al. (2001) also suggested that when considering therapeutic interventions in clinical settings, any improvement or positive change in challenging behaviour could mean that the use of dialectical behaviour therapy and mindfulness is an effective form of treatment.

With regard to the delivery of mindfulness as a treatment in clinical settings, mindfulness-based cognitive-therapy is a group based programme consisting of weekly sessions, typically delivered over a period of around eight weeks. The approach involves guided mindfulness exercises that are generally delivered by the therapist to the patient (Shonin et al., 2013). As such, mindfulness approaches easily lend themselves to application in a group therapy setting and these forms of intervention are particularly appropriate within psychiatric inpatient settings (Diadonna, 2009). Research suggests that these forms of intervention obtain good compliance and are well tolerated by patients, including patients that have high levels of distress or disturbance, hence the appropriateness of application within clinical settings (Mason & Hargreaves, 2001). Shigaki, Glass, and Schopp (2006) also stated that mindfulness techniques have a beneficial effect on wellbeing and psychological distress when delivered in clinical settings.

Furthermore, it is suggested that mindfulness-based cognitive therapy is effective in preventing relapse in patients with major depression, aids in lowering levels of residual or current depressive symptoms such as self-harm and may be effective in reducing symptoms in chronic, treatment-resistant patients (Cladder-Micus et al., 2015; McDermott & Willmott, 2018; Woodfield, Boduszek, & Willmott, In Press). It has been found that when mindfulness-based cognitive therapy was delivered towards residual symptoms in remitted depressed patients there was a significant improvement in depressive symptoms (Geschwind, Peeters, Huibers, van Os, & Wichers, 2012). Likewise, Barnhofer et al. (2009) also found that following completion of mindfulness based cognitive therapy, fewer participants met the full diagnostic

criteria for major-depressive episodes. Forkmann et al. (2014) provide further support of such as their study found that mindfulness based cognitive therapy reduced self-reported suicidal ideation from patients with residual depressive symptoms. Batey (2001) stated that trait mindfulness scores were low for individuals who had a history of childhood trauma and who met the diagnostic criteria for borderline personality disorder, within which self-harm is a key feature. This in itself could support the idea that mindfulness skills may play an important role in both dealing with intrusive thoughts and protecting against self-harm.

## Limitations and Future Directions

Despite the experiential and empirical evidence underlying the utility and effectiveness of mindfulness as a clinical intervention, some criticisms still remain. Firstly, it is essential for therapists that are delivering mindfulness approaches to have personal experience of learning to be mindful themselves and it is essential that the therapist is very clear on how the use of mindfulness may be relevant to the patients presenting problems (Dunkley & Loewenthal, 2013). Dunkley and Loewenthal (2013) also suggest that despite this need, many therapists fall short in their ability to communicate to the patient why the skill would be useful to them. This could be problematic as an individual requires understanding of how a form of therapy works before fully engaging with it.

Wupperman et al. (2013) suggests that following an initial attempt of mindfulness based therapy, adaptive coping strategies may not decrease the effect of negative emotions as quickly as the dysregulated behaviours, such as engagement in deliberate self-harm. As such this may possibly result in the individual feeling less able to tolerate residual negative urges and could mean that in order for mindfulness based interventions to be affective, consistent engagement within therapy and support following the therapy sessions, may be required.

In regards to managing self-harming behaviours clinically, specifically through the use of mindfulness techniques, challenges in implementing the therapy in particular settings may be problematic. Moreover, due to security protocols and policies often in place within high security facilities, a lack of therapeutic space and a lack of privacy may prevent typical delivery of mindfulness interventions (Low et al., 2001). Further criticism of the mindfulness-based approach surrounds whether clear conclusions for the efficacy of mindfulness-based cognitive therapy for suicidal ideation may be impeded by the lack of control trials that have been conducted to date (Forkmann et al., 2014). There is a lack of published research which reports personal accounts from individuals who have engaged in deliberate self-harm, of personal accounts on non-suicidal reasons for engaging in self-harming behaviours (Edmondson et al., 2016). As such may result in a general lack of willingness to engage in the therapy from the patient perspective and the overall delivery of the mindfulness-based therapy may not be as considered as effective as possible.

## Conclusion

Deliberate self-harm is a serious issue in the UK and globally prevalent both in the community and within clinical settings. It is a problem that needs appropriate and effective treatment options in order to provide help for the individual's suffering with repeated engagement in deliberate self-harming behaviours, as it has been identified as a risk factor that may ultimately lead to the development of suicidal ideations (Baetson et al., 2010; Cooper et al., 2005; Klonsky et al., 2007; McMahon et al., 2014). Klonsky and Muehlenkamp (2007) report that 50% of people who deliberately engage in self-harm report attempting suicide at least once, suggesting that engaging in deliberate self-harm vastly increases the risk of suicide, which is evidence that self-harm constitutes a serious health issue that requires intervention.

Despite the criticisms outlined there remains a vast array of empirical evidence supporting the efficacy of mindfulness in the reduction of incidents of deliberate self-harm, particularly within clinical settings (Chapman et al., 2006; Kok et al., 2011; Livesley, 2005; Stanley et al., 2007; Teasdale et al., 2002; Wupperman et al., 2013). Moreover. mindfulness techniques can be effectively used alongside other therapeutic interventions that are commonly utilized by patients who engage in deliberate self-harm (Chapman et al., 2006; Verheul et al., 2003). Likewise, mindfulness is therapeutic in its approach, enabling patients to effectively manage their emotions and respond to their experiences in an appropriate manner rather than engaging in dysregulated and harmful behaviours. The use of mindfulness in clinical settings appears to be an appropriate and effective treatment option for individuals suffering from engagement in deliberate self-harm, whether that be a dysregulated behaviour or a symptom of their illness such as borderline personality disorder or major depression (Klonsky & Muehlenkamp, 2007). Overall the research suggests that mindfulness-based therapy may prove to be a key element of future treatments for self-harming behaviours (Bowen et al., 2009; Chapman et al., 2006; Hawton et al., 2006; Martin, 2010). Alongside this, the developing body of research suggests that incorporating mindfulness techniques with the more traditional therapies such as dialectical behaviour therapy and cognitive behavioural therapy and creating integrated treatment approaches, may result in a significant reduction in the repetition of self-harming behaviour (Verheul et al., 2003). Whilst more research is undoubtedly needed to establish the interaction between mindfulness-based approaches and individuals who engage in deliberate self-harm who have not been clinically diagnosed with a psychiatric illness, mindfulness-based therapies have shown promise in their ability to effectively manage deliberate self-harm in a clinical setting. Alongside future endeavours that would enable greater insight into whether mindfulness-based approaches target the psychiatric disorder or the dysregulated behaviours, current research findings and theorising of the mindfulness approach display the utility of such

techniques for treating self-destructive behaviours which unconditionally require the future support of the scientific and therapeutic community. Behaviours which, if reduced, have an intangible benefit for individual and family lives, social support systems and the reduction of harm more broadly within global societies.

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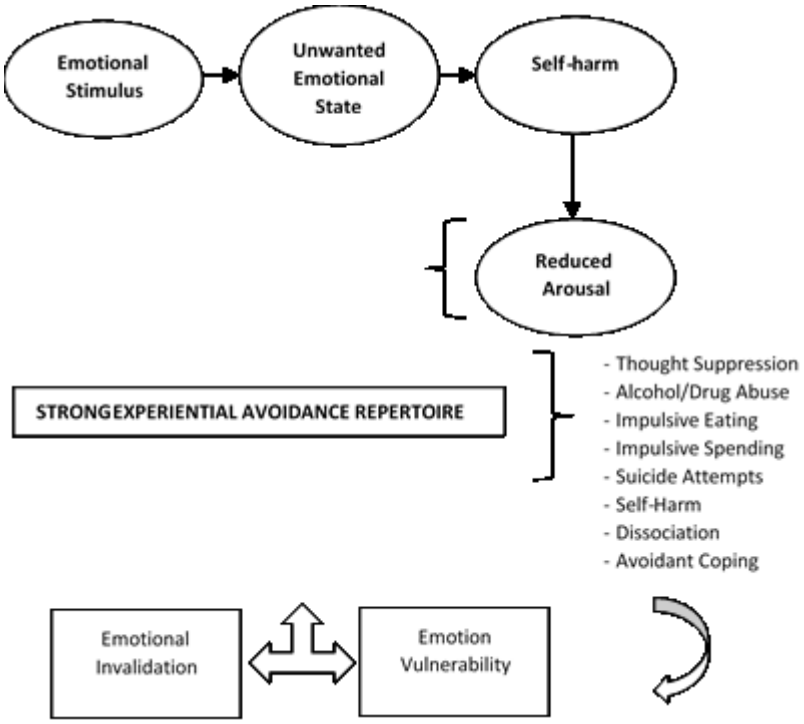


Figure 1: Schematic representation of Linehan's (1993) biosocial theory of BPD.

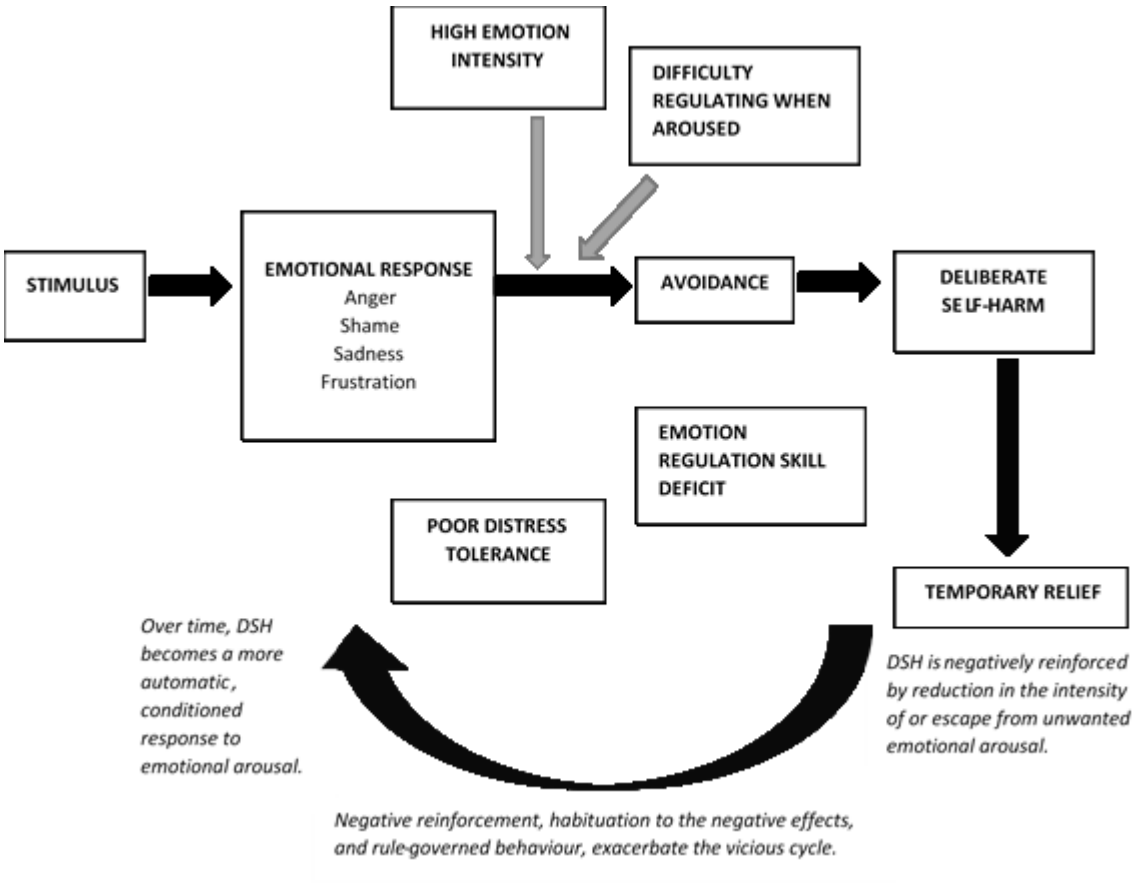


Figure 2: Schematic Representation of the Experiential Avoidance Model (EAM) Chapman et al. (2006).