# Correlates of Suicidality in Self-Injuring Populations

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A thesis submitted to the University of Birmingham for the degree of MASTER OF RESEARCH IN CLINICAL PSYCHOLOGY

School of Psychology University of Birmingham September 2014

Word Count: 14,790

(Excluding preliminaries, tables, figures, references and appendices)

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## Acknowledgments

I would like to thank Doctor Rachel Upthegrove and Doctor Ashleigh Lin for their invaluable help and guidance throughout this degree course and especially during my placements. Their feedback and advice throughout the completion of this thesis was both encouraging and supportive. I would like to thank Doctor Christopher Jones for his advice, suggestions and help during the statistical analysis part of the research project. I would also like to thank all the web sites that agreed to host my survey and all those participants that took the time to complete it.

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## Introduction

Before starting this course I had in mind certain areas of learning which I felt would benefit my overall goal of enhancing my suitability for clinical research. One of which was to improve my written communication skills. Prior to this course, I felt that I needed to develop my ability to write more effective and well-rounded pieces of psychological work.

Another learning objective was to gain experience and knowledge of qualitative research methodologies, which was not covered by my undergraduate psychology course. Since most positions require competency in qualitative research methods, this had put me at a disadvantage whilst applying for positions. I hoped by joining and conducting a placement research project focusing on qualitative methods would improve my knowledge, confidence and familiarity with this aspect of research.

Broadening my research interests was another objective. Prior to this course I had gained experience working with and caring for physically and learning disabled populations. Most of my research during my undergraduate course had also focused on these areas. Though researching this field has been worthwhile, giving me insight into the psychological and social difficulties faced by individuals with physical and learning disabilities, I felt I needed to widen my research interests to avoid becoming too specialised at such an early stage of my career and to develop overall as a psychologist.

My final objective was to gain experience working in NHS settings. The work experience that I had thus far gained was in private clinics and small charitable organisations. Although they provided excellent practise, I felt it was important to gain experience in the NHS. Possibly working and collaborating with multidisciplinary teams within the organisation, with a view to working in the NHS in the future.

My first placement required me to develop a literature review on the psychological correlates and functions of self-harm, while also developing the topic area that I was going to investigate in the summer. As I elaborate in chapter one, I felt writing the literature review whilst honing and developing the summer project, complemented each other and provided me with an overall introduction to the topic of self-harm and suicide, as well as improving my knowledge of the area. This placement helped fulfil my objective of widening my areas of interest and ultimately drew me to developing this research interest as my summer project. I feel that writing the literature review helped advance my communication skills, helping me write more concisely and allowing me to put my points across more easily. This helped fulfil the learning objective of improving my ability to write research related documents/reports to a better standard. While it was an interesting and enjoyable placement, it did not give me hands on experience of working with and researching differing populations nor did it give me a chance to experience or use qualitative research methodology.

My second placement involved investigating the experience of auditory verbal hallucinations in individuals with first episode psychosis. It also helped accomplish my other learning objectives by providing me with the opportunity to work with clinical populations without learning and physical disabilities in NHS settings. Moreover, I found collaborating with multi-

disciplinary teams with a diverse service user base made this setting more exciting, challenging and rewarding and has enthused me to return to the project after completing this course. This placement also provide the opportunity to use and experience qualitative research methodology as phenomenological interviews were conducted in order to gain a deeper insight of the experience of auditory verbal hallucinations. In addition, content analysis but taking an overall phenomenological approach and qualitative analytical software was used to analyse interviews. As I elaborate in chapter 2, dealing with the challenges of conducting phenomenological interviews and analysis of interviews using content analysis and novel qualitative analytical software, improved my confidence, skills and knowledge to perform such tasks. This introduction to qualitative research methodology has helped familiarise me with this type of analysis and given me the confidence to accept challenging, qualitative based projects for the future.

My final research project was especially unnerving. Not only was this a large piece of work to undertake, but very little research had been conducted in this field. Unlike other available placements, it was a project that that had to be developed from scratch. As it did not come with ethical approval there was a considerable amount of pressure to develop a sound piece of research and apply for ethical approval promptly, in order to have enough time to recruit participants, collect and analyse data and write up the thesis. I feel that by facing the challenges and pressures of the two placements, I have developed a more organised way of working that has helped me better prepare and accomplish this large piece of work. The study of suicidality in self-injuring populations; how self-injurers may be at a greater risk, how self-injurers may be protected from suicidality has been a particularly fascinating topic throughout the final project and is one I am keen to further explore in the future. Having completed my personal

learning objectives, I am now more self-assured and better placed to undertake clinical research.

# **Chapter 1**

# **Psychological Correlates and Functions of Self-Harm**

# Psychological Correlates and Functions of Self-Harm

#### **Abstract**

The purpose of this review was to explore the psychological correlates (PC) and models of the functions of self-harm. The present paper examined the following PC for self-harm: social support, maltreatment vulnerabilities (sexual abuse and physical abuse), individual self-derogation, individual cognitive and individual emotional vulnerabilities. Lastly recent models, the shame regulation, emotional cascade and four factor model of the functions of self-harm were also examined.

PubMed, Wiley online library, Google Scholar and Science Direct were utilised, with the definition of self-harm that was adopted being direct harm of oneself without suicidal intent. Studies on suicidal behaviour were only included if they also assessed non-suicidal self-harm. Research on socially or culturally accepted self-harming behaviours were excluded. Thirty-six studies met our criteria.

Evidence for social support, maltreatment vulnerabilities, individual self-derogation, individual cognitive and individual emotional vulnerabilities were mixed, this may be due to past conceptualisations of these PC. Due to the scarcity of longitudinal studies it cannot be known whether these PC predict the continuation of self-harm over time. Though these PC have been found to be associated with suicidality, little research has considered suicidal and

non-suicidal self-harm together to distinguish related PC. Longitudinal studies examining both non-suicidal and suicidal self-harm may be necessary.

Research provides support for the shame regulation, emotional cascade and four-factor model. The lack of longitudinal research and issues concerning the quantity and diversity of the samples of participants used, as well as the validity of self-report measures casts a shadow over findings. As does the validity of the models and supporting research explaining the functions of self-harm, warranting further research.

#### Introduction

Interest in self-harm, defined as the deliberate, direct self-injury of body tissue without suicidal intent (Klonsky, 2007; Muehlenkamp, 2005) has increased in recent years. Its presence in non-clinical and clinical populations is associated with poor outcomes, including reduced life expectancy and risk of suicide in personality disorders such as borderline-personality disorder, depression, eating disorders and substance/alcohol abuse (Ogle & Clements 2008; Claes *et al.*, 2012; Bergen *et al.*, 2012; Zaki, Coifman, Rafaeli, Berenson & Downey, 2013). Despite the increase in research, there is still a lack of understanding of the psychological correlates (PC) and models of the functions of engaging in self-harm. Such knowledge could better inform the etiology, prevention, and treatment of self-harm (Klonsky, 2007). Based on research it has been between four to six years since the last review focusing on the PC and models of functions for engagement in self-harm (Klonsky & Muehlenkamp, 2007; Fliege, Lee, Grimm, & Klapp, 2009). Therefore, providing an updated, current and accessible review of the PC and functions of self-harm may help further understanding.

Due to multiple terminologies used in the literature (Silverman, 2011) the term "self-harm" will be used throughout the review to mean deliberate, direct self-injury of body tissue without suicidal intent (Klonsky, 2007). This paper will aim to provide a comprehensive review, which will examine the following PC of self-harm: (1) social support, (2) maltreatment vulnerabilities (sexual abuse and physical abuse), (3) individual self-derogation vulnerabilities (self-esteem and shame), (4) individual cognitive vulnerabilities (hopelessness and rumination), (5) individual emotional vulnerabilities (emotional reactivity and impulsivity) and (6) summary and challenges of research into the PC of self-harm engagement. Compared to earlier reviews this review was intended to focus on a broader range of empirically investigated psychological correlates, some not previously examined in preceding reviews (e.g. rumination). It is also important to recognise current researches understanding of the association between these

psychological correlates and the engagement of self-harm since previous systematic reviews. A review of the recent models on the functions of self-harm will follow, including an examination of the shame regulation, emotional cascade, four factor model of self-harm and challenges and directions for models of self-harm functions. Finally, suggestions for future research.

#### **Research Strategies**

Searches in PubMed, Wiley online library, Google Scholar and Science Direct for key-phrases of "self-harm, deliberate self-harm, self-injury, self-mutilation or non-suicidal self-injury" combined with "social support, physical abuse, sexual abuse, self-esteem, shame, hopelessness, rumination, emotional reactivity, impulsivity" and or "models, theories" were conducted. Research was included that endorsed self-harm as a direct harm of oneself without suicidal intent (Fliege *et al.*, 2009; Klonsky, 2007). Studies on suicidal behaviour alone were generally excluded. Research on socially or culturally accepted self-harming behaviours were also excluded. However, to prevent neglecting relevant evidence, a small number of studies on suicidal behaviour were included, provided that non-suicidal self-harm was also investigated. This method has been recommended in previous reviews (Fliege *et al.*, 2009). A total of 36 studies that met the inclusion criteria on the PC and functions of self-harm emerged. See Figure 1 for the study selection process and Table 1 for an overview of all the studies that met the inclusion criteria.

Figure 1 Study Selection Process

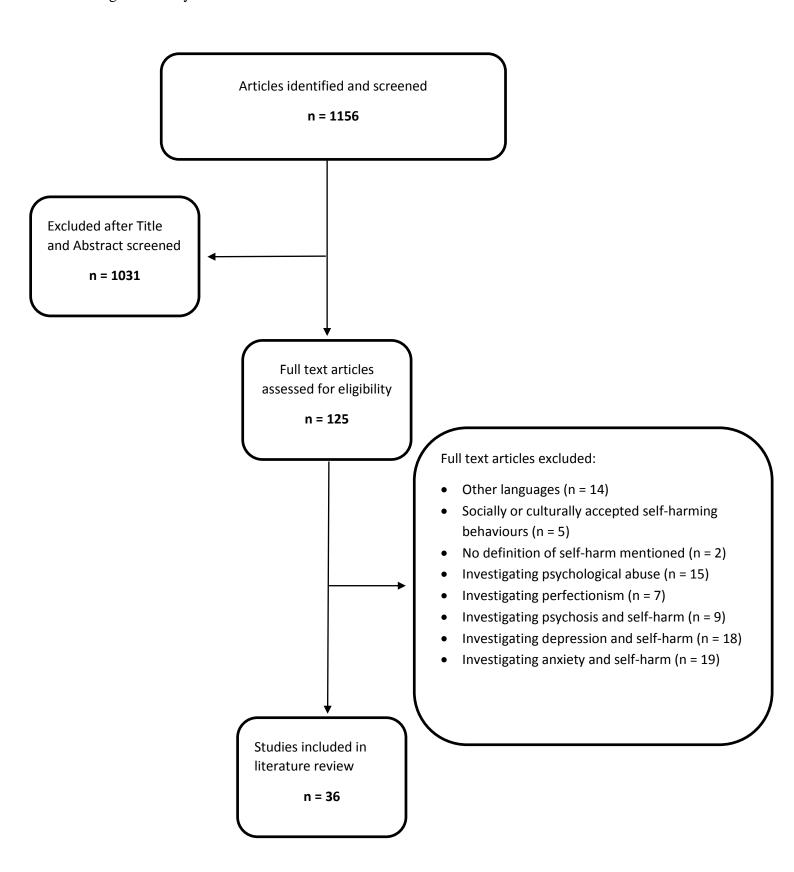


Table 1 Summary of the 36 studies that met the inclusion criteria on the correlates and functions of self-harm.

Authors	Sample	Design	Key Findings/Conclusion
McMahon,	1870 Male Adolescents	Cross-	Having access to family support was protective
Reulbach, Keeley,	10,011111011101010101111	sectional	against self-harm.
Perry & Arensman,		design	agamst sen nam.
2012		design	
Ystgaard et al.,	30,532 Adolescents	Cross-	Adolescents who had or had no access to social
2009	50,55 <b>2</b> 11 <b>0</b> 0105 <b>2</b> 01115	sectional	support or social networks were equally heavily
2007		design	burdened with reported self-harming intent.
Wu, Chang, Huang,	124 Case–control pairs of	Case-control	High social isolation and low social support was
Liu & Stewart,	individuals who self-harm	study	significantly associated with self-harming.
2013	and those who don't	study	significantly associated with sent narming.
Wu, Stewart,	209 (160 females and 49	Cross-	High levels of social support were associated
Huang, Prince &	males) self-harming	sectional	with increased help-seeking behaviour prior to
Liu, 2011	participants	design	self-harm engagement.
Matsumoto,	201 Juvenile adolescents	Cross-	Adolescents who engaged in self-harm reported
Yamaguchi,	(178 males & 23 females)	sectional	more physical abuse compared to non-self-
Chiba, Asami, Iseki	(178 maies & 23 females)	design	harming participants.
& Hirayasu, 2004		design	narming participants.
Deiter, Nicholls &	233 adults from hospital	Cross-	Significant associations were found between
-			sexual abuse and self-harm and physical abuse
Pearlman, 2000	and outpatient settings	sectional	and self-harm. Significantly greater self-harm
		design	
			engagement was found in patients with a history
Weismoore &	263 (188 female & 77	Cross-	of sexual and physical abuse.  Psychological correlates, physical abuse and
Esposito-Smythers	male) hospitalized	sectional	sexual abuse were found not to be significantly
2010	adolescents (ages 13–18)	design	associated with self-harm. Negative self-
			evaluations of oneself were associated with
	164 (02 1 016 1)	T	frequent self-harm engagement.
Yates, Carlson,	164 (83 male, 81 female)	Longitudinal	Sexual abuse was found to be directly related to
Egeland, 2008	children	study	repeated self-harm,
			while physical abuse was found to predict
			infrequent self-harming practices
Noll, Horowitz,	163 with/without a past	Longitudinal	Sexual abuse was found to be associated with
Bonanno, Trickett,	history of abuse	study	self-injuring behaviour, with participants who
Putnam, 2003			had a history of sexual abuse reporting
			significantly more self-harm engagement.
Klonsky & Moyer,		Meta-analysis	The direct relationship between sexual abuse
2008			and self-harm whilst controlling for other
			psychological correlates was minor.
Brown, Linehan,	77 Borderline personality	Longitudinal	Shame proneness scores were found not to be
Comtois, Murray &	disordered women with	study	significantly associated with
Chapman, 2009	past and current self-harm		self-harm after controlling for other emotions.
	behaviour		
Laye-Gindhu,	424 Adolescent school	Cross-	Shame was significantly associated with self-
Schonert-Reichl,	students (236 girls, 188	sectional	harm engagement, indicating increased shame
2005	boys)	design	after engaging in self-harm.
Lundh, Karim &	128 students (80 males &	Cross-	High frequency of self-harm was found to be
Quilisch, 2007	48 females)	sectional	significantly associated with low self-esteem.
		design	
Hawton,	45 Adolescents admitted to	Cross-	Self-esteem was not significantly associated
Kingsbury,	hospital	sectional	with self-harm when depression was controlled
Steinhardt, James		design	for.
& Fagg, 1999			
McLaughlin, Miller	51 self-harming	Cross-	Elevated levels of hopelessness predicted self-
& Warwick, 1996	participants and 2 control	sectional	harm engagement.
	groups (no mention of the	design	
	number of participants in		
	both control groups)		
Hoff &	160 university students	Cross-	Participants who engaged in self-harm, had
Muehlenkamp,	(123 female & 37 male)	sectional	higher levels of rumination compared to non-
2009		design	self-harming participants. Elevated levels of

			rumination may increase the vulnerability of self-harm engagement.
Selby, Connell & Joiner, 2010	94 (71 female & 23 male) University students	Cross- sectional design	Rumination predicted repeated self-harm behaviour, even when controlling for age and gender.
Milnes, Owens & Blenkiron, 2002	150 Self-harming patients	Cross- sectional design	Patients who experienced high levels of hopelessness were associated with engaging in self-harm.
Hankin & Abela, 2011	103 (63 female & 40 male) Adolescents	Longitudinal design	Negative cognitive style, maternal depression, depression and low social support, longitudinally predicted self-harm engagement over the 2½year follow-up. Rumination, negative emotionality, emotional reactivity, dysfunctional attitudes, excessive reassurance seeking and hopelessness did not predict self-harm engagement.
Nock, Wedig, Holmberg & Hooley, 2008	94 (73 female & 21 males)	Cross- sectional design	Emotional reactivity was significantly associated with self-harm thoughts and behaviours.
Bresin, Carter, Gordon, 2013	1,612 College students	Cross- sectional design	High negative urgency and daily sadness predicted urges to self-harm. Guilt and negative affectivity/emotion reactivity did not statistically predict the engagement of self-harm.
Glenn & Klonsky, 2010	168 (82 self-harming participants & 86 non-self- harming participants)	Cross- sectional design	No significant difference between self-harming and non-self-harming participants on computer based impulsivity control. Though, self-harming participants reported significantly higher levels of impulsivity compared to non-self-harming participants.
Janis & Nock, 2009	Study 1 - 94 participants (64 self-harming adolescents & 30 non-self-harming adolescents). Study 2 - 40 participants (20 self-harming adolescents & 20 non-self-harming adolescents)	Cross- sectional design	Compared to non-self-harmers, self-harming participants displayed higher impulsiveness on self-reported measures. However, there were no significant group differences on behavioural impulsivity tasks.
Glenn, Blumenthal, Klonsky & Hajcak, 2011	78 college students (41 self-injurers & 37 non-self-injurers)	Cross- sectional design	Comparing self-injurers and non-self-injurers, self-injuring participants reported significantly higher emotion reactivity compared to non-self-injurers, but no differences were found between each group on psychophysiological measures of emotional reactivity.
Victor & Klonsky, 2013	84 University students	Cross- sectional design	Self-harming participants experienced a higher array of negative emotions, such as self-dissatisfaction, compared to non-self-harming participants.
Anestis et al., 2012	127 Adult females with bulimia nervosa	Cross- sectional design	Affective lability significantly predicted self-harm engagement.
Glenn & Klonsky, 2011	81 (60 female & 21 male) Self-harming adolescents	Longitudinal design	Depression, anxiety, alcohol abuse and impulsivity did not predict self-harm engagement longitudinally.
Schoenleber, 2013	115 Female university students	Cross- sectional design	Shame regulation was positively associated with self-harm motivation. Indicating shame with an array of self-harm behaviours.
Selby & Joiner, 2009			Emotional Cascade Model, attempts to fill in the gap of how and why self-harm may function to regulate affect.
Selby, Anestis & Joiner, 2008	200 University students	Cross- sectional design	Emotional Cascade Model was positively associated with dysregulated behaviour.
Selby, Franklin, Carson-Wong &	47 (20 students & 27 individuals from the local	Cross- sectional	Rumination and instability of negative affect significantly predicted self-harming behaviour.

Selby, Anestis, Bender & Joiner, 2009	142 (33 men & 109 female) Participants. 39 participants met the borderline personality disorder criteria	Cross- sectional design	Emotional Cascade model fully mediated the relationship between Borderline-Personality disorder and self-harming behaviour.
Nock & Prinstein, 2004	108 Adolescents (32 boys, 76 girls)	Cross- sectional design	The results supported the four factor model, with participants engaging in self-harm due to automatic and socially reinforcing reasons.
Briere & Gil, 1998	93 (89 females & 4 males) Self-harming participants	Cross- sectional design	Participants reported motives for self-harm were to regulate affect, interpersonal and self-punishment reasons.
Kumar, Pepe & Steer, 2004	50 (31 female & 19 male) Self-harming participants	Cross- sectional design	Participants reported explanations for self-harm were to regulate affect, interpersonal and self-punishment reasons.
Klonsky, 2007		Review of the functions of self-harm	Current models and supporting studies regarding the functions of self-harm provide little valid support, leaving the explanations for the functions of self-harm in the dark.

#### **Social Support**

Social support is defined as the level and quality of support received from a social network (people with whom one has meaningful levels of contact) (Wu, Stewart, Huang, Prince & Liu, 2011). It has been suggested as a PC and a protective factor against self-harm engagement. However, research findings have been mixed. Low quality social support was significantly associated with self-harm and high quality social support provided a protective factor against self-harm (Wu, Chang, Huang, Liu & Stewart, 2013; McMahon, Reulbach, Keeley, Perry, & Arensman, 2012). Other research has found no significant association to self-harm; finding participants who received help or not from their social networks equally self-harmed (Ystgaard *et al.*, 2009). In addition research has suggested that individuals from low quality social support environments don't necessarily engage in self-harm (Wu *et al.*, 2011).

#### **Maltreatment Vulnerabilities**

Research has investigated specific types of abuse such as physical abuse and sexual abuse in relation to self-harm, yielding diverse results. While studies have found a direct relationship between physical abuse and self-harm (Matsumoto, Yamaguchi, Chiba, Asami, Iseki & Hirayasu, 2004; Deiter, Nicholls & Pearlman, 2000), other research has found the opposite effect, with no significant direct association (Weismoore & Esposito-Smythers, 2010). When controlling for the impact of other potential PC evidence shows that physical abuse did not contribute uniquely to the prediction of self-harm (Yates, Carlson, Egeland, 2008).

Studies have found direct relationships between sexual abuse and self-harm (Deiter *et al.*, 2000; Noll, Horowitz, Bonanno, Trickett, & Putnam, 2003; Yates *et al.*, 2008). Others have

questioned this association, with some research suggesting no direct relationship (Weismoore & Esposito-Smythers, 2010). Meta-analytic evidence suggests this association is modest, with sexual abuse a proxy factor for self-harm (Klonsky & Moyer, 2008). Although the studies reviewed by Klonsky and Moyer (2008) were cross-sectional, precluding conclusions about directionality, recent research has supported this idea that sexual abuse and self-harm may be associated because they are correlated with the same PC and may mediate the relationship between sexual abuse and self-harm (Smith, Kouros & Meuret, 2013; Lang & Sharma-Patel, 2011). However, not all self-harmers report experiencing sexual abuse and not all victims of abuse report self-harming (Smith *et al.*, 2013). Therefore, more individual PC could be related to the engagement of self-harm.

#### **Individual Self-derogation Vulnerabilities**

Findings suggest that self-derogation vulnerabilities, such as low self-esteem and shame proneness might be related to the engagement of self-harm (Lundh, Karim & Quilisch, 2007; Laye-Gindhu & Schonert-Reichl, 2005). However, there have been inconsistent results, with some research indicating non-significant associations in relation to self-esteem and shame (Brown, Linehan, Comtois, Murray & Chapman, 2009; Hawton, Kingsbury, Steinhardt, James & Fagg, 1999). This could be due to how self-esteem and shame has been conceptualised.

Recent findings have established contingent self-esteem; a type of self-worth, founded on meeting objectives based on an external criteria (Park & Crocker, 2008; Bailey & Ricciardelli, 2010). Therefore, self-harming individuals may be "highly preoccupied with their achievements and how they measure up in other people's eyes" (Kernis, 2003; Patrick,

Neighbors & Knee, 2004). Though contingent self-esteem has not been investigated with the focus on self-harm, it has been associated with eating disturbance, alcohol consumption and depressive symptoms (Wouters *et al.*, 2013; Bailey & Ricciardelli, 2010; Neighbors, Larimer, Geisner & Knee, 2004) which are within the realms of self-harm.

While research has investigated shame proneness in relation to self-harm, finding inconsistent results, shame aversion or the tendency to perceive shame as a painful and undesirable emotion could be related to self-harm (Schoenleber & Berenbaum 2012). Research finds that both shame proneness and aversion might be related to personality disorders, including borderline personality disorder and eating related attitudes over and above other measured factors (Schoenleber & Berenbaum, 2010; Manjrekar, Schoenleber & Mu, 2013).

#### **Individual Cognitive Vulnerabilities**

Studies have suggested that cognitive vulnerabilities such as hopelessness and rumination may directly affect the engagement of self-harm (Brittlebank *et al.*, 1990; McLaughlin, Miller & Warwick, 1996; Hoff & Muehlenkamp, 2009; Selby, Connell & Joiner, 2010; Milnes, Owens & Blenkiron, 2002). Alternatively, it has been found that hopelessness may be an inefficient predictor of self-harm compared to a lack of positive future expectancies (the ability to generate and pursue future expectations; O'Connor *et al.*, 2008), while rumination was not significantly related to self-harm (Hankin & Abela, 2011).

In terms of hopelessness, other related constructs that may have more predictive value might not have been previously investigated. One study comparing positive future expectancies and hopelessness in self-harm participants found significantly impaired ability to generate positive future expectancies, but not negative pessimistic concerns (hopelessness) (O'Connor *et al.*, 2008).

Other research has suggested rumination is more complex than previously conceptualised. Research by Treynor, Gonzalez and Nolen-Hoeksema (2003) via factor analysis, suggested two subtypes of rumination, first brooding, a preoccupation with some unachieved standard and second, reflection, which is contemplating on cognitive solutions to problems. Investigations into these two subtypes and self-harm have not been conducted, although both brooding and reflection have been associated with depression (Burwell & Shirk, 2007; Joormann, Dkane & Gotlib, 2006) and suicidal ideation and attempts (Chan, Miranda & Surrence, 2009; O'Connor & Noyce, 2008); both have been associated with self-harm.

#### **Individual Emotional Vulnerabilities**

By means of self-reported methods there is evidence that suggests participation in self-harm could be linked to emotional vulnerabilities such as impulsivity and emotional reactivity (Nock, Wedig, Holmberg & Hooley, 2008; Glenn and Klonsky, 2010). Though, additional research has produced varied conclusions, finding emotional reactivity was an ineffective predictor of self-harm (Bresin, Carter & Gordon, 2013). Conversely, using a combination of self-report and physiological methods, greater emotional reactivity was reported on questionnaires, but no differences in physiological measures were found in self-harming and control participants (Glenn, Blumenthal, Klonsky & Hajcak, 2011). While using behavioural impulsivity tasks no significant differences of impulsivity between self-harm and non-self-harming participants was

found (Glenn & Klonsky, 2010; Janis & Nock, 2009). These varied findings could be due to how emotional reactivity and impulsivity have been measured and conceptualised. In the investigation of emotional reactivity many studies have focused on negative affect in general. Research indicates that particular negative affect states may cause more emotional reactivity and engagement of self-harm (Armey, Crowther, & Miller, 2011; Victor & Klonsky, 2013). Examination has suggested that self-harming individuals only perceive themselves to be more impulsive whereas behavioural measures offer a snapshot of individual's decision-making (Cyders & Coskunpinar, 2011). It may be the case that self-reported and behavioural measures of impulsivity, investigate differing areas of unique subtypes of impulsivity. Research has suggested that impulsivity is a construct with distinct subtypes such as negative urgency (propensity to behave recklessly in response to negative emotions - Whiteside & Lynam, 2001), affective lability (tendency to experience frequent oscillations in emotional intensity and valence – Anestis et al., 2012) and self-control (ability to alter responses in conjunction with ideals and pursuit of long term goals – Baumeister, Vohs & Tice, 2007). Only one study has investigated all three impulsivity constructs and found only negative urgency was significantly associated with self-harm (Dir, Karyadi & Cyders, 2013). Though, the cross-sectional nature and over representation of females of Caucasian decent may limit causal inferences and generalizability.

#### Summary and Challenges of PC and Self-Harm Engagement

Overall, there are still mixed findings regarding each PC and its relationship to self-harm. Further investigations into these recently conceptualised PC may help to improve the fields understanding of self-harm whilst informing the treatment and prevention of self-harm (Klonsky, 2007; Gratz, 2003).

However, there are methodological and conceptual issues that may be hindering the understanding of self-harm engagement. Almost all of the research identified has applied a cross-sectional design. There is a lack of research examining PC of self-harm longitudinally, affecting whether these cross-sectional PC predict the continuation of self-harm over time (Prinstein, 2008). The few researchers that have conducted such investigations found that most PC that have been previously investigated in a cross-sectional design (including most of the PC investigated in this paper), failed to predict the course of self-harm and may not be useful for predicting the subsequent engagement of self-harm (Hankin & Abela, 2011; Glenn & Klonsky, 2011). These studies collected data on PC and self-harm retrospectively using small sample sizes, which raises concerns about the accuracy of recall over the time frame used and possible lack of statistical power to detect significant effects. Investigating these cross-sectional PC longitudinally may help to understand what affects the long term engagement of self-harm, whilst informing the treatment and prevention of such behaviours.

Although studies were included that adopted a definition of self-harm without conscious suicidal intent, we accepted a small number of suicide related studies that may provide us with a larger picture of the literature on self-harm. What is disconcerting is that research into suicidal behaviour (suicide intended self-harm) has found that PC investigated in the area of self-harm (including the PC investigated in this review) have also been investigated in suicide

research and found to have an association (Kleiman & Liu, 2013; Tiet, Finney & Moos, 2006; Overholser, Adams, Lehnert & Brinkman, 1995; Bryan, Ray-Sannerud, Morrow & Etienne, 2012; Miranda & Nolen-Hoeksema, 2007; Dour, Cha & Nock, 2011; Corruble, Damy & Guelfi, 1999). But, there are important differences between self-harm with and self-harm without the intent to die and the psychological correlates for self-harm and suicide are not necessarily the same (Prinstein, 2008). Based on our literature search this supports the theme that very little research has considered self-harm and suicide together or non-suicidal and suicidal self-harm in the investigation of PC compared to research that has separately investigated them (Prinstein, 2008). Such knowledge would help recognize what PC are specifically related to self-harm with or without suicidal thoughts/intent that would help to understand and treat the engagement of self-harm better.

#### **Models of Self-Harm Functions**

As a result of the criticisms and validity of previous models of self-harm engagement being questioned, recent research has attempted to examine alternative functional/motivation models of self-harming (Klonsky, 2007).

#### **Shame Regulation Model**

The shame regulation model suggests that self-harming may be used to down regulate shame among individuals who are prone and averse to that emotion (Schoenleber & Berenbaum, 2010; Schoenleber, 2013). The shame regulation model suggests that individuals with a history of self-harm will have elevated levels of shame proneness and shame aversion (Schoenleber & Berenbaum, 2012). However, very little research has examined the shame regulation model directly. Only one study has specifically investigated this model as a motivation for self-harm. Results indicated that the shame regulation model was positively associated with self-harm motivation and to the total number of types and frequency of self-harm behaviour in participants with a history of self-harm (Schoenleber, 2013). As only women participated in the study it cannot be determined whether the shame regulation model is applicable to males (Schoenleber, 2013). The self-harm motivations were examined retrospectively. Of the 26 female participants who took part in the study, 12 had intentionally self-harmed within the previous year and only 8 within the previous month; therefore the motivations reported by participants who had not engaged in self-harm recently may be susceptible to retrospective report biases (Schoenleber, 2013).

#### **Emotional Cascade Model**

The emotional cascade model suggests self-harm may function as a distraction method from intense rumination and negative effect (Selby, Anestis & Joiner, 2008). According to this model (Selby & Joiner, 2009), "cascades of rumination and negative emotion produce an aversive state and non-suicidal self-injury (self-harm) serves to distract from these cascades, thereby reducing negative emotion" (Selby, Franklin, Carson-Wong & Rizvi, 2013; Selby et al., 2008). Only two studies have investigated the emotional cascade model with the specific focus of self-harm, finding that it mediated the relationship between borderline personality disorders and self-harm (Selby, Anestis, Bender & Joiner, 2009). The two dimensions purported to be involved in the emotional cascade model, interaction between rumination instability and negative affect instability during monitoring, significantly predicted self-harm (Selby et al., 2013). Selby and colleagues (2013) did not focus on certain critical components of the model, namely the distraction effects of self-harm. Selby et al., (2009) studied college students with borderline personality disorder symptoms, which may actually be more highly functioning than individuals diagnosed with borderline personality disorder in clinical settings, reducing the generalizability of these results. While the study used a rumination induction, this was not controlled for differences in what people ruminated about. Individuals with borderline personality disorder may have ruminated on more intensely negative situations than those in the control group, probably affecting the validity of the results (Selby et al., 2009). Self-harm might be used to distract from these cascades and may need further replication.

#### **Four-Factor Model**

Due to the complexity of self-harm, researchers have argued that there may be several functions and reasons for self-harming. As a result Nock and Prinstein (2004) proposed a four-factor model. This model emphasizes two dimensions of reasons to self-harm: 1) intrapersonal negative function (self-harm decreases or distracts from negative affect) and intrapersonal positive function (self-harm produces desired feelings or stimulation) 2) interpersonal positive function (self-harm promotes help-seeking) or interpersonal negative function (self-harm facilitates escape from undesired social situations) (Nock, 2009; Nock, 2010). Recent studies have provided support for the four-factor model using confirmatory factor analysis in psychiatric inpatients and community samples reporting these multiple functions of the model (Nock & Prinstein 2004; Lloyd-Richardson, Perrine, Dierker & Kelley, 2007). While past studies assessing reported reasons of self-harm also support these functions (Briere & Gil, 1998; Kumar et al., 2004). However, there are still some areas that need to be addressed. As all of the aforementioned studies used retrospective self-reported/phenomenology measures of self-harm, it has been suggested that each method is limited by self-harming individuals' tendency to misidentify or misunderstand mental processes (Nisbett & Wilson, 1977; Klonsky, 2007). Moreover, self-harming individuals may not know why they self-harm and may offer inaccurate rationalisations for their behaviour. Others may invent explanations, possibly due to embarrassment of their true reasons (Klonsky, 2007). Almost all of the previous studies (except Lloyd-Richardson et al., 2007) supporting the four-factor model assessed clinical samples (You, Lin & Leung, 2013). It maybe that functions of self-harm differ across clinical and non-clinical populations, but this has not been investigated extensively (You et al., 2013).

#### **Summary and Challenges for Models of Self-Harm Functions**

Overall the shame regulation model, the emotional cascade model and the four-factor model provide novel insight into the possible functions of self-harm. All three are new theories and initial research seems promising, which in time could inform the treatment and prevention of self-harm. There may be some areas of research that all three models share that need to be addressed.

Research that has investigated past models, shame regulation model, emotional cascade model and the four-factor model have been assessed exclusively in the West (Prinstein, 2008; You *et al.*, 2013). Little is known about why people in non-western countries engage in self-harm or whether these models are valid as explanations of the functions of self-harm in non-western countries (You *et al.*, 2013). Given the cultural dissimilarities, there may also be differences in the reasons for and the functions of self-harm (Markus & Kitayama, 1991; You *et al.*, 2013). Future investigations into the functions of self-harm, including the models examined (shame regulation model, emotional cascade model, four-factor model) may need to conduct research in non-western groups.

With regards to the models and research mentioned, the longitudinal stability of self-harm functions remain unknown; whether certain functions for self-harming change or have higher stability for explaining why one self-harms overtime (Klonsky, 2007). It could be the case that endorsements in self-harm functions measured at one time point and measured overtime may be less or greater in explaining self-harming behaviours since endorsements in self-harm functions may change or remain.

#### **Suggestions for Future Research**

In terms of psychological correlates (PC), future research may need to be conducted longitudinally. By examining PC with larger sample sizes, with participants who self-harm with no suicide intent and participants who are at risk of suicidal behaviours, may allow for a distinction between PC of self-harming individuals from those who are at risk of suicidal behaviours.

Future examination of models of the functions of self-harm in general and in the focus of the shame regulation model, the emotional cascade model and the four-factor model should examine the functions of self-harm among relatively large samples of a balanced number of gender, western and non-western participants, within clinical and non-clinical populations; possibly using alternatives to retrospective self-report measures. This will allow the examination of how these functions vary across gender, culture and across self-injurers, as well as examining the longitudinal stability of the shame regulation model, the emotional cascade model and the four-factor model as self-harm functions.

#### **Reflective Commentary**

One of the objectives detailed in the placement contract was to produce a literature review of self-harm and suicide and the psychological factors that affect the recurrence of self-harm. After receiving approval of the contract, I soon realised an error. As my summer project is to focus on the psychological factors affecting escalation from self-harming to suicidal behaviour/suicidality, I would be repeating work. Noticing a trend in research, I decided to focus on the psychological correlates and functions of self-harm and gained approval from my supervisors. This plan was constructed from a less hasty and more extensive investigation of the literature.

Throughout the placement I worked on the literature review but also on developing the summer project. I did not anticipate this before constructing the contract or beginning the placement. This challenged my research skills, time management and workload to produce an effective literature review but also hone and identify what psychological factors to investigate in the summer project. However, both tasks complemented each other. Weekly meetings with my supervisor gave me the incentive to develop each task and indirectly helped me improve my knowledge of self-harm and suicide as well as research skills and time-management by simultaneously developing a theoretically and ethically sound summer project and systematic literature review.

When a draft of the literature review was sent to my supervisors, feedback was given. My supervisors highlighted the fact that at times the sentences were too long and complex which made it difficult to follow. They suggested examining each sentence and considering whether words are repeated too many times and what could be substituted to vary them. Also, are all

the extra words necessary?, are the sentences too long?, is this said as simply as possible? This made my overall literature review more concise, easier to read and helped me cut down words. Utilising the feedback from my supervisors enhanced my written communication and ability to work independently, while making valuable use of supervision.

After the literature review was completed and the summer project developed to an extent, I discussed the main findings of the literature review with my supervisors. One of the areas being the lack of research that has examined the psychological correlates of self-harm and escalation to suicidal behaviour. This supports the motivation for investigating this area in the summer. It was also suggested that investigating PC in a cross-sectional design may not be effective in whether the psychological correlates predict the continuation of self-harm over time. Following discussions with my supervisors it was decided that incorporating a longitudinal design for the summer may not be suitable in the time frame available.

Regarding the work I completed for the summer project, I found five areas not yet investigated to explain why self-harming individuals attempt suicide. Though, following the meeting with my supervisors I realised that I had too many areas for this type of study to investigate. As having too many questionnaires may yield a small turnout in an online format. This could have been avoided and time better spent on developing other parts to the summer project necessary for implementing it in the near future. I should have considered the participants point of view in trying to measure so many areas and not just thought as a researcher.

## Chapter 2

The Subjective Experience of Auditory

Verbal Hallucinations in First Episode

**Psychosis: A Phenomenological** 

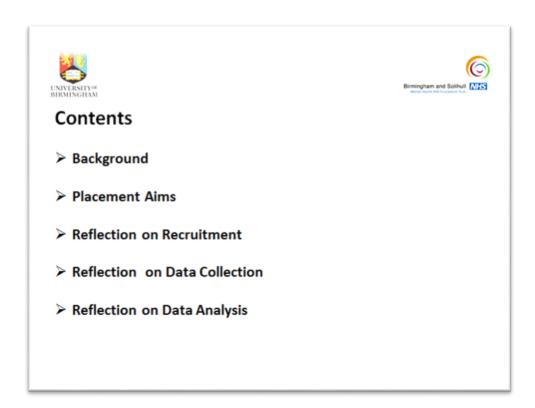
**Investigation:** 

**Reflection on Placement Two** 

#### Introduction



For my spring placement I chose to work within the Schizophrenia and Psychosis Research group situated in the Barberry Mental Health Centre, assisting my supervisor, Dr Rachel Upthegrove, in an on-going project investigating the subjective experience of Auditory Verbal Hallucinations (AVH).



Firstly I will introduce the research project, providing a background to the study. I will then present my placement objectives and reflect on what I learnt by completing these objectives.

# Birmingham and Solhul PURS BIRMINGHAM - Auditory verbal hallucinations (AVH) continues to be understudied in current scientific literature (McCarthy-Jones & Resnick, 2014) - Research has questioned how well AVH research accords with the phenomenology of AVH (Jones, 2010) - Experiences of AVH differ from classification and validated measures of AVH (Flanagan et al., 2012) - Models of AVH fail to account for the variety and diversity of phenomenological characteristics (Largel, Haam, Jones & Raballo, 2010) - Few studies have explored the neural correlates of AVH phenomenology (Allen et al., 2012)

Research suggests that Auditory Verbal Hallucinations (AVH), which refer to the experience of hearing voices in the absence of an appropriate external stimulus, continues to be understudied (McCarthy-Jones & Resnick, 2014). Although they are reported to vary along numerous dimensions, research has questioned how well AVH research accords with the phenomenology of the experience (Jones, 2010). Recent studies suggest individuals personal experiences of AVH may differ from their depiction in the DSM (Diagnostic and Statistical Manual) and ICD (International Classification of Diseases) diagnostic tools (Flanagan *et al.*, 2012). Prominent models of AVH are thought to be insufficient in explaining the full richness of this type of experience, due to their failure to account for the variety and diversity of phenomenological characteristics that are associated with AVH (Larøi, Haan, Jones & Raballo, 2010). Additionally very few studies have explored the neural correlates of AVH phenomenology (Allen *et al.*, 2012).



### **Background**



### Research Aims

To explore the phenomenological quality of AVH in first episode psychosis

To explore whether phenomenological themes are reflected in standardised measures

To pilot the mapping of differing phenomenological experience to neuroimaging models

### Design/Data Collection

 Qualitative cross-sectional study using phenomenological and ethnographic methods, combined with AVH validated measures and functional neuroimaging models.

### Recruitment

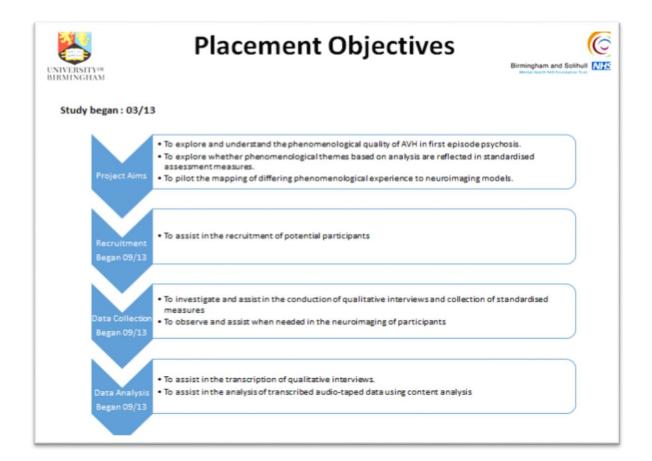
30 Individuals with first episode psychosis recruited from the Birmingham Early Intervention Service

### Analysis

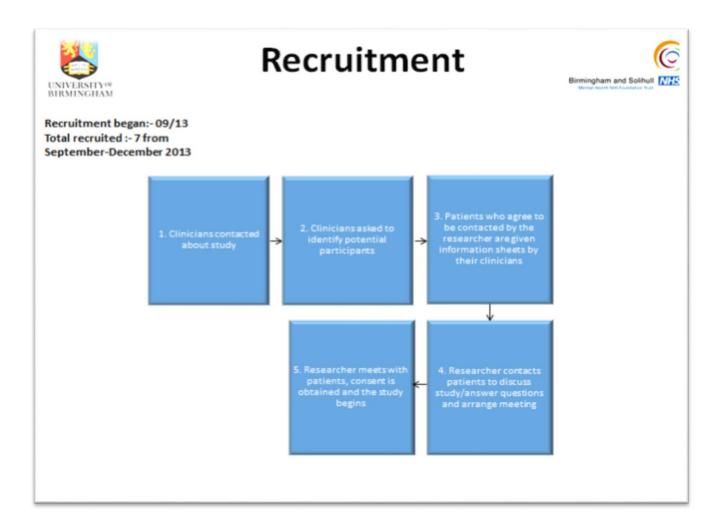
- Audiotaped data:- Content analysis, taking a phenomenological approach
- Standardised measures: Descriptive data and mean scores reported, and compared with emerging qualitative themes
- Neuroimaging:- correlation analyses to examine the relationship between volumes and phenomenological themes

Therefore, the objectives of the project are to explore the experience of AVH in individuals with first episode psychosis, recruited from the Birmingham Early Intervention Service. With the aim of identifying and understanding the phenomenological quality of these events, using phenomenological interviews, ethnographic diary methods and photo-elicitation methods. Which will be analysed using conventional content analysis, adopting a Phenomenological approach; in order to obtain a broad description of the phenomenon by moving from specific facts to general essences, free from preconceptions and presenting it as it is, in an undistorted form (Giorgi, 1997). This will allow an authentic description of the experience of AVH that will contain the possibility of new meanings (Giorgi, 1997; McCarthy-Jones, Krueger, Larøi, Broome & Fernyhough, 2013). This will involve becoming fully immersed in the data and making sense of this as a whole. Transcripts will therefore be read several times before units of analysis are selected. Data will then be organised through a process of coding, creating

categories, and abstraction. First, notes and headings will be written in the margins of the text, describing all aspects of its content. From this, categories that describe the phenomena will be generated, and grouped into sub/higher-order categories (abstraction), which will be named using content-characteristic words. In addition validated measures and neuroimaging models are used to see whether phenomenological themes based on analysis are reflected in standardised assessment measures and to pilot the mapping of differing phenomenological experience to neuroimaging models via a structural and functional MRI scan paradigm.



Following discussions with my supervisor in relation to the projects timeline, my placement objectives complemented the then study objectives. Accordingly, I assisted in the recruitment of potential participants. I also aided in the facilitation of qualitative interviews and standardised measures and when needed, in the neuroimaging of participants. Including assisting in the transcription and analysis of qualitative interviews.



One placement objective was to assist in the recruitment of participants. The protocol stated thirty participants were required. Seven participants had been successfully recruited by the Primary Researcher (PR) on the project between September to December 2013. From January I assisted in the recruitment process, following the protocol of the study. Clinicians working in the Birmingham Early Intervention Service were asked to identify potential participants. Participants who gave permission to be contacted were informed about the study. Arrangements were made to meet those wishing to proceed, in order to obtain consent and to complete standardised measures, besides distributing diaries and cameras. Interviews were organised and towards the latter stage of recruitment, arrangements for participants' involvement in the neuroimaging phase of the study were arranged.



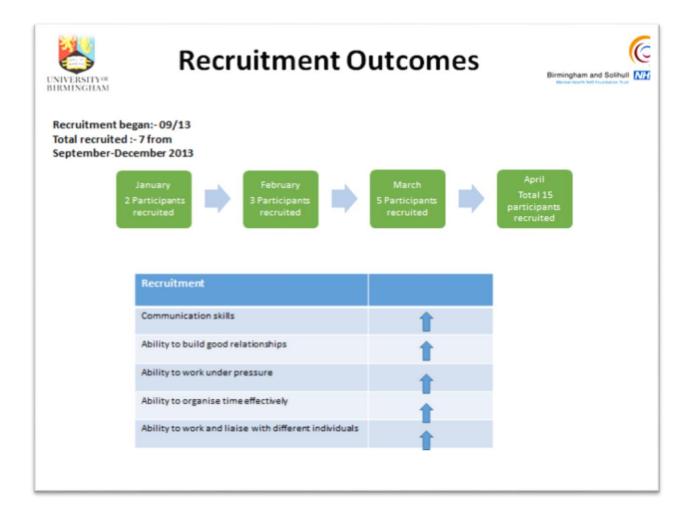
Initially I observed and assisted the PR. This not only helped me understand the whole process, but highlighted the necessary communication skills needed to achieve this objective, including the ability to liaise and build good relationships with staff/clinicians and potential participants.

Subsequently, we decided to expand our canvassing area. Prior to this, recruitment had focused on the south and Solihull teams of the Birmingham Early Intervention Service. It was decided that I independently focus on north and south teams, while the PR focused on the south and Solihull. At this time my supervisor set a target of recruiting three participants a month.

I introduced myself and organised meetings with the teams. This required co-ordinating my own time with clinicians schedules to allow the north and south teams to provide me with potential participants. I soon realised I had to be prepared for anything. For example, whilst attending an appointment with a nurse to see a potential candidate for the study; I had only taken with me the necessary materials needed for that one potential participant. I was asked by the nurse if I wanted to accompany her on further appointments that day. Despite not having enough materials, I went along to the appointments and discussed the study with the unexpected others. If they were interested I was able to organise times, dates and locations to discuss the study with relevant materials ready.

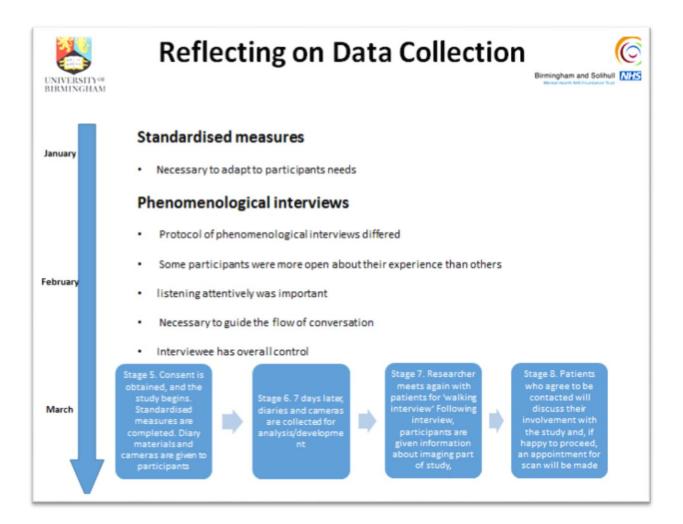
I appreciated the difficulty in recruiting participants. With symptoms exacerbated at times, it wasn't always suitable for certain individuals to take part or be introduced to the study as indicated by their clinicians. My time management became pivotal in arranging meetings with Community Psychiatric Nurses (CPN) when potential participants were not at risk, while also completing other objectives.

There were occasions where individuals became distressed. I recall one incident when a participant became distressed demanding that he didn't want to do the MRI. I was able to stay calm and manage the situation by listening to him and correcting him, explaining that he had no obligation to participate in this part of the study.



By dealing with the challenges of recruitment I was able to meet this objective and exceed the quota of participants required. Recruiting eight participants from January to the end of March, reaching the halfway point of the total required for the study.

I feel I have improved my organisational skills by coordinating my time with that of clinicians and participants and being able to work under pressure, along with improving my communication skills and ability to build good professional relationships.



One of my objectives was to assist in the conduction of qualitative interviews and collection of standardised measures.

Initially I observed and assisted in the data collection phase. This followed the study protocol, where standardised measures were completed first with diary materials and cameras given to participants. Followed by the conduction of a walking interview at the botanical gardens in Edgbaston, using the diaries and photos to stimulate discussion during the interview.

Following the protocol, standardised measures were to be administered after consent was taken and before the qualitative interviews. When I began to take the lead, I soon realised this was not always followed. Due to participants' experiences of AVH, they were not always able to complete the measures on the agreed day or before the interview. Therefore, we had to adapt to their needs, which required managing my schedule in order to rearrange times to complete the questionnaires.

When I began to lead the interviews, participants generally didn't partake in the camera or diary part of the study nor wanted to do the walking interview; instead wanting to perform the interview in their homes. Consequently, we obliged by conducting the interviews without the photos and diaries in their homes. This required me to ask more open-ended questions to gain insights into their experiences. As the aim of the study was to obtain a deeper insight into the experience of AVH, the use of the walking interview enabled participants to express their thoughts more easily and clearly, putting them at ease in a setting outside a clinical environment. I felt that conducting the interviews in the homes of participants also offered them an equally if not more comfortable, personally known environment that allowed us to gain valuable insight into their experiences. As our aim was to discover the rich experience of AVH, the use of photos and diary entries made by participants, theoretically and in practice allowed us to draw from the participant a richer dialogue of their experience; without them the interviewer alone was the only facilitator of this. This in my opinion meant more responsibility for the interviewer to guide and ask the type of questions that met the aims of the study process in gaining the rich phenomenological experience of AVH. Having the photos and diary entries would have helped guide the interview, although asking more open ended questions and listening carefully to what the participant had to say about their

experience of AVH, I feel it did not impact the richness of AVH experience that was documented and discussed in these interviews.

Some participants were more open about their experience than others and gave a rich and at times complex insight into their AVH. Effective listening skills were required in order to understand and pick up on topics to confirm and question further.

At times participants would diverge from speaking about their AVH. Initially I wasn't sure when the right time was to try and guide the conversation back to their experience of AVH. However, by observing the PR, I would wait until they had spoken about this divergent topic or I would try guiding the focus of their conversation back to AVH. This prevented cutting off the interviewee or offending them in anyway.

We also had participants that were reticent about sharing their experiences. Therefore, prompting methods (e.g. "that must have been quite difficult" or "that must be quite difficult") were used to allow us to connect and promote conversation, with limited effect.

On reflection I felt disheartened by these occasions, but I now appreciate that the interviewee has overall control in the amount that they want to say. Their history in experiencing these voices maybe distressing and difficult to relay, especially to strangers.



### **Reflection on Data Collection**



### Neuroimaging

- · Took place at the Birmingham University Imaging Centre
- · Lacked knowledge in the use of Magnetic Resonance Imaging

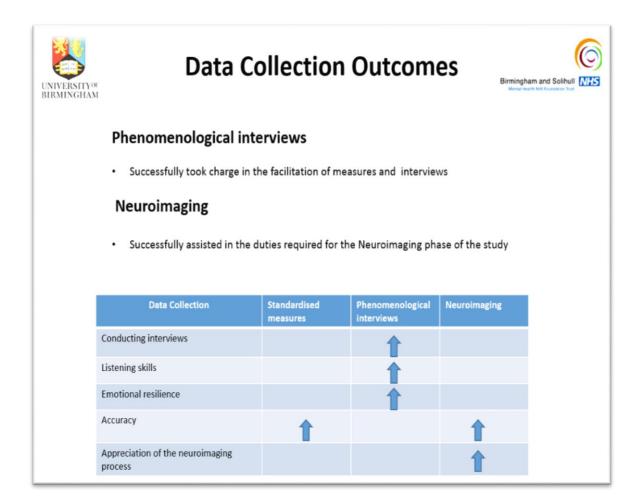
### However I had other duties:

- · Arranged appointments to attend the Birmingham University Imaging Centre
- · Arranged transport for participants
- · Escorted participants to the scan
- Assisting in recording clinical neuroimaging information
- · Importance of accurate recoding of information and utilising supervision

I also assisted when needed in the neuro-imaging phase of the project. Participants were invited to attend the Birmingham University Imaging Centre for an MRI scan. As I didn't have the relevant qualifications to assist in the actual scan, I arranged MRI sessions, organised transport and reimbursement for participants. I also met and escorted participants to the Imaging centre and answered any questions they had.

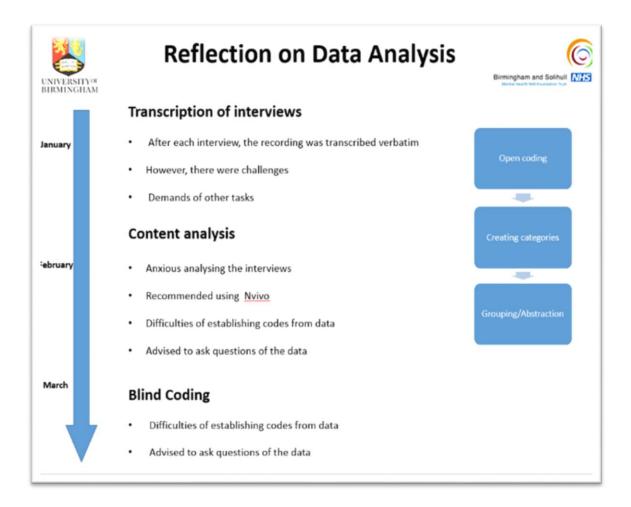
I facilitated the completion of the MRI safety screening questionnaire with participants prior to the scan. Therefore, accurate record keeping was necessary, as well as utilising supervision. For example, when completing the MRI safety questionnaire with a participant, one question asked whether the individual has a tattoo. Although the participant did, he assured me that he

had been in a previous MRI scan with no adverse effect. As tattoo ink contains iron oxide, the MRI can cause the area to heat up. I therefore made a note of what he said and spoke to my supervisor, before letting him go in. My Supervisor then took it from there.



Through completing the placement I was able to successfully take charge in the facilitation of standardised measures, conduction of phenomenological interviews and assistance in the neuro-imaging of participants.

By assisting in the data collection phase, I have become more proficient in conducting interviews with both open and closed individuals, whilst improving my listening skills and emotional resiliency. It has enhanced my ability to collect accurate information through the standardised and neuroimaging phase of the study, while also allowing me to improve my understanding of the MRI.



My placement objectives also involved assisting in the analysis part of the study and transcribing interviews. Due to the demand on recruitment my schedule was at times sporadic, with last minute changes and on the day interviews due to participants' schedules, making time for transcribing difficult. This tested my ability to balance the demands of recruitment, data collection and the transcription and analysis of work during the placement; demonstrating the need for organising my time in advance.

Another objective was assisting in the analysis of transcribed audio-taped data using content analysis, while taking an overall phenomenological approach. At this point in the project, analysis was focused on the process of open coding and creating categories, involving reading

and re-reading the transcripts to become fully immersed in the data. Data was then organised through a process of coding where initial notes and headings were noted, describing different aspects of its content. From this, categories that described the phenomena were generated and named using content-characteristic words.

Initially I felt anxious in participating in the analysis of transcripts, as I had not had much experience in qualitative analytical research or use of content analysis. Following discussions with the PR, I was advised to use NVivo; a qualitative data analysis software used in deep levels of analysis. It allowed me to organise and analyse the data more efficiently, as well as identify trends in codes throughout the transcribed interviews.

I was also assigned to blind coding the analysed/coded interviews conducted earlier in the project to determine the reliability of the original coded interviews. In analysing current interviews and blind coding previously coded interviews, there were difficulties in identifying and establishing whether certain aspects of the transcriptions fit with established codes or not. Discussing this in our weekly meetings, my supervisor suggested asking myself certain questions when analysing the transcripts. E.g. If I couldn't explain to myself and others why this particular part of the data belongs to this code and explain the code at all, then that code and that aspect of the data doesn't belong there, which helped tremendously.



### **Data Analysis Outcomes**



### Transcription of interviews

Transcribed interviews

### **Content analysis**

- Analysed interviews
- · Development of new codes

### **Blind Coding**

- · Coded previously analysed transcripts
- General agreement between analysed interviews
- Development of new codes

Code: Helping → Links to Relationship 115 (165-190): "so if I'm family members would so like talk me through situations "... obviously you think somebody helping you

Code: Threatening 101 (48-50): "We're going to kill you"... sometimes they, they were threatening me that they were going to kill me

Data Analysis	
Organisational skills	1
Knowledge of qualitative analytical methods	1
Knowledge of qualitative software	1
Knowledge of AVH	1

By completing this placement I was able to transcribe and analyse all the interviews that were conducted throughout my time there. I was able to blind code all previously analysed interviews by the PR, finding a general agreement with the coding (Appendix 2a and 2b). Though new codes, not previously established were also found (Appendix 2c). For example the identification of a code: Helping – links to relationships, found that the experiences of AVH were similar to family members providing support in dealing with varying situations.

Through completing the data analysis objectives, I feel I have improved my organisational skills by managing my time transcribing and analysing interviews along with other demands of the placement. It has allowed me to improve my knowledge of qualitative methods and

software (e.g. content analysis, blind coding and the use of NVivo), as well as the richness and diversity of AVH experience.

### **Chapter 3**

## Correlates of Suicidality in Self-Injuring Populations

### Correlates of Suicidality in Self-Injuring Populations

### **Abstract**

The purpose of this study was to explore possible risk and protective correlates of suicidality amongst self-injuring individuals. Using self-reported survey responses from 323 self-injuring participants, a cross-sectional internet web-based design was employed to determine whether attachment, self-forgiveness and positive self-appraisals significantly predicted suicidality in self-injurers. Results indicated that dismissing attachment was positively associated with suicidality; emotion coping and support seeking positive self-appraisals negatively predicted suicidality, as did self-forgiveness. Findings indicate that the perceived ability to cope with emotions and gain support and the ability to self-forgive may protect against suicidality in selfinjurers. Conversely the presence of dismissing attachment may increase the risk of suicidality. In the long term investigations such as this could better inform theory, assessment and treatment of suicidality in self-injurers. Replication of these results in a longitudinal design with more ethnically and age diverse samples and balance of gender is needed to strengthen the confidence in the present study's findings and to further explore the relationship between these constructs and suicidality. In addition, studies establishing the importance of Attachment, Self-forgiveness and Positive self-appraisals constructs role in moderating the impact of risk on suicidality are needed to further delve into the relationship between these proposed constructs and suicidality in self-injurers.

### Introduction

In the 21<sup>st</sup> century, suicide has become a problem of great concern, representing 1.8% of the total world burden of disease (Kleiman & Liu, 2013; World Health Organization, 2007). In the UK it is the fifth leading cause of death among all age groups (Office for National Statistics, 2012) and tenth leading cause of death in the USA (Centres for Disease Control and Prevention, 2012; Kleiman & Liu, 2013). Suicidal behaviour/suicidality does not often occur at random or without warning (Hansen, 2013). Recognising at risk individuals has become an important focus of research and governmental action in the UK (Madge *et al.*, 2008; Dennis, 2002; Department of Health, 2002 & 2012). Even with decades of research, the prediction of suicidal risk remains relatively inaccurate (Hansen, 2013). In recent years clinicians not only have identified increased prevalence of suicidality in certain populations but also suggest an increased risk of engaging in other self-injurious behaviours (Department of Health, 2012; Gosney & Hawton, 2007; Greydanus & Shek, 2009). Experts have observed an increased risk of suicidality/suicidal behaviour among self-harming populations (Bebbington *et al.*, 2010).

### Co-occurrence of Self-Harm and Suicidal Behaviour

Self-harm and suicidality are forms of self-injurious behaviour but evidence supports the distinct nature of these constructs (Anestis, Knorr, Tull, Lavender & Gratz, 2013; Hamza, Stewart, & Willoughby 2012). Self-harm refers to the intentional self-inflicted injury of body tissue without suicidal intent, whereas suicidality or suicidal behaviour refers to a spectrum of behaviours (Nock & Favazza 2009; Andover, Morris, Wren, & Bruzzese 2012). Suicide attempts refer to intentional and direct self-injury with the intent to die (Victor & Klonsky 2014; Nock 2010; Nock & Favazza, 2009), while suicidal ideation and planning signify

thinking about and planning to end one's life (Hamza *et al.*, 2012; Nock 2010; Nock *et al.*, 2008). Suicidal behaviour/suicidality is associated with ending one's life, self-harm is associated with multiple motives/functions (see Chapter 1 pg21-23) (Nock, 2010), occurring more frequently (Muehlenkamp, 2005), with lower lethality methods (e.g. cutting) compared to suicidal behaviour (e.g. hanging) (Whitlock et al., 2011; Navaneelan 2012; Andover & Gibb 2010). For the purposes of this paper suicidality/suicidal behaviour is defined as suicidal ideation, planning and/or suicidal attempts (McLaughlin, O'Carroll & O'Connor, 2012).

Despite differences there seems to be frequent co-occurrence of self-harm and suicidality (Hamza et al., 2012, Victor, Klonsky 2014). Among 10-25% of community samples and 30-70% of clinical samples of adolescents and adults report histories of self-harm and suicidality (Nock, Joiner, Gordon, Lloyd-Richardson, Prinstein 2006; Wilcox et al., 2012; Bebbington et al., 2010; Asarnow et al., 2011). This is further supported by cross-sectional and longitudinal findings that a history of self-harm may be one of the strongest predictors of suicidality (Turner, Layden, Butler & Chapman, 2013; Hamza et al., 2012; Whitlock et al., 2013). This cooccurrence can be explained in part by the interpersonal-psychological theory of suicide (Joiner, 2005; Andover et al., 2012). According to this theory, individuals who are at risk of suicidality are those possessing the desire (through perceived burdensomeness or thwarted belonging from significant others and/or society) and the capability to do so (Hansen, 2013; Joiner, 2005). The theory states individuals with a history of self-harm increases the acquired capability for suicidality by habituating the fear and pain associated with it (Joiner, 2005; Hamza & Willoughby, 2013; Hamza et al., 2012). However, not all self-injurers engage in suicidal behaviour (Turner et al., 2013; Whitlock & Knox 2007). Thus there may be identifiable psychological factors that influence suicidality (Cox et al., 2012).

### **Examining the Link Between Self-Harm and Suicidality**

Understanding what differentiates self-injurers who do or do not show concurrent suicidality is of critical importance to clinicians (Whitlock *et al.*, 2013), particularly in the areas of theory, risk assessment and intervention (Hamza *et al.*, 2012; Brausch & Gutierrez, 2010; Muehlenkamp & Gutierrez, 2007). Researchers have begun to evaluate the link between self-harm and suicidality (Victor & Klonsky 2014; Hamza *et al.*, 2012), comparing self-injurers with varying endorsements of self-harm and suicidality across various proposed risk factors (Andover *et al.*, 2012).

Studies examining demographic factors, have found that females (Liang *et al.*, 2014; Swahn *et al.*, 2012) and Caucasians with a history of self-harm were more vulnerable to suicidality compared to males and black and minority ethnic groups (Sansone, Sellbom, Chang & Jewell, 2012; Selby & Joiner, 2008). This is in contrast to previous research investigating ethnicity, although the explicit nature of self-injurious behaviours was not clarified (Bhui, McKenzie & Rasul, 2007; Shek & Yu, 2012; Cooper *et al.*, 2010). As large majorities of the samples studied were females and Caucasian, this may have limited the possibility to analyse the impact of gender and ethnicity (Liang *et al.*, 2014; Swahn *et al.*, 2012; Sansone, *et al.*, 2012; Selby & Joiner, 2008).

Investigations into environmental factors found binge drinking and sexual experiences were specifically associated with co-occurring self-harm and suicide attempt (Swahn *et al.*, 2012; Liang *et al.*, 2014). Researchers focusing on childhood adversity have found that a history of self-harm and suicidal behaviour was significantly related to greater accounts of trauma

compared to participants who only self-harmed (Whitlock & Knox 2007; Asarnow *et al.*, 2011). However, Boxer (2010) found no such effect.

Researchers investigating cognitive risk factors have shown that greater negative self-evaluations, negative self-statements, hopelessness and less perceived familial support in self-injurers with histories of suicidality compared to those who only self-harm (Muehlenkamp & Gutierrez, 2007; Claes *et al.*, 2010; Wolff *et al.*, 2013). Another study found no differences in hopelessness and self-evaluations between self-injurers with or without suicidal behaviour (Brausch & Gutierrez, 2010).

Examinations into emotional vulnerabilities found self-injurers with a history of suicidal behaviour reported higher depression compared to samples just engaging in self-harm (Hamza & Willoughby, 2013; Dougherty *et al.*, 2009). Others found no significant differences (Brausch and Gutierrez, 2010; Muehlenkamp & Gutierrez, 2004). Since Hamza and Willoughby (2013) and Dougherty *et al.* (2009) used total scores of instruments chosen to measure depression, it is possible that certain subtypes of depression are more associated with co-occurring self-harm and suicidality. It was revealed that self-injurers engaging in suicidal behaviour reported significantly greater anhedonia than participants who self-harm only (Muehlenkamp & Gutierrez 2007; Brausch & Gutierrez, 2010), but no difference in dysphoric mood or somatic symptoms of depression (Brausch & Gutierrez, 2010). Others have found that a history of self-harm and suicidality may be related to greater anger (Guertin, Lloyd-Richardson, Spirito, Donaldson & Boergers, 2001), social anxiety, neuroticism and borderline personality disorder symptoms (unstable interpersonal relationships, impulsivity, emotion

dysregulation) than a history of self-harm alone (Liang *et al.*, 2014; Muehlenkamp, Ertelt, Miller & Claes, 2011; Hamza, & Willoughby, 2013).

These studies suggest that self-injurers who engage in suicidal behaviour may be associated with greater levels of risk factors (Andover *et al.*, 2012; Hamza *et al.*, 2012), which could help in the early identification of risk for suicidality in self-injurers. These risk factors, however, also tend to identify large groups of self-injurers, the majority of whom will not experience suicidality (Hawton & van Heeringen, 2009; Johnson *et al.*, 2010b). Research argues that the predictive validity of these proposed risk factors is limited, where identifying self-injurers at risk of suicidality result in a high number of false positives (Powell, Geddes, Hawton, Deeks & Goldacre, 2000; Johnson *et al.*, 2010b; Law & Shek, 2013). A meta-analysis examining the predictors of suicidality among self-injurers found most of these risk factors displayed negligible associations with suicidality (Victor & Klonsky, 2014). These approaches, therefore, are unable at present to explain why some self-injurers will engage in suicidal behaviour when others appear protected (Bolton, Gooding, Kapur, Barrowclough & Tarrier, 2007; Johnson, Gooding, Wood & Tarrier, 2010a).

The presence of protective factors may be one of the reasons why self-injurers are protected from suicidality and the impact of risk factors (Johnson *et al.*, 2010b). There has been far less research on the role of protective factors of suicidality among self-injurers (Hansen, 2013; Nock *et al.*, 2008), leading to a lack of consideration of protective factors in many suicide assessment instruments (Kene-Allampalli, Hovey, Meyer, & Mihura, 2010; Posner *et al.*, 2011) and sub-optimally effective interventions in clinical practice (Brent, 2011). This could be due to researchers' conceptualisation of constructs as risk or protective factors. An alternative approach called the "buffering hypothesis," may be preferable (Johnson, Wood, Gooding,

Taylor & Tarrier 2011). This suggests both risk and protective factors can be understood as bipolar dimensions whereby defining constructs as either protective or risk factors is fairly subjective, as constructs that have been conceptualized as protective are the positive extremes of factors conceptualized as conferring risk and vice versa (Hansen 2013; Johnson *et al.*, 2011).

Given the high risk of suicidality amid self-injurers, it's essential to determine more accurate predictors of suicidal behaviour amongst this group. Endorsing the Buffering Hypothesis' conceptualisation of protective and risk factors may aid in the identification and investigation of potential correlates that more accurately determine under which conditions self-injurers may/may not be at risk of suicidality (Muehlenkamp & Gutierrez, 2007; Hamza *et al.*, 2012).

### **Attachment**

Attachment theory suggests early relationships influence the development of attachment styles which are internal working model representations of the self and others, functioning as templates for later relationships (Joly, 2014; Bowlby, 1969, 1988; Feeney, 1999; Merz & Consedine, 2009; Mikulincer & Shaver, 2007). Bartholomew and Horowitz (1991) proposed a two-dimensional construct of attachment where different combinations of two poles of self (the degree of self-worth versus dependency on others approval) and other (the degree of seeking out or avoiding closeness in relationships) yields one secure/adaptive and three insecure patterns: secure, preoccupied, fearful and dismissing (Zeyrek, Gençöz, Bergman & Lester 2009; Bartholomew 1990; Lessard & Moretti, 1998; Bartholomew & Horowitz, 1991). These patterns differentially regulate and predict behaviours, thoughts and feelings across the lifespan (Levi-Belz, Gvion, Horesh & Apter, 2013; Sheftall, Mathias, Furr & Dougherty, 2013;

Cassidy & Shaver, 2008). Secure attachment is an important determinant of well-being in Caucasian and non-Caucasian populations (Merz & Consedine, 2012; Mikulincer & Shaver, 2007; Peter, Roberts & Buzdugan, 2008; van Ijzendoorn & Bakermans-Kranenburg, 1996), related to reduced depression, social disconnection, personal inadequacy (Paterson, Pryor & Field, 1995) and the fostering of adaptive problem solving and support seeking strategies (Schaffer, 1993; Florian, Mikulincer, Bucholtz, 1995). Insecure attachment patterns reduce protection in times of stress contributing to negative outcomes (Mikulincer and Shaver, 2008; Grunebaum *et al.*, 2010) and increase the utilisation of maladaptive coping strategies (Farber, 1995, 2000). Moreover insecure attachment may be associated with difficulties depending on others and fears of abandonment (Allen, Porter, McFarlan, McElhaney & Marsh, 2007; Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987).

Given that attachment has been associated with self-harm and suicide ideation separately in non-self-injuring populations (Kimball & Diddams, 2007; Davaji, Valizadeh & Nikamal, 2010; Lessard & Moretti, 1998; Zeyrek *et al.*, 2009; Bostik & Everall, 2007), attachment could be pertinent to suicidality in self-injurers. Each style may lead to differences in the expression of suicidality (Sheftall *et al.*, 2013; Ainsworth *et al.*, 1978; Brennan, Clark & Shaver, 1998). Secure attachment may provide an inner resource to cope with stressful experiences, allowing for successful navigation throughout life; which protects against suicidality in self-injurers (Crowell, Fraley & Shaver, 2008; Mikulincer & Florian, 1998). Considering the desire for suicidal behaviour (thwarted belonging and burdensome) as conceptualised by the interpersonal-psychological theory of suicide, insecurely attached self-injurers with possible negative expectations of the self and/or others may prevent them from successfully connecting to significant others in society (Mikulincer & Nachshon, 1991). This distorts self-injurers perceptions that others will want to help support them, in turn amplifying feelings of

disconnection and worthlessness, leading to greater risk of suicidality (Levi-Belz *et al.*, 2013; Levi *et al.*, 2008).

### **Self-forgiveness**

Self-forgiveness refers to motivational changes to perceived transgressions where responses are transformed from negative to neutral or positive and one becomes decreasingly motivated to retaliate against the self (Terzino, 2010; Hall & Fincham 2005; Thompson et al., 2005). Self-forgiveness has important consequences for well-being (Webb, Toussaint & Conway-Williams, 2011; Terzino, 2010). According to Hall and Fincham's (2005) model of selfforgiveness, an ability to self-forgive results in adaptive perceptions of the self (Strelan, 2007), severity of transgressions and increased motivation to act compassionately towards the self, resulting in positive outcomes. Accordingly, self-forgiveness has been associated with reduced depression, hopelessness, negative self-evaluations, anger, shame and guilt (Strelan, 2007; Walker & Gorsuch, 2002; Zechmeister & Romero, 2002; Maltby, Macaskill & Day, 2001; Mauger et al., 1992). According to the model, a lack of self-forgiveness causes distorted perceptions of the severity of interpersonal/intrapersonal transgressions leading to intense feelings of self-resentment and self-condemnation and the pronunciation of maladaptive behaviour for such transgressions (Griffin, 2014; Strelan, 2007; Yelsma, Brown & Elison, 2002; Hall & Fincham, 2005). Low self-forgiveness has been associated with negative outcomes, including binge drinking, exacerbation of depressive and borderline personality disorder symptoms and anger (Enright and Human Development Study Group, 1996; Scherer, Worthington Jr, Hook & Campana, 2011; Güloğlu & Karaırmak, 2013, Terzino, 2010; Zettle, Barner & Gird 2009; Fincham & Beach, 2002; Wedig & Nock, 2007).

Given the cognitive and emotion related vulnerabilities previously documented to impact suicidality in self-injurers and that self-forgiveness has been associated with lower rates of self-harm (Westers, 2010; Westers, Rehfuss, Olson & Biron, 2012), and the buffering of anger on suicidality (Hirsch, Webb & Jeglic, 2011; Ahadi & Ariapooran 2009) in depressed patients; dispositional self-forgiveness may be particularly salient for suicidality in self-injurers. Self-injurers with low self-forgiveness may engage in self-harm to carry out and affirm the punishment they feel they deserve for the transgression they feel they have committed (Westers et al., 2012; Deiter-Sands & Pearlman, 2009). Considering the concept of acquired capability of suicidality, self-injurers exposure to self-harm over the course of a lifetime may increase self-injurers acquired capability for suicidality (Anestis, Tull, Lavender & Gratz, 2014). Self-harm may be considered less painful, severe and unequal punishment for transgressions (Westers et al., 2012). Self-injurers may escalate to suicidality to equal the perceived transgressions. The ability to self-forgive could weaken the translation that suicidality is a potential solution (Hansen, 2013), possibly conferring resilience against suicidality that might arise with an inability to self-forgive (Hall & Fincham, 2005).

### Positive self-appraisals

Positive self-appraisals are defined as the self-efficacy or capacity to cope with difficult life circumstances (Johnson *et al.*, 2010b). According to the Schematic Appraisals Model of Suicide (Johnson, Gooding & Tarrier, 2008), the self-appraisals concerning the perceived ability to cope with negative emotions (emotion coping positive appraisals), perceived ability to problem solve (problem solving positive appraisals) and perceived ability to gain support (support seeking positive appraisals) to cope with difficult situations or life circumstances

(Johnson et al., 2010a; Johnson et al., 2010b) are thought to be important concerning mental health and well-being (Johnson et al., 2008; Bandura, 1977). The model suggests the level of positive self-appraisals affects the degree to which the ability to cope with difficult situations are perceived as being implementable, stressful, challenging, or an opportunity (Roe, Yanos, & Lysaker, 2006). The theory suggests low positive self-appraisals may encompass distorted evaluations to cope with difficult situations, producing intense feelings of defeat and entrapment (Williams, 1997; Johnson et al., 2008; Panagioti, Gooding, Taylor & Tarrier, 2012) and the likelihood of engaging in maladaptive behaviours. High positive self-appraisals provide more positivity and confidence in one's ability to cope with difficult life circumstances, reducing the risk of maladaptive behaviour (Johnson et al., 2010b). Accordingly, high positive self-appraisals have been found to reduce emotional instability, emotion dysregulation, depression, anxiety, alcohol abuse and improve well-being (Albal & Kutlu, 2010; Karademas, 2006; Rodkjaer et al., 2014; Tarrier, & Gooding, 2007). Low positive self-appraisals have been found to result in the opposite effect.

Given the documented emotional and cognitive vulnerabilities previously discussed, positive self-appraisals may be relevant to suicidality in self-harming individuals. Research has found that high support seeking, problem solving and emotion coping positive self-appraisals, reduced the risk of suicidality in people with a history of trauma and in schizophrenia-spectrum populations (Deeley & Love, 2012, 2013a, 2013b; Johnson *et al.*, 2010a; Johnson *et al.*, 2010b; Panagioti, Gooding, Taylor & Tarrier, 2014; Park *et al.*, 2014; Lieberman, Solomon & Ginzburg, 2005; Thompson, Kaslow, Short & Wyckoff, 2002; Chang, 2002; Esposito & Clum, 2002). Self-injurers with low levels of positive self-appraisals may cause doubts and negative beliefs in one's abilities to cope with difficult situations, which may amplify suicidal risk (Panagioti *et al.*, 2012). High positive self-appraisals in contrast may represent a source of

resilience against suicidality, with greater self-efficacy/confidence in the ability to cope with difficult life circumstances and more able to engage in adaptive behaviour.

### **Study Aims**

The aim of this study was to extend the empirical investigation of potential risk and protective correlates that may differentially predict suicidality in populations with a history of self-harm. The purpose of this research was to investigate whether attachment, self-forgiveness and positive self-appraisals predict suicidality in self-injurers, using a correlational internet webbased survey design. Derived from the above theoretical literature of self-forgiveness, positive self-appraisals and attachment styles possible relationship with suicidal behaviour, hypotheses for this study were as follows:-

- 1. Insecure attachment will positively predict suicidal behaviour; including dismissing attachment, preoccupied attachment and fearful attachment. In contrast secure attachment will negatively predict suicidal behaviours.
- 2. Self-forgiveness will negatively predict suicidal behaviour.
- 3. Positive self-appraisals will negatively predict suicidal behaviour; including support seeking, emotion coping and problem solving positive self-appraisals.

### Method

### Recruitment

After obtaining approval from the University of Birmingham's ethical committee, data was acquired through self-harm related websites. Permission was sought from websites before inviting potential participants to take part in the study. A series of online searches, using terms such as "self-harm forums", "self-harm support", "self-harm groups" and "self-harm websites" identified fifteen websites/groups of which seven (Appendix 3a) granted permission to post a link and description of the survey on their websites. In each case, emails were sent to potential websites detailing information about the proposed study and requesting formal permission from the administrator. Websites were regularly checked to ensure the link to the survey had not gotten lost in the forum and if necessary was reposted.

### **Procedures and Design**

An online cross-sectional internet web-based design was employed for the purposes of the study. Potential participants interested in taking part in the study were instructed to click the link posted on the self-harm websites. This would take them to the anonymised survey (Appendix 3b), hosted on LimeSurvey that was available to access for four weeks between May and June 2014. Before beginning the survey, participants were asked to read the information sheet that would appear after clicking the link which determined their eligibility for the study and provided a clear description of the nature of the survey. Inclusion criteria were: current or past experience of self-harming and age 16 and over. Individuals who met the study's inclusion criteria were instructed to confirm their willingness to participate in the study and proceed to the survey. On completion of the survey, participants were provided with

contact details for self-harm support services and groups in order to minimise possible undue distress from participating in the study. The survey's anonymised responses were automatically sent to the primary researcher's LimeSurvey account.

### **Participants**

A total of 332 participants with a history of self-harming took part in the study between May and June 2014. Participants who reported never engaging in self-harm (N = 9) were omitted, resulting in a total of 323 cases retained for analyses.

### **Measures**

### Demographic Information:

Participants were asked to report the following demographic characteristics: age, gender, educational status, relationship status and ethnic background.

### **Clinical Information:**

Participants were asked to self-report clinical characteristics including: lifetime diagnosis of mental illness, current treatment for mental illness, current medication use, alcohol consumption and illicit substance use.

### Deliberate Self-harm Behaviours Questionnaire- History of Deliberate Self-harm Subsection:

The Deliberate Self-harm Behaviours Questionnaire- History of Deliberate Self-harm (Harris & Roberts, 2013) consists of five closed questions, where participants choose the most appropriate answer(s) from a list of options. These concern one's own experience of self-harm ("Have you ever self-harmed?"), ("Do you currently self-harm?"), the age at which one began self-harming ("How old were you when you first started self-harming?"), the number of times one self-harms ("How often do you self-harm?") and ones method of self-harm ("When you self-harm/self-harmed, what do/did you usually do?").

### Suicidal Behaviours Questionnaire

The Suicidal Behaviours Questionnaire (Osman *et al.*, 2001) is a four-item measure which assesses the level of suicidality experienced by participants. Total score comprises: lifetime suicidality including thoughts, plans and attempts (i.e. "Have you ever thought about or attempted to kill yourself?"); suicide ideation in the past year ("How often have you thought about killing yourself in the past year"); communication of intent to commit suicidal behaviour ("Have you ever told someone that you were going to commit suicide, or that you might do it") and likelihood of future suicide attempts ("How likely is that you will attempt suicide someday") (Osman *et al.*, 2001). Possible scores range from 3 to 18, with higher scores representing greater levels of suicidality risk. Osman *et al.* (2001) have shown that the questionnaire is a reliable measure in both clinical and nonclinical samples, with an alpha coefficient ranging from acceptable ( $\alpha$  =0.76) to good ( $\alpha$  =0.88) reliability. The Cronbach's alpha was 0.73 in the present sample, suggesting acceptable internal consistency.

### The Relationship Questionnaire:

The Relationship Questionnaire (Bartholomew & Horowitz, 1991; Zeyrek *et al.*, 2009) consists of four paragraphs reflecting four attachment styles: secure, dismissing, preoccupied, and fearful. The measure is designed to obtain continuous ratings of each of the four attachment patterns by using participants' perceptions of how they behave and feel in relationships. Respondents read four short paragraphs describing each style and then rate how each style corresponds to their general relationships using a 7-point Likert scale, ranging from 1 (disagree strongly) to 7 (agree strongly). The Relationship Questionnaire has been reported to have good test–retest reliability (Sümer and Güngör, 1999).

### The Heartland Forgiveness Scale- Self Forgiveness Subscale:

The Heartland Forgiveness Scale- Self Forgiveness Subscale (Thompson *et al.*, 2005; Hansen, 2013) is a six item measure that examines an individual's ability to forgive themselves for perceived transgressions by rating each item on a seven-point Likert scale ranging from one ("almost always false of me") to seven ("almost always true of me"). Possible scores range from 6 to 42, with higher scores representing greater levels of self-forgiveness. Previous research has found the Heartland Forgiveness Scale- Self Forgiveness Subscale to have adequate internal consistency ( $\alpha = .72$ ; Thompson *et al.*, 2005). In the current study; the Cronbach's alpha for the six self-forgiveness items was 0.79 suggesting acceptable internal consistency.

#### Resilience Appraisals Scale:

The Resilience Appraisal Scale (Johnson *et al.*, 2010a) is a 12 item self-report measure that assesses an individual's positive self-appraisals. Responses are rated on a five point scale from 'strongly disagree' to 'strongly agree'. It consists of three subscales. The first subscale examines an individual's perceived ability to cope with negative emotions ("I can control my emotions"). The second investigates an individual's perceived ability to problem solve ("I can generally solve problems that occur") and the third subscale reflects an individual's perceived ability to gain social support ("If I were in trouble, I know of others who would be able to help me"). In the current study the three subscales had a satisfactory level of internal consistency as determined by a Cronbach's alpha of  $\alpha$  =.86 for the emotion coping subscale,  $\alpha$  =.89 for the problem solving coping subscale,  $\alpha$  =.87 for the support seeking subscale.

#### **Analytical Strategy**

Univariate analyses were conducted to understand the data set and its demographic and clinical features. The study methodology attempted to maximise the number of responses made by users of websites in the four weeks of data collection. Consequently, no power analysis was performed to determine the size of the sample required for the purposes of the study. However, in a post hoc power calculation, a sample size of 53 would give 90% power to detect a significant difference in the mean score on our key measure (self-forgiveness) between those with and without a history of suicidal behaviour. The study recruited significantly more participants, thus possessed sufficient power.

Correlation analyses were carried out to assess the association between suicidality/suicidal behaviour, attachment, self-forgiveness and positive self-appraisal variables. A three stage blocked regression analysis was undertaken in order to examine whether attachment, selfforgiveness and positive self-appraisals were predictive of suicidality. This blocked regression was utilised to reduce the risk of collinearity resulting from the use of multiple measures of the same construct (i.e. attachment and positive self-appraisals). The first block contained the selfreported ratings of the four measures of attachment (dismissing, fearful, preoccupied and secure attachment), the second block contained the total score of the self-forgiveness scale and the third block contained the scores of the three measures of positive self-appraisals (support seeking positive self-appraisals, emotion coping positive self-appraisals and problem-solving positive self-appraisals). Before conducting the block regression the assumptions of this analysis were tested. There was independence of residuals as assessed by a Durbin-Watson statistic of 1.943. Examination of correlations (see Table 3) and collinearity statistics (Tolerance and Variance Inflation Factor-VIF) (Appendix 3g) revealed no independent variables were highly correlated with each other and were all within acceptable limits, finding the assumption of multicollinearity was met (Coakes, 2005; Hair, Anderson, Tatham & Black, 1998). The standardised residuals were then checked to find any multivariate outliers (Hansen, 2013). Case wise diagnostics revealed (Appendix 3h), one participant was found to have standardised residuals greater than minus three standard deviations from the mean (Hansen, 2013). An examination of the Cooks distance maximum value (Appendix 3h), suggested there were no cases exerting any undue influence on the results as a whole (Pallant, 2001). Therefore it was decided to include this participant in the analyses presented below. Finally, the inspection of histogram, residual and scatter plots (Appendix 3i and 3j), indicated the assumptions of homoscedasticity, normality and linearity were all satisfied (Johnson 2005; Hair et al., 1998; Pallant, 2001).

# **Results**

## **Demographic Characteristics**

Of the 323 participants, 88% were female (n=285) and 12% (n=38) were male, ranging from age 16 to 62 (M = 22.86, SD = 7.62, Median = 21). The ethnic composition of the sample was 87% White/Caucasian, 5% Asian, 5% mixed race, 2.1% Black and 0.9% Arab. 35.3% (n=114) were in full time education, 25.7% (n=83) were educated up to degree standard and 61.6% (n=199) were not in a romantic relationship. Additional demographic information is available in Table 1.

Table 1: Demographic characteristics of the sample

Occupation (n = 323)			Qualification (n = 32.	3)	
	N	%		N	9,
Employed Full Time	63/323	19.5%	None	25/323	7.7
Self-Employed	12/323	3.7%	A' Level	71/323	22.0
Not Employed (Seeking Work)	27/323	8.4%	Degree	83/323	25.7
Employed Part Time	34/323	10.5%	GCSE/O Level	47/323	14.0
Full Time Education	114/323	35.3%	Diploma	51/323	15.8
Not Employed (Ill Health)	23/323	7.1%	Other	46/323	14.2
Not Employed (Not Seeking work for any reason)	10/323	3.1%			
Retired	1/323	0.3%			
Other	8/323	2.5%			
Full Time Education + Employed Part Time	30/323	9.3%			
Self-Employed + Full Time Education	1/323	0.3%			
Living with the romantic partner	r (n = 124)				
	N	%			
Yes	56/124	45.16%			
No	68/124	54.83%			

## **Clinical Characteristics**

Of the 323 participants, 63.8% (n=206) reported currently self-harming and 48.9% (n=158) reported having a history of attempted suicide. 45.8% (n=148) of the sample reported being on prescribed medication. A DSM-IV psychiatric disorder was reported in 63.8% (n=206) of the sample, with 60.6% (n=125) reporting receiving treatment from mental health services. In addition, 71.2% (n=230) reported no current alcohol consumption and 88.2% (n=285) reported no current use of illicit drugs. Additional clinical information is available in Table 2a and 2b.

Table 2a: Clinical Characteristics of the Sample

Currently Self-H	arming (n = 323)		Self-H	arm Charact	eristics (n = 323	)
	N	%		Mean	Standard Deviation	Range
Yes	206/323	63.8%	Onset of engaging in self-harm	17.27	5.41	16 and under-40
No	117/323	36.2%				
			Number of self-harm methods	3.58	1.81	1-9 methods
Self-Harm Frequency (n = 323)			-			
	N	%	_			
More than once daily	34/323	10.5				
Once Daily	16/323	5.0				
4-6 times weekly	46/323	14.2				
2-3 times weekly	58/323	18.0				
Every couple of weeks	68/323	21.1				
Approximately monthly	52/323	16.1				
Less often than once per year	49/323	15.2				
History of Suicidality/Suic	cidal behaviour (1	n = 323)	_			
	N	%	_			
History of attempted suicide	158/323	48.9%				
History of suicide planning	104/323	32.2%				
History of suicide ideation	53/323	16.4%				
No history of suicidal behaviour	8/323	2.5%				

Table 2b: Clinical Characteristics of the Sample (continued)

Type of Diagnosis	s(n = 206)		Type of Treatment (n = 125)			
	N %			N	%	
Depression	104/206	50.5	GP (General practitioner)	17/125	13.6%	
Anxiety	28/206	13.6%	Community Mental Health Team	19/125	15.2%	
Psychosis	6/206	2.9%	Counsellor	31/125	24.8%	
Personality Disorder	26/206	12.6%	Other	13/125	10.4%	
Bipolar Affective Disorder	19/206	9.2%	GP & Counsellor	14/125	9.2%	
Other	23/206	11.2%	GP & Community Mental Health Team	12/125	9.6%	
			Community Mental Health Team & Counsellor	8/125	6.4%	
			GP, Community Mental Health Team & Counsellor	11/125	8.8%	
Type of Medicatio	n (n = 148)		Type of illicit Substa	nce (n = 38)		
	N	%		N	%	
Anti-depressants	53/148	35.8%	Cannabinoids	24/38	63.1%	
Mood Stabilisers	3/148	2%	Stimulants	3/38	7.8%	
Antipsychotic medication	9/148	6%	Hallucinogens	2/38	5.2%	
Anxiolytics	4/148	2.7%	Other	13/38	10.4%	
Anti-depressants & Antipsychotics	16/148	10.8%	Multiple	9/38	23.6%	
Anti-depressants & Mood stabilisers	6/148	4%				
Mood Stabilisers & Antipsychotics	2/148	1.3%				
Antipsychotics and Anxiolytics	5/148	3.3%				
Multiple	7/148	4.7%				
Other (Non-mental health)	43/148	29%				
> 21 Alcohol units per week (n=93)			_			
	N	%	_			
Yes	25/93	26.8%				

#### **Correlations**

Preliminary zero-order correlations were conducted to assess the association between suicidality/suicidal behaviour, attachment, self-forgiveness and positive self-appraisal variables. These are displayed in Table 3. Preoccupied attachment was not found to correlate with suicidality/suicidal behaviour. Dismissing (r = .09, p < 0.04) and fearful (r = .12, p < 0.01) attachment scores were slightly correlated with suicidality/suicidal behaviour. Similarly, secure (r = -.23, p < 0.001) attachment was found to have a small inverse correlation with suicidality/suicidal behaviour. Self-forgiveness scores (r = -.47, p < 0.001) were found to be moderately inversely correlated with suicidality/suicidal behaviour, as were the three positive self-appraisal subscales of support seeking (r = -.30, p < 0.001), emotion coping (r = -.38, p < 0.001) and problem solving (r = -.34, p < 0.001). Correlations and inverse correlations between attachment subscales self-forgiveness and positive self-appraisal subscales were also found (see Table 3).

Table 3: Correlations for Suicidality, Attachment, Self-forgiveness and Positive Self-Appraisals

*p < .05; *	**p < .01;	***p < .001

1								
.09*	1							
00	27***	1						
.12*	.07	.09*	1					
23***	11*	04	46***	1				
47***	.03	10*	23***	.28***	1			
30***	14**	04	18**	.30***	.35***	1		
38***	.19***	08	19***	.18**	.48***	.15**	1	
34***	.15**	06	17**	.21***	.46***	.31***	.63***	1
	00 .12* 23*** 47*** 30***	0027***  .12* .07 23***11* 47*** .03 30***14** 38*** .19***	0027*** 1  .12* .07 .09* 23***11*04 47*** .0310* 30***14**04 38*** .19***08	0027*** 1  .12* .07 .09* 1 23***11*0446*** 47*** .0310*23*** 30***14**0418** 38*** .19***0819***	0027*** 1  .12* .07 .09* 1 23***11*0446*** 1 47*** .0310*23*** .28*** 30***14**0418** .30*** 38*** .19***0819*** .18**	0027*** 1  .12* .07 .09* 1 23***11*0446*** 1 47*** .0310*23*** .28*** 1 30***14**0418** .30*** .35*** 38*** .19***0819*** .18** .48***	0027*** 1  .12* .07 .09* 1 23***11*0446*** 1 47*** .0310*23*** .28*** 1 30***14**0418** .30*** .35*** 1 38*** .19***0819*** .18** .48*** .15**	0027*** 1  .12* .07 .09* 1 23***11*0446*** 1 47*** .0310*23*** .28*** 1 30***14**0418** .30*** .35*** 1 38*** .19***0819*** .18** .48*** .15** 1

#### **Block Regression**

Table 4 presents a summary of the total R<sup>2</sup> for each block and the change in R<sup>2</sup> associated with the additional variables added at each block with regression coefficients for all variables in the regression analysis. The Block regression revealed that at block one, attachment contributed significantly to the regression model, F(4, 318) = 5.17; p < 0.01 and accounted for 6.1% of the variation in suicidality. Introducing the self-forgiveness variable in block two explained an additional 18.5% of variation in suicidality scores and this change in R<sup>2</sup> was significant, F (1, 317) = 78.00, p < 0.01. Lastly, the addition of positive self-appraisals into block three of the regression model explained an additional 5.3% of the variation in suicidality scores and this change in  $R^2$  was significant, F(3, 314) = 7.99, p < 0.01. When all eight independent variables were included in block 3 of the regression model, dismissing attachment ( $\beta$ =0.125, t = 2.416, p < 0.016) emerged as a significant predictor of suicidality. Of the three independent measures of positive self-appraisals, both emotional coping positive self-appraisals ( $\beta$ =-0.202, t = -3.121, p < 0.002) and support seeking positive self-appraisals ( $\beta$ =-0.122, t=-2.26, p < .024) showed significant effects. Finally, self-forgiveness ( $\beta$ =-0.304, t = -5.172, p < 0.01) was found to be a significant predictor of suicidality, emerging as the strongest predictor for suicidality. Together the final block of the eight independent variables accounted for 30.0% of the variance in suicidality.

Table 4: Summary of Block Regression Analysis for Variables predicting Suicidality

Variable	R	R <sup>2</sup>	R <sup>2</sup> Change	B (95% CI)	Standard Error	β	T
Block 1	.24	.06	.06				
Dismissing Attachment				0.13 (-0.08, 0.34)	.10	.07	1.23
Preoccupied Attachment				0.01 (-0.19, 0.21)	.10	.00	0.09
Fearful Attachment				0.03 -0.22, 0.28)	.12	.01	0.24
Secure Attachment				- 0.42 (-0.66, -0.19)	.11	22***	-3.61
Block 2	.49	.24	.18				
Dismissing Attachment				0.17 (-0.01, 0.36)	.09	.09	1.81
Preoccupied Attachment				-0.04 (-0.22, 0.14)	.09	02	45
Fearful Attachment				08 (-0.31, 0.14)	.11	04	76
Secure Attachment				22 (-0.44, -0.01)	.10	11*	-2.08
Self-forgiveness				22 (-0.28, -0.18)	.02	45***	- 8.83
Block 3	.54	.30	.05				
Dismissing Attachment				.23 (0.04, 0.42)	.09	.12*	2.41
Preoccupied Attachment				-0.3 (-0.21, 0.14)	.08	02	42
Fearful Attachment				12 (-0.35, 0.09	.11	06	-1.16
Secure Attachment				15 (-0.37, 0.06)	.10	08	-1.45
Self-forgiveness				15 (-0.21, -0.09)	.02	30***	-5.17
Support seeking positive self- appraisals				10 (-0.20, -0.01)	.04	12*	-2.26
Emotion Coping positive self-appraisals				18 (-0.30, -0.07)	.05	20***	-3.12
Problem solving positive self-appraisals				05 (-0.18, 0.07)	.06	05	82

Note. Statistical significance: \*p < .05; \*\*\*p < .001

## **Discussion**

The purpose of this study was to add to the limited research on the aetiology of suicidality in self-injuring populations. The hypotheses addressed the extent to which attachment, self-forgiveness and positive self-appraisals differentially predicted suicidality. Findings suggest that the level of dismissing attachment positively predicts suicidality. As levels of dismissing attachment problems increase, so does the level of suicidality in self-injurers. In contrast findings revealed that self-forgiveness, emotion coping and support seeking positive appraisals negatively predict suicidality. As levels of self-forgiveness, emotion coping and support seeking positive appraisals negatively predict suicidality.

#### **Attachment**

The hypothesis that insecure attachment would positively predict suicidal behaviour was partially supported. Specifically, dismissing attachment emerged as a significant predictor of suicidality, where higher levels of dismissing attachment predicted greater suicidality. This supports the study's proposed conception that self-injurers with dismissing attachment are more likely to be at a greater risk of suicidality. Given the novelty of the findings, how does dismissing attachment effect suicidality in self-injuring populations?

Self-injurers with dismissing attachment problems are likely to possess negative working models of others. As a result self-injurers may have negative distorted perceptions of others willingness to connect and help them in various circumstances. Self-injurers with dismissing attachment problems may fear intimacy and dependence. This may cause a reluctance and avoidance to seek out relationships or connect to significant others, possibly feeling at risk to disclose their thoughts and emotions, (Mikulincer & Nachshon, 1991). This may be especially

detrimental when experiencing negative life events, reducing their ability to approach someone or significant others (e.g. friends and family) and appeal for help (Levi-Belz *et al.*, 2013; Mikulincer & Shaver, 2007), overall limiting self-injurers use of social support networks (Grunebaum *et al.*, 2010). The inability of self-injurers to connect to individuals could lead to detachment, loneliness and alienation, which may increase the risk of suicidal behaviour (Levi-Belz *et al.*, 2013). This is consistent with the interpersonal theory of suicide, which suggests that suicidality arises in part from an acquired capability (e.g. history of self-harm) and thwarted belonging (e.g. via dismissing attachment problems) where connections with valued individuals/groups are unsuccessful (Joiner, 2005).

In contrast neither preoccupied nor fearful attachment predicted suicidality in self-injurers, suggesting that suicidality may not be related to other types of insecure attachment styles. The conception that the negative view of the self, characterised in preoccupied and fearful attachment impacts suicidality may not be supported by the results. According to general suicide research, suicidality can be seen in these circumstances as an extreme case of anxious hyper-activation of the attachment system, where suicidality is a means for social benefits (e.g. compassion and attention) (Mikulincer & Shaver 2007; Zeyrek *et al.*, 2009). This conception of suicidality may not be relevant in self-injurers escalating to suicidal behaviour. Rather it may be associated with self-injurers engaging in self-harm itself. Research suggests self-injurers may engage in self-harm for multiple functions, including interpersonal positive functions (e.g. attention, support) (Nock, 2010). As suicidality is conducted with the intention to end one's life, anxious hyper-activation of the attachment system in preoccupied and fearful attachment may not impact suicidality in self-injurers, but may influence self-harm episodes (Nock, 2010).

The hypothesis that secure attachment would negatively predict suicidality in self-injurers was not supported in this study. Although significant inverse correlations were obtained between secure attachment and suicidality, there was no significant effect in the block regression analysis. This is contrary to research illustrating the protective nature of secure attachment on suicidality (Zeyrek et al., 2009; Bostik and Everall, 2007; Davaji et al., 2010). Overall, the findings highlight the importance of insecure attachment (specifically dismissing attachment) over the protective potential of secure attachment as impacting suicidality in self-injurers (Peter et al., 2008). As this was one of the first studies to have examined attachment and its relation to suicidality in self-injuring populations, we did not attempt to recruit specific demographic populations of self-injurers (e.g. age, adolescents, and elderly). Research has suggested that the impact of attachment on well-being is in turn also affected by ethnicity, finding the secure attachment-wellbeing link is stronger among black and minority ethnic groups, while the detrimental impact of insecure attachment is weaker among Caucasian populations (Merz, & Consedine, 2012). In addition, specific attachment relationships with certain individuals have been suggested to have more of a pronunciation on self-injurious behaviour (Joly, 2014; Peter et al., 2008). Researchers have suggested peer and parental attachments more strongly impact suicidality in young people (Peter et al., 2008). Given the majority of the sample were selfinjuring adolescents of Caucasian decent and that the attachment measurement used in the study (Relationship Questionnaire) gauged general attachment in non-specific relationships, this could explain the lack of significant predictions of the attachment construct (secure, preoccupied and fearful attachment) on suicidality. This may need to be investigated in further research.

#### **Self-Forgiveness**

The hypothesis that self-forgiveness negatively predicts suicidal behaviour was supported. Self-forgiveness emerged as the strongest significant predictor of suicidality, where higher levels of self-forgiveness predicted lower suicidality. This supports the proposed conception that suicidality in self-injuring populations might be related to the ability to forgive oneself for perceived transgressions. This also accords with previous research findings that the ability to self-forgive for perceived interpersonal and intrapersonal transgressions may potentially help protect against the consideration of maladaptive behaviour, such as self-injurious behaviour (Westers et al., 2012). Therefore self-forgiveness in its positive and negative extremes may have inverse effects on suicidality in self-injuring populations. One way to explain this relationship may be found using Hall and Fincham's (2005) model of self-forgiveness and the interpersonal theory of suicide (Joiner 2005). Self-injurers lacking the qualities of selfforgiveness may experience greater intrapunitive anger, self-resentment, and selfcondemnation (i.e. I am a bad person) reflecting distorted perceptions of the severity of perceived interpersonal transgressions and intrapersonal transgressions (e.g. episodes of selfharm, life events) (Hirsch et al., 2011; Hall & Fincham, 2005; Westers et al., 2012). The lack of self-forgiveness may motivate self-injurers to engage in self-harm as a form of punishment for the transgressions they feel they have committed (Westers et al., 2012; Deiter-Sands & Pearlman, 2009). Frequent exposure or extensive history of self-harm which may be evident in self-injurers could enhance tolerance of physiological pain and diminish the fear and pain of self-harming and more severe harm (Anestis et al., 2014). Self-harm as a form of punishment might be considered more painless and not felt or seen as severe enough or equal punishment for such transgressions. This in turn may reinforce negative, self-condemning and selfresentfulness (e.g. "worthless" "unforgivable") views of the self and deserving of punishment severe enough for perceived transgressions (Westers et al., 2012). As a result self-injurers may

escalate and engage in suicidal behaviour as more of an equal punishment for such transgressions. This lack of self-forgiveness and acquired capability of suicidal behaviour may therefore become a never ending spiral of more severe self-injurious behaviour and a need to self-punish as a result of a lack of self-forgiveness. There is however, little evidence to support the explanation that self-injurers may escalate to suicidal behaviour as a result of a need to self-punish due to a lack of self-forgiveness. This theory needs to be tested in order to see if this is the correct explanation of how self-forgiveness impacts the risk of suicidality in self-injurers. In contrast, self-injurers with high levels of self-forgiveness may have the cognitive skills to alleviate the distress and perceptions that perceived transgressions and repeated self-harm may produce, possibly conferring protection against suicidality that may arise with an inability to forgive oneself (Hall & Fincham, 2005; Hansen, 2013).

## Positive self-appraisals

The third Hypothesis stated that positive self-appraisals would negatively predict suicidality. This was partially supported. Consistent with previous research, support seeking positive self-appraisals emerged as a significant predictor of suicidality (Panagioti *et al.*, 2014). Specifically, higher levels of support seeking positive appraisals predicted lower suicidality in self-injurers, supporting the proposed conception that support seeking positive self-appraisals are a protective factor for suicidality in self-injurers and can potentially lessen suicidality (Panagioti *et al.*, 2014). Consistent with previous research, the current findings indicated that positive self-appraisals of the ability to cope with negative emotions, significantly predicted suicidality (Deeley & Love, 2012). Specifically, emotion coping positive appraisals were negatively correlated with suicidality in self-injurers (Johnson *et al.*, 2010b). This finding

supports the current study's proposed conception that emotion coping positive appraisals may potentially confer protection from suicidality in self-injurers (Deeley & Love 2013a). Emotion coping positive appraisals may be one of the explanations for previous research investigating emotional vulnerabilities that may impact suicidality in self-injurers, resulting in mixed findings. While self-injurers with high positive emotion coping appraisals are protected from the pernicious impact of emotional vulnerabilities (Johnson et al., 2010b), low emotion coping positive appraisals may predispose self-injurers towards suicidality (Deeley & Love 2013b, 2012). In contrast, problem solving positive appraisals did not predict suicidality, suggesting that problem solving positive appraisals may not be related to suicidality in self-injurers. Given that previous findings indicated non-significant associations between problem solving positive appraisals and suicidality, it could be problem solving abilities rather than the positive appraisals that more strongly relate to suicidality in self-injurers (Johnson et al., 2010b; Chang, 2002). Findings indicate that the levels of support seeking and emotion coping positive selfappraisals possessed by self-injurers may impact suicidality. Emotion coping and support seeking positive self-appraisals in its positive and negative extremes may have inverse effects on suicidality in self-injuring populations. Self-injurers with low positive self-appraisals in the ability to gain support and cope with negative emotions may result in distorted evaluations or self-efficacy to gain support and in coping and managing aversive emotionality in difficult situations (Roe et al., 2006; Johnson et al., 2008; Deeley & Love 2013a). This could result in, as described by the schematic appraisals model as an impossible situation, giving rise to possible aversive states of defeat and entrapment (Johnson et al., 2008; Panagioti et al., 2012), leading to heightened risk of suicidality and possible engagement to escape from these aversive states (Williams, 1997). High positive emotion coping self-appraisals in self-injurers may represent a source of protection against suicidality with more confidence and awareness in their potential to cope and manage negative emotions (Johnson et al., 2010b), reducing the motivation of suicidality and more self-efficacy/confidence in adaptive coping behaviour (Deeley & Love 2013b, 2012). Self-injurers with high support seeking positive appraisals may be aware of the availability of external resources and have more confidence in their ability to gain social support, establishing the possibility of being "rescued" and reducing the likelihood of suicidality (Panagioti *et al.*, 2014; Park *et al.*, 2014; Johnson *et al.*, 2008b; Williams, 1997).

#### Limitations

Despite their novelty, the results must be understood in the context of limitations. The current study's analyses were based on cross-sectional data, thus no causal inference can be made as to the direction of the associations between suicidality, attachment, self-forgiveness and positive self-appraisals (Hansen, 2013).

Although a large sample using an internet survey methodology was obtained, this represents convenience sampling which limits the ability to obtain a representative sample of all self-injurers. As a result, females and self-injuring adolescents were overrepresented, limiting the generalizability of the findings. The majority of the sample was of Caucasian decent. Thus, findings may not necessarily generalise to self-injurers from black and minority ethnic groups. As mentioned previously the impact of correlates on suicidality could have been affected by differences in cultural ideals and values attached to specific ethnicities (Merz, & Consedine, 2012). For example, self-injurers with suicidal risk belonging to ethnic groups with collectivistic cultural values may not principally respond to seeking forgiveness within

themselves (Scherer *et al.*, 2011). Therefore, a self-forgiveness intervention may be less beneficial (Scherer *et al.*, 2011).

Another limitation concerns the study's methodological approach to the investigation of potential protective and risk enhancing correlates of suicidality in self-injurers. This research employed the general assumptions of the buffering hypothesis; resulting in self-forgiveness, emotion coping and social support seeking positive appraisals negatively predicting suicidality, with dismissing attachment positively predicting suicidality. According to Johnson et al (2011), protective factors are not only inversely related to suicidality but more importantly moderate the impact of risk factors on suicidality (Panagioti et al., 2014). Whilst this study has found inverse associations between certain correlates and suicidality, it has not established that they moderate the impact of risk factors on suicidality in self-injurers (Johnson et al., 2011, 2010b). Self-harming is one of the strongest predictors of suicidality in self-injurers. Due to the differential nature of the current study's measurements of self-harm (measuring self-harm in the present) and suicidality (measuring lifetime suicidality), investigating attachment, selfforgiveness and positive self-appraisals in this format was not appropriate. The non-significant associations found between certain correlates (secure attachment and problem solving positive appraisals) and suicidality may actually moderate the impact of risk factors (e.g. self-harm engagement) on suicidality. Conversely, the correlates that were found to have direct linear associations with suicidality may have a greater role in moderating risk (Johnson et al., 2011).

## **Implications**

Present findings have implications for research and clinical applications. One of the continuing difficulties is the accurate prediction of self-injurers risk of suicidal behaviour in a reasonable timeframe (Joiner, 2005, Hansen, 2013). Attempts to predict suicide risk using previously documented correlates for suicidality result in a high number of false-positives, with the majority of self-injurers never engaging in suicidal behaviour (Powell *et al.*, 2000; Hansen, 2013). Both an under and over-estimation of a patient's risk for suicidality results in considerable costs, not only to life and well-being but to financial resources for treatment (Hansen, 2013). Tools for the identification of at-risk self-injurers have need for improvement (Hansen, 2013). Current findings point to the utility of the buffering hypothesis conceptualisation of risk and protective dimensional correlates of suicidality, which in the long term may aid in the identification of significant correlates that may increase the accuracy of assessing suicide risk (Hansen, 2013).

This is especially important given the lack of protective factors included in the assessment of suicidal risk in clinical practice (Kene-Allampalli *et al.*, 2010; Posner *et al.*, 2011). Early identification of at risk self-injurers is important for clinicians. Dismissing attachment, self-forgiveness, emotion coping and support seeking positive appraisals could be appropriate correlates to improve the accurate prediction of self-injurers risk of suicidality in a reasonable timeframe (Joiner, 2005, Hansen, 2013).

The findings also have implications for the development of new preventive measures to reduce the risk of suicidality (Hansen, 2013). Attachment, self-forgiveness and positive selfappraisals provide knowledge of what potential interventions may be effective for at risk self-injurers. This is likely to be beneficial in the treatment of self-injurers at risk for suicidality, given that such correlates are more easily modified than other factors (e.g. social support) (Brent, 2011). Based on the current findings, interventions aimed at building secure attachment may not be beneficial in the protection of suicidality in self-injurers. Positive self-appraisals are a novel area of research and no interventions have yet been developed. Techniques such as positive data logging could be used in developing a more positive self-concept, whereby self-injurers record instances where they have demonstrated positive qualities, (Johnson *et al.*, 2010a; Tarrier & Gooding, 2007). No self-forgiveness interventions have been specifically tailored to self-injurers at risk of suicidality. Applied to self-injurers, promoting self-forgiveness could be delivered utilizing traditional psychotherapy strategies (Hirsch *et al.*, 2011; Fincham & Beach, 2002), in building self-concept (Zettle *et al.*, 2009), and reducing self-deprecatory cognitive styles (Wedig & Nock, 2007; Westers *et al.*, 2012).

## **Conclusion and Future Directions**

This study is one of a few that have attempted to investigate suicidality in self-injuring populations in relation to existing constructs that may have significant bipolar dimensional protective and risk effects on suicidality. Based on the findings, there appear to be novel correlates of suicidality that may protect against (e.g. self-forgiveness, positive emotion and social support self-appraisals) or increase the risk of (e.g. dismissing attachment) suicidality in self-injurers. Replication of these results in a longitudinal design with more ethnically and age diverse samples, balance of gender, using a moderation regression analyses would aid in-further

understanding the relationship between the proposed correlates and suicidality in self-injurers.

This in turn will better inform theory, assessment and treatment of suicidality in self-injurers.

# References

## **Chapter 1 References**

Anestis, M. D., Silva, C., Lavender, J. M., Crosby, R. D., Wonderlich, S. A., Engel, S. G., & Joiner, T. E. (2012). Predicting non-suicidal self-injury episodes over a discrete period of time in a sample of women diagnosed with bulimia nervosa: An analysis of self-reported trait and ecological momentary assessment based affective lability and previous suicide attempts. *International Journal of Eating Disorders*, 45(6), 808-811.

Armey, M. F., Crowther, J. H., & Miller, I. W. (2011). Changes in ecological momentary assessment reported affect associated with episodes of non-suicidal self-injury. *Behaviour Therapy*, 42(4), 579-588.

Bailey, S. D., & Ricciardelli, L. A. (2010). Social comparisons, appearance related comments, contingent self-esteem and their relationships with body dissatisfaction and eating disturbance among women. *Eating Behaviours*, 11(2), 107-112.

Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science*, *16*(6), 351-355.

Bergen, H., Hawton, K., Waters, K., Ness, J., Cooper, J., Steeg, S., & Kapur, N. (2012). Premature death after self-harm: a multicentre cohort study. *The Lancet*, *380*(9853), 1568–1574.

Bresin, K., Carter, D. L., & Gordon, K. H. (2013). The relationship between trait impulsivity, state negative affect, and urge for non-suicidal self-injury: A daily diary study. *Psychiatry Research*, 205, 227-231.

Briere, J., & Gil, E. (1998). Self-mutilation in clinical and general population samples: Prevalence, correlates, and functions. *American Journal of Orthopsychiatry*, 68, 609–620.

Brittlebank, A. D., Cole, A., Hassanyeh, F., Kenny, M., Simpson, D., & Scott, J. (1990). Hostility, hopelessness and deliberate self-harm: A prospective follow-up study. *Acta Psychiatrica Scandinavica*, *81*(3), 280-283.

Brown, M. Z., Linehan, M. M., Comtois, K. A., Murray, A., & Chapman, A. L. (2009). Shame as a prospective predictor of self-inflicted injury in borderline personality disorder: A multi-modal analysis. *Behaviour Research and Therapy*, 47(10), 815-822.

- Bryan, C. J., Ray-Sannerud, B., Morrow, C. E., & Etienne, N. (2012). Shame, pride, and suicidal ideation in a military clinical sample. *Journal of Affective Disorders*, *147*(1–3), 212–216.
- Burwell, R. A., & Shirk, S. R. (2007). Subtypes of rumination in adolescence: Associations between brooding, reflection, depressive symptoms, and coping. *Journal of Clinical Child and Adolescent Psychology*, 36(1), 56-65.
- Chan, S., Miranda, R., & Surrence, K. (2009). Subtypes of rumination in the relationship between negative life events and suicidal ideation. *Archives of Suicide Research*, 13(2), 123-135.
- Claes, L., Jiménez-Murcia, S., Agüera, Z., Castro, R., Sánchez, I., Menchón, J. M., & Fernández-Aranda, F. (2012). Male eating disorder patients with and without non-suicidal self-injury: A comparison of psychopathological and personality features. *European Eating Disorders Review*, 20(4), 335-338.
- Corruble, E., Damy, C., & Guelfi, J. D. (1999). Impulsivity: A relevant dimension in depression regarding suicide attempts?. *Journal of Affective Disorders*, 53(3), 211-215.
- Cyders, M. A., & Coskunpinar, A. (2011). Measurement of constructs using self-report and behavioural lab tasks: Is there overlap in nomothetic span and construct representation for impulsivity?. *Clinical Psychology Review*, *31*(6), 965-982.
- Deiter, P. J., Nicholls, S. S., & Pearlman, L. A. (2000). Self-injury and self-capacities: Assisting an individual in crisis. *Journal of Clinical Psychology*, *56*(9), 1173-1191.
- Dir, A. L., Karyadi, K., & Cyders, M. A. (2013). The uniqueness of negative urgency as a common risk factor for self-harm behaviours, alcohol consumption, and eating problems. *Addictive Behaviours*, 38(5), 2158–2162.
- Dour, H. J., Cha, C. B., & Nock, M. K. (2011). Evidence for an emotion—cognition interaction in the statistical prediction of suicide attempts. *Behaviour Research and Therapy*, 49(4), 294-298.
- Fliege, H., Lee, J. R., Grimm, A., & Klapp, B. F. (2009). Risk factors and correlates of deliberate self-harm behaviour: A systematic review. *Journal of Psychosomatic Research*, 66(6), 477-493.
- Glenn, C. R., & Klonsky, E. D. (2010). A multimethod analysis of impulsivity in non-suicidal self-injury. *Personality Disorders: Theory, Research, and Treatment, 1*(1), 67.

Glenn, C. R., & Klonsky, E. D. (2011). Prospective prediction of non-suicidal self-injury: a 1-year longitudinal study in young adults. *Behaviour Therapy*, 42(4), 751-762.

Glenn, C. R., Blumenthal, T. D., Klonsky, E. D., & Hajcak, G. (2011). Emotional reactivity in non-suicidal self-injury: Divergence between self-report and startle measures. *International Journal of Psychophysiology*, 80(2), 166-170.

Gratz, K. L. (2003). Risk factors for and functions of deliberate self-harm: An empirical and conceptual review. *Clinical Psychology: Science and Practice*, 10(2), 192-205.

Hankin, B. L., & Abela, J. R. (2011). Non-suicidal self-injury in adolescence: Prospective rates and risk factors in a 2 ½ year longitudinal study. *Psychiatry Research*, 186(1), 65-70.

Hawton, K., Kingsbury, S., Steinhardt, K., James, A., & Fagg, J. (1999). Repetition of deliberate self-harm by adolescents: The role of psychological factors. *Journal of Adolescence*, 22(3), 369-378.

Hoff, E. R., & Muehlenkamp, J. J. (2009). Non-suicidal self-injury in college students: The role of perfectionism and rumination. *Suicide and Life-Threatening Behaviour*, 39(6), 576-587.

Janis, I. B., & Nock, M. K. (2009). Are self-injurers impulsive?: Results from two behavioural laboratory studies. *Psychiatry Research*, 169(3), 261-267.

Joormann, J., Dkane, M., & Gotlib, I. H. (2006). Adaptive and maladaptive components of rumination? Diagnostic specificity and relation to depressive biases. *Behaviour Therapy*, *37*(3), 269-280.

Kernis, M. H. (2003). Toward a conceptualization of optimal self-esteem. *Psychological Inquiry*, *14*, 1–26.

Kleiman, E. M., & Liu, R. T. (2013). Social support as a protective factor in suicide: Findings from two nationally representative samples. *Journal of Affective Disorders*, 150(2), 540–545.

Klonsky, E. D. (2007). The functions of deliberate self-injury: A review of the evidence. *Clinical Psychology Review*, *27*(2), 226-239.

Klonsky, E. D., & Moyer, A. (2008). Childhood sexual abuse and non-suicidal self-injury: meta-analysis. *The British Journal of Psychiatry*, 192(3), 166-170.

Klonsky, E. D., & Muehlenkamp, J. J. (2007). Self-injury: A research review for the practitioner. *Journal of Clinical Psychology*, 63(11), 1045-1056.

Kumar, G., Pepe, D., & Steer, R. A. (2004). Adolescent psychiatric inpatients' self-reported reasons for cutting themselves. *Journal of Nervous and Mental Disease*, 192, 830–836.

Lang, C. M., & Sharma-Patel, K. (2011). The relation between childhood maltreatment and self-injury: A review of the literature on conceptualization and intervention. *Trauma*, *Violence*, & *Abuse*, *12*(1), 23-37.

Laye-Gindhu, A., & Schonert-Reichl, K. A. (2005). Non-suicidal self-harm among community adolescents: Understanding the "whats" and "whys" of self-harm. *Journal of Youth and Adolescence*, *34*(5), 447-457.

Lloyd-Richardson, E. E., Perrine, N., Dierker, L., & Kelley, M. L. (2007). Characteristics and functions of non-suicidal self-injury in a community sample of adolescents. *Psychological Medicine London*, *37*(8), 1183.

Lundh, L. G., Karim, J., & Quilisch, E. V. A. (2007). Deliberate self-harm in 15-year-old adolescents: A pilot study with a modified version of the Deliberate Self-Harm Inventory. *Scandinavian Journal of Psychology*, 48(1), 33-41.

Manjrekar, E., Schoenleber, M., & Mu, W. (2013). Shame aversion and maladaptive eating-related attitudes and behaviours. *Eating Behaviours*, 14(4), 456-459.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological review*, 98(2), 224.

Matsumoto, T., Yamaguchi, A., Chiba, Y., Asami, T., Iseki, E., & Hirayasu, Y. (2004). Patterns of self-cutting: A preliminary study on differences in clinical implications between wrist-and arm-cutting using a Japanese juvenile detention centre sample. *Psychiatry and Clinical Neurosciences*, 58(4), 377-382.

McLaughlin, J. A., Miller, P., & Warwick, H. (1996). Deliberate self-harm in adolescents: Hopelessness, depression, problems and problem-solving. *Journal of Adolescence*, 19(6), 523-532.

McMahon, E. M., Reulbach, U., Keeley, H., Perry, I. J., & Arensman, E. (2012). Reprint of: Bullying victimisation, self-harm and associated factors in Irish adolescent boys. *Social Science & Medicine*, 74(4), 490-497.

Milnes, D., Owens, D., & Blenkiron, P. (2002). Problems reported by self-harm patients: Perception, hopelessness, and suicidal intent. *Journal of Psychosomatic Research*, 53(3), 819-822.

Miranda, R., & Nolen-Hoeksema, S. (2007). Brooding and reflection: Rumination predicts suicidal ideation at 1-year follow-up in a community sample. *Behaviour Research and Therapy*, 45(12), 3088-3095.

Muehlenkamp, J. J. (2005). Self-Injurious behaviour as a separate clinical syndrome. *American Journal of Orthopsychiatry*, 75(2), 324-333.

Neighbors, C., Larimer, M. E., Markman Geisner, I., & Knee, C. R. (2004). Feeling controlled and drinking motives among college students: Contingent self-esteem as a mediator. *Self and Identity*, *3*(3), 207-224.

Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84, 231–259.

Nock, M. K. (2009). Why do people hurt themselves? New insights into the nature and functions of self-injury. *Current Directions in Psychological Science*, *18*(2), 78-83.

Nock, M. K. (2010). Self-injury. Annual Review of Clinical Psychology, 6, 339-363.

Nock, M. K., & Prinstein, M. J. (2004). A functional approach to the assessment of self-mutilative behaviour. *Journal of Consulting and Clinical Psychology*, 72(5), 885.

Nock, M. K., Wedig, M. M., Holmberg, E. B., & Hooley, J. M. (2008). The emotion reactivity scale: development, evaluation, and relation to self-injurious thoughts and behaviours. *Behaviour therapy*, 39(2), 107-116.

Noll, J. G., Horowitz, L. A., Bonanno, G. A., Trickett, P. K., & Putnam, F. W. (2003). Revictimization and self-harm in females who experienced childhood sexual abuse: Results from a prospective study. *Journal of Interpersonal Violence*, *18*(12), 1452-1471.

O'Connor, R. C., & Noyce, R. (2008). Personality and cognitive processes: Self-criticism and different types of rumination as predictors of suicidal ideation. *Behaviour Research and Therapy*, 46(3), 392-401.

O'Connor, R. C., Fraser, L., Whyte, M. C., MacHale, S., & Masterton, G. (2008). A comparison of specific positive future expectancies and global hopelessness as predictors of suicidal ideation in a prospective study of repeat self-harmers. *Journal of Affective Disorders*, 110(3), 207-214.

Ogle, R. L., & Clements, C. M. (2008). Deliberate self-harm and alcohol involvement in college-aged females: A controlled comparison in a nonclinical sample. *American Journal of Orthopsychiatry*, 78(4), 442-448.

Overholser, J. C., Adams, D. M., Lehnert, K. L., & Brinkman, D. C. (1995). Self-esteem deficits and suicidal tendencies among adolescents. *Journal of the American Academy of Child & Adolescent Psychiatry*, 34(7), 919-928.

Park, L. E., & Crocker, J. (2008). Contingencies of self-worth and responses to negative interpersonal feedback. *Self and Identity*, 7, 184–203.

Patrick, H., Neighbors, C., & Knee, C. R. (2004). Appearance-related social comparisons: The role of contingent self-esteem and self-perceptions of attractiveness. *Personality and Social Psychology Bulletin*, 30(4), 501-514.

Prinstein, M. J. (2008). Introduction to the special section on suicide and non-suicidal self-injury: A review of unique challenges and important directions for self-injury science. *Journal of Consulting and Clinical Psychology*, 76(1), 1.

Schoenleber, M. (2013). *Testing alternative motivational models for self-injurious behaviour* (Doctoral dissertation, University of Illinois at Urbana-Champaign).

Schoenleber, M., & Berenbaum, H. (2010). Shame aversion and shame-proneness in Cluster C personality disorders. *Journal of Abnormal Psychology*, *119*(1), 197.

Schoenleber, M., & Berenbaum, H. (2012). Shame regulation in personality pathology. *Journal of Abnormal Psychology*, *121*(2), 433.

Selby, E. A., Anestis, M. D., & Joiner, T. E. (2008). Understanding the relationship between emotional and behavioural dysregulation: Emotional cascades. *Behaviour Research and Therapy*, *46*(5), 593-611.

Selby, E. A., Anestis, M. D., Bender, T. W., & Joiner Jr, T. E. (2009). An exploration of the emotional cascade model in borderline personality disorder. *Journal of Abnormal Psychology*, 118(2), 375.

Selby, E. A., & Joiner Jr, T. E. (2009). Cascades of emotion: The emergence of borderline personality disorder from emotional and behavioural dysregulation. *Review of General Psychology*, *13*(3), 219.

Selby, E. A., Connell, L. D., & Joiner Jr, T. E. (2010). The pernicious blend of rumination and fearlessness in non-suicidal self-injury. *Cognitive Therapy and Research*, *34*(5), 421-428.

Selby, E. A., Franklin, J., Carson-Wong, A., & Rizvi, S. L. (2013). Emotional Cascades and Self-Injury: Investigating instability of rumination and negative emotion. *Journal of Clinical Psychology*, 69(12), 1213–1227.

Silverman, M. M. (2011). Challenges to classifying suicidal ideations, communications, and behaviours. *International Handbook of Suicide Prevention: Research, Policy and Practice*, 9-25.

Smith, N. B., Kouros, C. D., & Meuret, A. E. (2013). The role of trauma symptoms in non-suicidal self-injury. *Trauma, Violence, & Abuse, 15*(1), 41-56.

Tiet, Q. Q., Finney, J. W., & Moos, R. H. (2006). Recent sexual abuse, physical abuse, and suicide attempts among male veterans seeking psychiatric treatment. *Psychiatric Services*, 57(1), 107-113.

Treynor, W., Gonzalez, R., & Nolen-Hoeksema, S. (2003). Rumination reconsidered: A psychometric analysis. *Cognitive Therapy and Research*, 27(3), 247-259.

Victor, S. E., & Klonsky, E. D. (2013). Daily emotion in non-suicidal self-injury. *Journal of Clinical Psychology*. doi: 10.1002/jclp.22037

Weismoore, J. T., & Esposito-Smythers, C. (2010). The role of cognitive distortion in the relationship between abuse, assault, and non-suicidal self-injury. *Journal of Youth and Adolescence*, 39(3), 281-290.

Whiteside, S. P., & Lynam, D. R. (2001). The five factor model and impulsivity: Using a structural model of personality to understand impulsivity. *Personality and Individual Differences*, *30*(4), 669-689.

- Wouters, S., Duriez, B., Luyckx, K., Klimstra, T., Colpin, H., Soenens, B., & Verschueren, K. (2013). Depressive symptoms in university freshmen: Longitudinal relations with contingent self-esteem and level of self-esteem. *Journal of Research in Personality*, 47, 356-363.
- Wu, C. Y., Chang, C. K., Huang, H. C., Liu, S. I., & Stewart, R. (2013). The association between social relationships and self-harm: A case-control study in Taiwan. *BMC Psychiatry*, *13*(1), 101-101.
- Wu, C. Y., Stewart, R., Huang, H. C., Prince, M., & Liu, S. I. (2011). The impact of quality and quantity of social support on help-seeking behaviour prior to deliberate self-harm. *General Hospital Psychiatry*, *33*(1), 37-44.
- Yates, T. M., Carlson, E. A., & Egeland, B. (2008). A prospective study of child maltreatment and self-injurious behaviour in a community sample. *Development and Psychopathology*, 20(2), 651.
- Ystgaard, M., Arensman, E., Hawton, K., Madge, N., van Heeringen, K., Hewitt, A., & Fekete, S. (2009). Deliberate self-harm in adolescents: Comparison between those who receive help following self-harm and those who do not. *Journal of Adolescence*, *32*(4), 875-891.
- You, J., Lin, M. P., & Leung, F. (2013). Functions of non-suicidal self-injury among Chinese community adolescents. *Journal of Adolescence*, *36*(4), 737-745.
- Zaki, L. F., Coifman, K. G., Rafaeli, E., Berenson, K. R., & Downey, G. (2013). Emotion differentiation as a protective factor against non-suicidal self-injury in borderline personality disorder. *Behaviour Therapy*, 44(3), 529–540.

## **Chapter 2 References**

Allen, P., Modinos, G., Hubl, D., Shields, G., Cachia, A., Jardi, R., et al. (2012). Neuroimaging auditory hallucinations in Schizophrenia: From Neuroanatomy to neurochemistry and beyond. *Schizophrenia Bulletin*, *38*(4), 695-703.

Flanagan, E.H., Solomon, L.A., Johnson, A., Ridgway, P., Strauss, J.S., Davidson, L. (2012). Considering DSM-5: the personal experience of schizophrenia in relation to the DSM-IV-TR criteria. *Psychiatry: Interpersonal and Biological Processes*, 75(4), 375-386.

Giorgi, A. (1997). The theory, practice, and evaluation of the phenomenological method as a qualitative research procedure. *Journal of Phenomenological Psychology*, 28(2), 235-260.

Jones, S. R. (2010). Do we need multiple models of auditory verbal hallucinations? Examining the phenomenological fit of cognitive and neurological models. *Schizophrenia Bulletin*, *36*(3), 566-575.

Larøi, F., de Haan, S., Jones, S., & Raballo, A. (2010). Auditory verbal hallucinations: dialoguing between the cognitive sciences and phenomenology. *Phenomenology and the Cognitive Sciences*, 9(2), 225-240.

McCarthy-Jones, S., Krueger, J., Larøi, F., Broome, M., & Fernyhough, C. (2013). Stop, look, listen: the need for philosophical phenomenological perspectives on auditory verbal hallucinations. *Frontiers In Human Neuroscience*, 7, 127.

McCarthy-Jones, S., & Resnick, P. J. (2014). Listening to voices: The use of phenomenology to differentiate malingered from genuine auditory verbal hallucinations. *International Journal of Law and Psychiatry*, 37(2), 183-189.

## **Chapter 3 References**

Ahadi, B., & Ariapooran, S. (2009). Role of self and other forgiveness in predicting depression and suicide ideation of divorcees. *Journal of Applied Sciences*, *9*(19), 3598-3601.

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of Attachment: A Psychological study of the Strange Situation*. Hillsdale, NJ: Erlbaum.

Albal, E., & Kutlu, Y. (2010). The relationship between the depression coping self-efficacy level and perceived social support resources. *Psikiyatri Hemşireliği Dergisi*, *I*(3), 115-120.

Allen, J. P., Porter, M., McFarland, C., McElhaney, K. B., & Marsh, P. (2007). The relation of attachment security to adolescents' paternal and peer relationships, depression, and externalizing behaviour. *Child Development*, 78(4), 1222-1239.

Andover, M. S., & Gibb, B. E. (2010). Non-suicidal self-injury, attempted suicide, and suicidal intent among psychiatric inpatients. *Psychiatry Research*, 178(1), 101-105.

Andover, M. S., Morris, B. W., Wren, A., & Bruzzese, M. E. (2012). The co-occurrence of non-suicidal self-injury and attempted suicide among adolescents: distinguishing risk factors and psychosocial correlates. *Child and Adolescent Psychiatry and Mental Health*, 6(11).

Anestis, M. D., Knorr, A. C., Tull, M. T., Lavender, J. M., & Gratz, K. L. (2013). The importance of high distress tolerance in the relationship between non-suicidal self-injury and suicide potential. *Suicide and Life-Threatening Behaviour*, 43(6), 663-675.

Anestis, M. D., Tull, M. T., Lavender, J. M., & Gratz, K. L. (2014). The mediating role of non-suicidal self-injury in the relationship between impulsivity and suicidal behaviour among inpatients receiving treatment for substance use disorders. *Psychiatry Research*.

Asarnow, J. R., Porta, G., Spirito, A., Emslie, G., Clarke, G., Wagner, K. D., ... & Brent, D. A. (2011). Suicide attempts and nonsuicidal self-injury in the treatment of resistant depression in adolescents: findings from the TORDIA study. *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(8), 772-781.

Bandura, A. (1977). Social Learning Theory. Oxford, UK: Prentice-Hall.

Bartholomew, K. (1990). Avoidance of intimacy. *Journal of Social & Personal Relationships*, 7, 147–178.

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality & Social Psychology*, *61*, 226–244.

Bartholomew, K., & Shaver, P. R. (1998). Methods of assessing adult attachment. *Attachment Theory and Close Relationships*, 25-45.

Bebbington, P. E., Minot, S., Cooper, C., Dennis, M., Meltzer, H., Jenkins, R., & Brugha, T. (2010). Suicidal ideation, self-harm and attempted suicide: results from the British psychiatric morbidity survey 2000. *European Psychiatry*, 25(7), 427-431.

Bhui, K., McKenzie, K., & Rasul, F. (2007). Rates, risk factors & methods of self-harm among minority ethnic groups in the UK: a systematic review. *BMC Public Health*, 7(1), 336.

Bolton, C., Gooding, P., Kapur, N., Barrowclough, C., & Tarrier, N. (2007). Developing psychological perspectives of suicidal behaviour and risk in people with a diagnosis of schizophrenia: We know they kill themselves but do we understand why? *Clinical Psychology Review*, 27(4), 511–536.

Bowlby, J. A. (1969). Attachment and loss: Volume I. Attachment. New York: Basic Books.

Bowlby, J. A. (1988). Secure base: Parent-child attachment and healthy human development. New York: Basic Books.

Bostik, K. E., & Everall, R. D. (2007). Healing from suicide: Adolescent perceptions of attachment relationship. *British Journal of Guidance & Counselling*, *35*, 79–96.

Boxer, P. (2010). Variations in risk and treatment factors among adolescents engaging in different types of deliberate self-harm in an inpatient sample. *Journal of Clinical Child and Adolescent Psychology*, *39*, 470–480.

Brausch, A. M., & Gutierrez, P. M. (2010). Differences in non-suicidal self-injury and suicide attempts in adolescents. *Journal of Youth and Adolescence*, *39*, 233–242.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment Theory and Close Relationships* (pp. 46–76). New York: The Guilford Press.

Brent, D. A. (2011). Preventing youth suicide: time to ask how. *Journal of the American Academy of Child & Adolescent Psychiatry*, 50(8), 738-740.

Cassidy, J. (2008). The nature of the child's ties. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications* (2nd ed., pp. 3–22). New York: The Gilford Press.

Cassidy, J., & Shaver, P. (2008). *Handbook of attachment: Theory, research, and clinical applications*. New York: Guilford.

Centres for Disease Control and Prevention, 2012.WISQARS Injury Mortality Report. Webbased Injury Statistics Query and Reporting System (WISQARS). Available from: /http://webappa.cdc.gov/cgi-bin/broker.exeS.

Chang, E. C. (2002). Predicting suicide ideation in an adolescent population: Examining the role of social problem solving as a moderator and a mediator. *Personality and Individual Differences*, 32, 1279–1291.

Claes, L., Muehlenkamp, J., Vandereycken, W., Hamelinck, L., Martens, H., & Claes, S. (2010). Comparison of non-suicidal self-injurious behaviour and suicide attempts in patients admitted to a psychiatric crisis unit. *Personality and Individual Differences*, 48, 83–87.

Cleverley, K., & Kidd, S. A. (2011). Resilience and suicidality among homeless youth. *Journal of Adolescence*, *34*(5), 1049-1054.

Coakes, S. J. (2005), SPSS: Analysis without Anguish: Version 12.0 for Windows, Wiley, Sydney.

Cooper, J., Murphy, E., Webb, R., Hawton, K., Bergen, H., Waters, K., & Kapur, N. (2010). Ethnic differences in self-harm, rates, characteristics and service provision: three-city cohort study. *The British Journal of Psychiatry*, *197*(3), 212-218.

Cox, L. J., Stanley, B. H., Melhem, N. M., Oquendo, M. A., Birmaher, B., Burke, A., ... & Brent, D. A. (2012). A longitudinal study of non-suicidal self-injury in offspring at high risk for mood disorder. *The Journal of Clinical Psychiatry*, 73(6), 821-828.

Crowell, J. A., Fraley, R. C., Shaver, R. P. (2008). Measurement of individual differences in adolescent and adult attachment. In: Cassidy, J., Shaver, P.R. (Eds.), *Handbook of Attachment*. Guilford, New York, pp. 599–634.

Davaji, R. B. O., Valizadeh, S., & Nikamal, M. (2010). The relationship between attachment styles and suicide ideation: the study of Turkmen students, Iran. *Procedia-Social and Behavioral Sciences*, *5*, 1190-1194.

Deeley, S. T., & Love, A. W. (2012). The emotion self-confidence model of suicidal ideation. *Advances in Mental Health*, *10*(3), 246-257.

Deeley, S. T., & Love, A. W. (2013)a. A preliminary investigation into the emotion self-confidence model of suicidal ideation in adolescents. *Archives of Suicide Research*, 17(2), 161-172.

Deeley, S. T., & Love, A. W. (2013)b. Longitudinal analysis of the emotion self-confidence model of suicidal ideation in adolescents. *Advances in Mental Health*, *12*(1), 34-45.

Dennis, M. S. (2002). Suicide and deliberate self-harm in the elderly: an examination of risk factors with implications for prevention. *Doctoral dissertation, University of Leicester*.

Department of Health. (2002). *National Suicide Prevention Strategy for England*. London: Department of Health.

Department of Health. (2012). *Preventing Suicide in England: A cross-government outcomes strategy to save lives*. London: Department of Health.

Deiter-Sands, P. J., Pearlman, L. A. 2009. Self-injury: Treatment of a complex adaptation. In P. M. Kleespies (Ed), *Behavioural emergencies: An evidence-based resource for evaluating and managing risk of suicide, violence, and victimization* (pp. 211-234). Washington, DC: American Psychological Association.

Dougherty, D. M., Mathias, C. W., Marsh-Richard, D. M., Prevette, K. N., Dawes, M. A., Hatzis, E. S., ... & Nouvion, S. O. (2009). Impulsivity and clinical symptoms among adolescents with non-suicidal self-injury with or without attempted suicide. *Psychiatry Research*, *169*(1), 22-27.

Enright, R. D., and the Human Development Study Group (1996). Counselling within the forgiveness triad: On forgiving, receiving forgiveness, and self-forgiveness. *Counselling and Values*, 40 (2), 107-126.

Esposito, C. L., & Clum, G. A. (2002). Social support and problem-solving as moderators of the relationship between childhood abuse and suicidality: Applications to a delinquent population. *Journal of Traumatic Stress*, *15*, 137–146.

Farber, S. (1995). A psychoanalytically informed understanding of the association between binge-purge behaviour and self-mutilating behaviour: A study comparing binge-purgers who self-mutilate severely with binge-purgers who self-mutilate less severely or not at all. *Dissertation Abstracts International*. (UMI Number 99603317).

Farber, S. (2000). When the body is the target: Self-harm, pain, and traumatic attachments. Northvale, NJ: Jason Aronson.

Feeney, J. A. (1999). Adult romantic attachment and couple relationships. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment. Theory, research, and clinical applications* (pp. 355-377). New York/London: Guilford

Fincham, F.D., & Beach, S.R. (2002). Forgiveness: Toward a public health approach to intervention. In J.H. Harvey & A. Wenzel (Eds.), *A Clinician's Guide to Maintaining and Enhancing Close Relationships*. Mahwah, NJ: Lawrence Erlbaum Associates.

Florian, V., Mikulincer, M., & Bucholtz, I. (1995). Effects of adult attachment style on the perception and search for social support. *Journal of Psychology*, 129, 665 - 676.

Gosney, H., & Hawton, K. (2007). Inquest verdicts: youth suicides lost. *Psychiatric Bulletin*, 31(6), 203-205.

Greydanus, D. E., & Shek, D. (2009). Deliberate self-harm and suicide in adolescents. *The Keio Journal of Medicine*, 58(3), 144-151.

Griffin, B. J. (2014). Efficacy of a self-forgiveness workbook: A randomized controlled trial with university students. *VCU Theses and Dissertations*. Paper 3318.

Grunebaum, M. F., Galfalvy, H. C., Mortenson, L. Y., Burke, A. K., Oquendo, M. A., & Mann, J. J. (2010). Attachment and social adjustment: Relationships to suicide attempt and major depressive episode in a prospective study. *Journal of Affective Disorders*, *123*(1), 123-130.

Guertin, T., Lloyd-Richardson, E., Spirito, A., Donaldson, D., & Boergers, J. (2001). Self-mutilative behaviour in adolescents who attempt suicide by overdose. *Journal of the American Academy of Child and Adolescent Psychiatry*, *39*, 470–480.

Güloğlu, B., & Karaırmak, Ö. (2013). Posttraumatic stress disorder among Turkish veterans of the Southeast. *Anatolian Journal of Psychiatry*, *14*(3), 237-244.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate Data Analysis*. (5th Ed.). New Jersey: Prentice-Hall.

Hall, J. H., & Fincham, F. D. (2005). Self–forgiveness: The stepchild of forgiveness research. *Journal of Social and Clinical Psychology*, 24(5), 621-637.

Hamza, C. A., Stewart, S. L., & Willoughby, T. (2012). Examining the link between non-suicidal self-injury and suicidal behaviour: A review of the literature and an integrated model. *Clinical Psychology Review*, 32(6), 482-495.

Hamza, C. A., & Willoughby, T. (2013). Non-suicidal self-injury and suicidal behaviour: A latent class analysis among young adults. *PloS one*, 8(3), e59955.

Hansen, R. W. (2013). The role self-forgiveness and hope in relation to the interpersonal psychological theory of suicide. *Doctoral dissertation, The Ohio State University*.

Harris, I. M., & Roberts, L. M. (2013). Exploring the use and effects of deliberate self-harm websites: An internet-based study. *Journal of medical Internet research*, 15(12).

Hawton, K., & van Heeringen, K. (2009). Suicide. The Lancet, 373, 1372-1381.

Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, *52*(3), 511.

Hirsch, J. K., Webb, J. R., & Jeglic, E. L. (2011). Forgiveness, depression, and suicidal behaviour among a diverse sample of college students. *Journal of Clinical Psychology*, 67(9), 896-906.

Johnson, J., Gooding, P., & Tarrier, N. (2008). Suicide risk in schizophrenia: Explanatory models and clinical implications, The Schematic Appraisal Model of Suicide (SAMS). *Psychology and Psychotherapy: Theory, Research and Practice*, 81(1), 55-77.

Johnson, J., Gooding, P. A., Wood, A. M., & Tarrier, N. (2010)a. Resilience as positive coping appraisals: Testing the schematic appraisals model of suicide (SAMS). *Behaviour Research and Therapy*, 48(3), 179-186.

Johnson, J., Gooding, P. A., Wood, A. M., Taylor, P. J., Pratt, D., & Tarrier, N. (2010)b. Resilience to suicidal ideation in psychosis: Positive self-appraisals buffer the impact of hopelessness. *Behaviour Research and Therapy*, 48(9), 883-889.

Johnson, J., Wood, A. M., Gooding, P., Taylor, P. J., & Tarrier, N. (2011). Resilience to suicidality: the buffering hypothesis. *Clinical Psychology Review*, 31(4), 563-591.

Johnson, K. (2005). Examining the relationship satisfaction of mothers returning to work or study: The impact of attachment, commitment and conflict. Available from: researchbank.swinburne.edu.au

Joiner, T. E. (2005). Why people die by suicide. Cambridge, MA: Harvard University Press.

Joly, M. (2014). Parent and peer attachment relationships and non-suicidal self-injury in young adolescents. *Counselling Psychology University/Publisher*. McGill University.

Karademas, E. C. (2006). Self-efficacy, social support and well-being: The mediating role of optimism. *Personality and Individual Differences*, 40(6), 1281-1290.

Kene-Allampalli, P., Hovey, J. D., Meyer, G. J., & Mihura, J. L. (2010). Evaluation of the reliability and validity of two clinician-judgment suicide risk assessment instruments. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 31(2), 76.

Kidd, S., & Shahar, G. (2008). Resilience in homeless youth: the key role of self-esteem. *American Journal of Orthopsychiatry*.

Kimball, J. S., & Diddams, M. (2007). Affect regulation as a mediator of attachment and deliberate self-harm. *Journal of College Counselling*, *10*(1), 44-53.

Kleiman, E. M., & Liu, R. T. (2013). Social support as a protective factor in suicide: Findings from two nationally representative samples. *Journal of Affective Disorders*, 150(2), 540-545.

Law, B. M. F., & Shek, D. T. L. (2013). Self-harm and suicide attempts among young Chinese adolescents in Hong Kong: prevalence, correlates, and changes. *Journal of Pediatric and Adolescent Gynecology*, 26(3), S26-S32.

Levi-Belz, Y., Gvion, Y., Horesh, N., & Apter, A. (2013). Attachment patterns in medically serious suicide attempts: The mediating role of self-disclosure and loneliness. *Suicide and Life-Threatening Behaviour*, 43(5), 511-522.

Levi, Y., Horesh, N., Fischel, T., Treves, I., Or, E., & Apter, A. (2008). Mental pain and its communication in medically serious suicide attempts: An "impossible situation." *Journal of Affective Disorders*, 111(2), 244–250.

Lessard, J. C., & Moretti, M. M. (1998). Suicidal ideation in an adolescent clinical sample: Attachment patterns and clinical implications. *Journal of Adolescence*, *21*, 383–395.

Liang, S., Yan, J., Zhang, T., Zhu, C., Situ, M., Du, N., ... & Huang, Y. (2014). Differences between non-suicidal self-injury and suicide attempt in Chinese adolescents. *Asian Journal of Psychiatry*, 8, 76-83.

Lieberman, Z., Solomon, Z., & Ginzburg, K. (2005). Suicidal ideation among young adults: Effects of perceived social support, self-esteem, and adjustment. *Journal of Loss and Trauma*, *10*(2), 163-181.

Madge, N., Hewitt, A., Hawton, K., Wilde, E. J. D., Corcoran, P., Fekete, S., ... & Ystgaard, M. (2008). Deliberate self-harm within an international community sample of young people: Comparative findings from the Child & Adolescent Self-harm in Europe (CASE) Study. *Journal of Child Psychology and Psychiatry*, 49(6), 667-677.

Maltby, J., Macaskill, A., & Day, L. (2001). Failure to forgive self and others: A replication and extension of the relationship between forgiveness, personality, social desirability, and health. *Personality and Individual Differences*, *30* (5), 881-885.

Mauger, P. A., Perry, J. E., Freeman, T., Grove, D. C., McBride, A. G., & McKinney, K. E. (1992). The measurement of forgiveness: Preliminary research. *Journal of Psychology and Christianity*, 11 (2), 170-180.

McLaughlin, J., O'Carroll, R. E., & O'Connor, R. C. (2012). Intimate partner abuse and suicidality: A systematic review. *Clinical Psychology Review*, *32*(8), 677-689.

Merz, E. M., & Consedine, N. S. (2009). The association of family support and wellbeing in later life depends on attachment style. *Attachment & Human Development*, 11, 203-221.

Merz, E. M., & Consedine, N. S. (2012). Ethnic group moderates the association between attachment and well-being in later life. *Cultural Diversity and Ethnic Minority Psychology*, *18*(4), 404.

Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. *Attachment Theory and Close Relationships*, *143*, 165.

Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure. *Journal of Personality and Social Psychology*, 61(2), 321.

Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York: Guilford.

Mikulincer, M., Shaver, P.R. (2008). Adult attachment and affect regulation. In: Cassidy, J., Shaver, P.R. (Eds.), *Handbook of Attachment*. Guilford, New York, pp. 503–531.

Muehlenkamp, J. J. (2005). Self-injurious behaviour as a separate clinical syndrome. *American Journal of Orthopsychiatry*, 75(2), 324-333.

Muehlenkamp, J. J., Ertelt, T. W., Miller, A. L., & Claes, L. (2011). Borderline personality symptoms differentiate non-suicidal and suicidal self-injury in ethnically diverse adolescent outpatients. *Journal of Child Psychology and Psychiatry*, 52, 148–155.

Muehlenkamp, J. J., & Gutierrez, P. M. (2004). An investigation of differences between self-injurious behaviour and suicide attempts in a sample of adolescents. *Suicide & Life Threatening Behaviour*, *34*, 12–22.

Muehlenkamp, J. J., & Gutierrez, P. M. (2007). Risk for suicide attempts among adolescents who engage in non-suicidal self-injury. *Archives of Suicide Research*, 11, 69–82.

Navaneelan, T. (2012). Suicide rates: An overview. Health Statistics Catalogue, 82-624-X.

Nock, M. K. (2010). Self-injury. Annual Review of Clinical Psychology, 6, 339-363.

Nock, M. K., Borges, G., Bromet, E. J., Cha, C. B., Kessler, R. C., & Lee, S. (2008). Suicide and suicidal behaviour. *Epidemiologic Reviews*, 30(1), 133-154.

Nock, M. K., & Favazza, A. (2009). Non-suicidal self-injury: Definition and classifications. In M. K. Nock (Ed.), *Understanding non-suicidal self-injury: Origins, assessment and treatment*. Washington DC: American Psychological Association.

Nock, M. K., Joiner Jr, T. E., Gordon, K. H., Lloyd-Richardson, E., & Prinstein, M. J. (2006). Non-suicidal self-injury among adolescents: Diagnostic correlates and relation to suicide attempts. *Psychiatry Research*, *144*(1), 65-72.

Osman, A., Bagge, C. L., Gutierrez, P. M., Konick, L. C., Kopper, B. A., & Barrios, F. X. (2001). The Suicidal Behaviours Questionnaire-Revised (SBQ-R): validation with clinical and non-clinical samples. *Assessment*, 8(4), 443-454.

Office for National Statistics. (2012). Births and Deaths in England and Wales (provisional), 2011. Available from: /http://www.ons.gov.uk/ons/rel/vsob1/death-reg-sum-ta bles/2011–provisional-/sb-births-and-deaths-first-release–2011.

Pallant, J. (2001). SPSS Survival Manual: A step-by-step guide to data analysis using SPSS for Windows (Version 10). Allen & Unwin.

Panagioti, M., Gooding, PA., Taylor, P.J., & Tarrier, N. (2012). Negative self-appraisals and suicidality among trauma victims experiencing PTSD symptoms: The mediating role of defeat and entrapment. *Depression and Anxiety*, 29(3), 187-194.

Panagioti, M., Gooding, P. A., Taylor, P. J., & Tarrier, N. (2014). Perceived social support buffers the impact of PTSD symptoms on suicidal behaviour: Implications into suicide resilience research. *Comprehensive Psychiatry*, *55*, 104–112.

Park, J. I., Han, M. I., Kim, M. S., Yoon, M. S., Ko, S. H., Cho, H. C., & Chung, Y. C. (2014). Predictors of suicidal ideation in older individuals receiving home-care services. *International Journal of Geriatric Psychiatry*, 29(4), 367-376.

Paterson, J., Pryor, J., & Field, J. (1995). Adolescent attachment to parents and friends in relation to aspects of self-esteem. *Journal of Youth and Adolescence*, 24, 365 – 376.

Peter, T., Roberts, L. W., & Buzdugan, R. (2008). Suicidal ideation among Canadian youth: A multivariate analysis. *Archives of Suicide Research*, *12*(3), 263-275.

Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., ... & Mann, J. J. (2011). The Columbia–Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. *American Journal of Psychiatry*, 168(12), 1266-1277.

Powell, J. (2000). Suicide in psychiatric hospital in-patients: Risk factors and their predictive power. *The British Journal of Psychiatry*, 176, 266–272.

Powell, J., Geddes, J., Hawton, K., Deeks, J., & Goldacre, M. (2000). Suicide in psychiatric hospital in-patients Risk factors and their predictive power. *The British Journal of Psychiatry*, *176*(3), 266-272.

Rodkjaer, L., Chesney, M. A., Lomborg, K., Ostergaard, L., Laursen, T., & Sodemann, M. (2014). HIV-infected individuals with high coping self-efficacy are less likely to report depressive symptoms: a cross-sectional study from Denmark. *International Journal of Infectious Diseases*, 22, 67-72.

Roe, D., Yanos, P. T., & Lysaker, P. H. (2006). Coping with psychosis: An integrative developmental framework. *The Journal of Nervous and Mental Disease*, 194(12), 917.

Sansone, R. A., Sellbom, M., Chang, J., & Jewell, B. (2012). An examination of racial differences in self-harm behaviour. *Psychiatry Research*, 200(1), 49-51.

Schaffer, C. E. (1993). The role of adult attachment in the experience and regulation of affect. *Unpublished doctoral dissertation, Yale University, New Haven* 

Scherer, M., Worthington Jr, E. L., Hook, J. N., & Campana, K. L. (2011). Forgiveness and the bottle: Promoting self-forgiveness in individuals who abuse alcohol. *Journal of Addictive Diseases*, 30(4), 382-395.

Selby, E. A., & Joiner Jr, T. E. (2008). Ethnic variations in the structure of borderline personality disorder symptomatology. *Journal of Psychiatric Research*, 43(2), 115-123.

Sheftall, A. H., Mathias, C. W., Furr, R. M., & Dougherty, D. M. (2013). Adolescent attachment security, family functioning, and suicide attempts. *Attachment & human development*, *15*(4), 368-383.

Shek, D. T., & Yu, L. (2012). Self-harm and suicidal behaviours in Hong Kong adolescents: prevalence and psychosocial correlates. *The Scientific World Journal*, 2012.

Strelan, P. (2007). The prosocial, adaptive qualities of just world beliefs: Implications for the relationship between justice and forgiveness. *Personality and Individual Differences*, 43(4), 881-890.

Swahn, M. H., Ali, B., Bossarte, R. M., Van Dulmen, M., Crosby, A., Jones, A. C., & Schinka, K. C. (2012). Self-harm and suicide attempts among high-risk, urban youth in the US: shared and unique risk and protective factors. *International Journal of Environmental Research and Public Health*, *9*(1), 178-191

Sümer, N., & Güngör, D. (1999). Psychometric evaluation of adult attachment measures on Turkish samples and a cross-cultural comparison. *Turk Psikoloji Dergisi*, *14*(43), 71-109.

Tarrier, N., & Gooding, P. (2007). Treatment manual: Cognitive behavioural suicide prevention for psychosis. *Unpublished manuscript*.

Terzino, K. A. (2010). Self-forgiveness for interpersonal and intrapersonal transgressions. *Graduate Theses and Dissertations*. Paper 11470.

Thompson, L. Y., Snyder, C. R., Hoffman, L., Michael, S. T., Rasmussen, H. N., Billings, L. S., ... & Roberts, D. E. (2005). Dispositional forgiveness of self, others, and situations. *Journal of Personality*, 73(2), 313-360.

Thompson, M. P., Kaslow, N. J., Short, L. M., & Wyckoff, S. (2002). The mediating roles of perceived social support and resources in the self-efficacy-suicide attempts relation among African American abused women. *Journal of Consulting and Clinical Psychology*, 70(4), 942.

Turner, B. J., Layden, B. K., Butler, S. M., & Chapman, A. L. (2013). How often, or how many ways: Clarifying the relationship between non-suicidal self-injury and suicidality. *Archives of Suicide Research*, 17(4), 397-415.

van Ijzendoorn, M. H., & Bakermans-Kranenburg, M. J. (1996). Attachment representations in mothers, fathers, adolescents, and clinical groups: A meta-analytic search for normative data. *Journal of Consulting and Clinical Psychology*, 64(1), 8.

Victor, S. E., & Klonsky, E. D. (2014). Correlates of suicide attempts among self-injurers: A meta-analysis. *Clinical Psychology Review*, *34*(4), 282-297.

Walker, D. F., & Gorsuch, R. L. (2002). Forgiveness within the Big Five personality model. *Personality and Individual Differences*, *32*(7), 1127-1137.

Webb, J. R., Toussaint, L., & Conway-Williams, E. (2011). Integrating psychology and religiousness/spirituality: Forgiveness as a nexus. *Manuscript submitted for publication*.

Wedig, M. M., & Nock, M. K. (2007). Parental expressed emotion and adolescent self-injury. *Journal of the American Academy of Child & Adolescent Psychiatry*, 46(9), 1171-1178.

Westers, N. J. (2010). Forgiveness and religious coping in adolescents who self-injure Doctoral dissertation, Regent University. *ProQuest Dissertations & Theses*, 3420452.

Westers, N. J., Rehfuss, M., Olson, L., & Biron, D. (2012). The role of forgiveness in adolescents who engage in nonsuicidal self-injury. *The Journal of Nervous and Mental Disease*, 200(6), 535-541.

Whitlock, J., & Knox, K. L. (2007). The relationship between self-injurious behaviour and suicide in a young adult population. *Archives of Pediatrics & Adolescent Medicine*, 161, 634-640.

Whitlock, J., Muehlenkamp, J., Eckenrode, J., Purington, A., Baral Abrams, G., Barreira, P., & Kress, V. (2013). Non-suicidal self-injury as a gateway to suicide in young adults. *Journal of Adolescent Health*, 52(4), 486-492.

Whitlock, J., Muehlenkamp, J., Purington, A., Eckenrode, J., Barreira, P., Baral Abrams, G., ... & Knox, K. (2011). Non-suicidal self-injury in a college population: General trends and sex differences. *Journal of American College Health*, 59(8), 691-698.

Wilburn, V. R., & Smith, D. E. (2005). Stress, self-esteem, and suicidal ideation in late adolescents. *Adolescence*, 40, 33–4

Wilcox, H. C., Arria, A. M., Caldeira, K. M., Vincent, K. B., Pinchevsky, G. M., & O'Grady, K. E. (2012). Longitudinal predictors of past-year non-suicidal self-injury and motives among college students. *Psychological Medicine*, *42*(04), 717-726.

Williams, J. M. G. (1997). *Cry of pain: Understanding Suicide and Self-harm*. London: Penguin Books.

Wolff, J., Frazier, E. A., Esposito-Smythers, C., Burke, T., Sloan, E., & Spirito, A. (2013). Cognitive and social factors associated with NSSI and suicide attempts in psychiatrically hospitalized adolescents. *Journal of Abnormal Child Psychology*, *41*(6), 1005-1013.

World Health Organization. (2007). World Health Organization. Suicide prevention (SUPRE). Geneva, Switzerland. Available from: /http://www.who.int/mental\_health/prevention/suicide/suicideprevent/en/S.

Yelsma, P., Brown, N. M., & Elison, J. (2002). Shame-focused coping styles and their associations with self-esteem. *Psychological Reports*, *90*(3c), 1179-1189.

Zechmeister, J. S., & Romero, C. (2002). Victim and offender accounts of interpersonal conflict: autobiographical narratives of forgiveness and unforgiveness. *Journal of Personality and Social Psychology*, 82(4), 675.

Zettle RD, Barner SL, Gird S (2009) ACT with depression: The role of forgiving. In JT Blackledge, J Ciarrochi, FP Deane (Eds), *Acceptance and Commitment Therapy: Contemporary Theory, Research and Practice* (pp. 151-173). Bowen Hills, QLD, Australia: Australian Academic Press.

Zeyrek, E. Y., Gençöz, F., Bergman, Y., & Lester, D. (2009). Suicidality, problem-solving skills, attachment style, and hopelessness in Turkish students. *Death Studies*, *33*(9), 815-827.

# **Appendices**

# **Chapter 2 Appendices**

# Appendix 2a: Blind coded previously analysed interviews

#### Authoritative

100 (22): I say things to them like "Leave me alone", and they don't leave me alone

100 (35-36): it's only when the voices want me to go to sleep that I can go to sleep

101 (17-18): I went to have like a relaxing sit down in the front room and the voices were saying "Get up, get up"

101 (40-41): They'll come back and say "We're still here" or they'll say something to make sure I know that they're there

101 (50-51): my sister said "Alright" then the voices said "We are not alright"

101 (106): the voices were telling me to stop eating, stop sleeping

103 (95-96): They were basically "Oh look, there's your new Mum. You've got to report to her, you've got to be her friend, you've got to be on her side."

103 (27): so told me to take my jumper off (to give as a peace offering to neighbour)

103 (31): he says, in my voice... "Throw the hamster against the wall"

103 (64-65): it was... laughing going "... don't tell Mum this that or the other, or else..."

105 (3): I wanted to listen in to what they (neighbours) were saying like, but my voices and that were saying "Don't do it"

106 (21): it's definitely almost as if... someone's being told off

106 (22-23): they would potentially get a little bit more aggravated or direct in what they were saying

106 (61-62): what you're meant to be doing is looking at me and answering me, however, you need to be paying attention to what they're saying

#### In Control

100 (3): the voices have taken over my mind

100 (6-7): I can't get rid of them

100 (22): I say things to them like "Leave me alone", and they don't leave me alone

100 (35-36): it's only when the voices want me to go to sleep that I can go to sleep

100 (49): they've gone into my mind and taken it

100 (130-132): I feel I'm just getting on with things. I feel that if I was to do something and it would anger the voices, like speak to the Society of Homeopaths about what they've done to me then they would get angry and I potentially could lose awareness of certain aspects of my mind and behaviour.

101 (29): It says "<different language>" and like "Where are you going"

101 (40-41): They'll come back and say "We're still here" or they'll say something to make sure I know that they're there

101 (18-19): So they just randomly come when I don't realise, they're quite random, like if I'm about to do anything .

103 (72-73): Since I've had my mental illness... since I wake up and the time I go to bed, I've had the voice in my head

103 (6): it's always been like a voice that triggers off automatically on its own

103 (30): the male voice can use my own voice against me

103 (98-99): It was like "How dare you take a picture of this old lady, she's done nothing wrong, I'm going to f the camera up on you", and the camera didn't seem to work

105 (24-25): Sometimes... they don't stop

106 (130-131): I have no control over when it happens or... how that whatever gets said gets said... I have literally no control over it

110 (29): I didn't want to wake up to hear them every day

110 (37): They stopped my day-to-day life. I wouldn't go out because of my voices

#### **Powerful**

100 (5): the fact that they're a strong consciousness has made my mind weak

100 (3): the voices have taken over my mind

100 (6-7): I can't get rid of them

100 (101): They're just like taking thoughts

100 (131-132): they would get angry and I potentially could lose awareness of certain aspects of my mind and behaviour.

100 (5): the fact that they're a strong consciousness has made my mind weak

100 (68-69): I've got three different types of medication that I take and I don't feel that it takes away the voices

103 (72-73): Since I've had my mental illness... since I wake up and the time I go to bed, I've had the voice in my head

105 (124): they just overcome you

106 (170): when I experience things it does greatly affect me

# **Manipulative**

103 (30): the male voice can use my own voice against me

103 (31): he says, in my voice... "Throw the hamster against the wall"

105 (4-5): they use voices from back in the day, like of a... mates or girlfriend that I had

105 (6): They just use them against me

105 (41-42): They're lying, they're actually like lying to me... it's like, if I can hear them, they must be able to hear them

105 (68-69): it's just lies man, it's a complete lie

112 (255-260): I'm still curious though I'm sitting there thinking what the hell man its just a matter of a time before someone twists it around and turns it into a bad thing... whether its me or them or whether its someone else who's hearing voices skill [/still/] someone's gonna get really hurt over it

112 (644-647): this shit, if I find out who she is she's gone I'm telling ya cus this woman is starting it all up between two two of... serious war this could have, could have been people getting shot un everything I'm not lying seriously

112 (688-690): The case is she's doing all this stirring, she's saying to me =Jimmy's= planning on bombing your whole family =Jimmy's= planning on doing that

# **Punishing**

100 (79-81): they say that they have made, they say they have given my Dad like mental health problems, and they say that they have taken my Mum and my Grandmother from the spirit

103 (85-86): he was like "Ha ha, you deserved it because you brought all this pain and suffering onto your Mum"

105 (6): They just use them against me

105 (9): I must have been doing something wrong back in the day

# **Frustrating**

100 (41-42): the voices make me... quite angry, they make me quite sort of agitated

100 (83-85): I feel angry, but not in an aggressive way, I just in my mind feel that, feel angry that this is what they've done and I feel like, that they don't have the courage to admit to what they've done but they've done it.

101 (47-48): I'm trying to do something normal... and they're bothering me

101 (51-52): I do get agitated... like I'll find it really annoying

101 (63): I felt quite agitated at them

103 (8): Very annoyed and peed off

103 (15): Very annoyed

105 (6): it gets you wound up

105 (8): I don't know how they do it man, fucking, they're bastards

105 (69): it's all fucking bull crap

106 (234): it just gets really, really annoying

# Making Sense of Experience (explanations versus insight)

100 (54-56): for a big part of time I was like looking on the internet... trying to understand what's happened to me

100 (73-74): what I'm going through isn't normal, it's not normal mental health, it's because it's their consciousness in my mind

101 (95): that could just be my own beliefs playing up and my mind, triggering them off

101 (103-106): that was like one of the things that, part of my psychosis gets me is the eating... when I went quite bad in my psychosis, the voices were telling me to stop eating, stop sleeping

103 (72-73): Since I've had my mental illness... since I wake up and the time I go to bed, I've had the voice in my head

105 (9): I must have been doing something wrong back in the day

105 (28): It makes me think man, who is it?

105 (34): I think I've always been sensitive to sound and that

105 (122-124): It's like, say like a mother duck, you've got a duckling, the duckling knows that call innit, so if it's family and that, speaking and that, like they won't hear them like we are speaking now

106 (37-38): I know it's not them (people outside) saying these things, I can see they're not doing anything towards me or saying anything towards me

106 (46-47): because I know there's not ten/fifteen people in the garage or under the stairs, I tend to handle that a bit better

106 (76-77): because I can't see anything, they must not be there

106 (58-87): why would there be a group of people in our garage... that was the point where I really began to understand that... it was something to do with myself

106 (83-84): the point where I thought no this isn't quite right

106 (107-109): I'm aware that it's something gone wrong in my head to put it bluntly, whether it's a chemical imbalance or I'm not sure if you're aware that I was attacked a couple of years ago when this first happened

106 (121-122): that's when I started experiencing things so I can understand that potentially that was a trigger

106 (147): reading different papers, different media outlets, of course you have these preconceived ideas

106 (148-151): how other people experience these things... they have names and, you know, personalities and I don't really have that, mine are very much voices, they don't have names... that singular one... doesn't have a name, it doesn't have an image, it's just a, it's a voice

106 (158-160): having that ability of being able to just get on with stuff, maybe that is why I can recognise the fact that what I do experience is, or what one would say, isn't a regular, normal thing

110 (46-47): obviously it's a part of me; it's coming from my head, my brain...

# **Searching for Answers**

100 (53-54): Is there a solution, has someone else gone through this, is there information on what I'm going through

100 (54-56): for a big part of time I was like looking on the internet... trying to understand what's happened to me

100 (56-57): there's the part of this experience of what's going on leads you to try and investigate

101 (63-64): why are they here and saying this stuff to me

101 (98): why are they there

101 (132-133): is it the voices or is it my thoughts, why are they, and why am I thinking like this

105 (28): It makes me think man, who is it?

105 (37-39): can I make it stop and is it me doing it

106 (191-192): I've experienced it for a good long time on my own because I was embarrassed by it so I did go internet

# **Disruptive** (distracting + stopping daily life completely)

100 (10): I feel like sleeping to block out the voices

100 (10-11): If I sleep and block out the voices, I'm not facing the struggle of living, I'm just sleeping

100 (35): my sleep has been disturbed, like I can't go to sleep naturally

100 (35-36): it's only when the voices want me to go to sleep that I can go to sleep

100 (60): a lot of time is spent sleeping, lying in bed, feeling tired from my voices

100 (61): you're not as much living life, just sleeping

100 (63-64): it's difficult when you're not feeling well to keep everything tidy and neat

- 100 (64-65): It's just, sort of self-neglect and not keeping as tidy
- 101 (2-3): I think I was just doing normal stuff... and just all of a sudden the voices started
- 101 (18-19): they just randomly come... like if I'm about to do anything
- 101 (33): if I try to pray they start on me
- 101 (41): whilst I was putting my deodorant on the voices started screaming
- 101 (47-48): I'm trying to do something normal like have a cup of tea and they're bothering me
- 101 (61-62): while I was making a cup of tea so again I was trying to do... a normal life duty and the voices were just like "We're going to get you"
- 101 (85-86): I was trying to have my cup of tea, like do a normal task and they were just threatening me
- 101 (102-105): I feel like I'm trying to get on with something normal, like eating is like good for me and I need to eat, that was like one of the things that... the thoughts were making me try to stop eating
- 101 (107): they make it difficult for me or distrust me at those times
- 105 (14): I weren't getting no sleep
- 105 (20-21): I used to spit like rap... I've stopped all that. I can't like get back into it, I can't read a book... the only thing that I could do is watch TV
- 105 (24): it's like, can't do nothing like, can't do nothing
- 106 (48): That one (multiple voices) does take me a bit longer to kind of get back to my normal operating
- 106 (61-62): what you're meant to be doing is looking at me and answering me, however, you need to be paying attention to what they're saying
- 106 (62-63): you have so many things that you're trying to concentrate on, you start tripping over yourself
- 106 (95-96): everything does become far more difficult, I become distracted

106 (96-97): a task that is normally simple that takes minutes to do could take me a very long time purely because I just can't concentrate on it

106 (170): when I experience things it does greatly affect me

106 (252-253): the answer I gave was so far disconnected from what I was actually asked by the interviewer

110 (37): They stopped my day-to-day life. I wouldn't go out because of my voices

110 (43-44): I wouldn't want to go out because, in case I thought of anything, they would just start again as soon as I get out of the door

110 (29): I didn't want to wake up to hear them every day

# Separate to Self

100 (5): their consciousness has gone into my mind

100 (5): the fact that they're a strong consciousness has made my mind weak

100 (21): I'm hearing it in my mind because their energy has gone into my mind

100 (49): they've gone into my mind and taken it

100 (74): it's because it's their consciousness in my mind

101 (70-71): I thought of pouring water into the bin so, that like wasn't my thought

101 (90): I start thinking that maybe it's the jinns around me putting these thoughts in me

101 (121-122): I start thinking that "I don't want to be alive anymore" and I feel like they're not my thoughts

103 (33): it's stuff that I would never think

105 (17): it's outside my head man, it ain't inside my head, no way is it

105 (17-18): Sometimes seems like it's coming from outside my house man, like I can hear them outside

105 (37-39): it's definitely outside, it's not all in my head

105 (63-64): I hope I hear the voices now like, so if I can hear it, hopefully they can hear it

106 (129-130): I hear it as an exterior voice, it's not as if I have a thought, it's as clear as your voice is to me

110 (7): it feels like it's not in my own mind

110 (52-53): I didn't think I was hearing voices, I just thought someone was playing a trick on me

#### Motive

100 (32-33): they just had an ulterior motive to take my soul energy

100 (49): they've gone into my mind and taken it

101 (49-50): "We're going to kill you"... sometimes they, they were threatening me that they were going to kill me

101 (107-108): I feel like... they don't want me to be alive and they want me to be dead and they're trying to kill me

103 (23-25): the voices yeah, are basically trying to get me to be friends with people who would either beat me up or who would... try and not be very nice to me

105 (65-66): they just want you to be ill, they want you to like, I don't know, they just want you to be ill man.

105 (28): It makes me think man, who is it?

105 (78/80): at first, it was my Uncle's that I could hear... "You've got to chill out and that lad, man. You can't be doing that, flipping out and that"

105 (86): (Family members) They're like clever enough to like, put this on me

105 (88): (Family members) maybe they're trying to say like "What you was doing, you can't be doing that..."

105 (125-126): that's probably why they're using voices that you recognise from back in the day and it's like "We use these, try to connect"

#### Part of Self

101 (45): it's not a real sound, it's like a thought in my mind

101 (46): It's a thought. It's like a thinking voice

106 (12-13): I recognise it as myself

106 (28): I recognise that it's something going on in my own head

106 (53): I'm aware that it's something that I'm experiencing

106 (107): I'm aware that it's something gone wrong in my head

106 (136-137): I would know it was coming from my head

106 (143): I know what I'm hearing is in my head... as distressing as it is

106 (145-146): I don't like really referring to it as a separate entity because I know it's not

106 (161-162): I don't like talking about it in, in that kind of third person or that extra person sense because I don't have that

110 (46-47): obviously it's a part of me; it's coming from my head, my brain...

110 (50): It was more in my mind

111 (28): It's just in my own mind

# **Complex**

100 (13-15): These voices are spiritual, understand spirituality and they understand the spiritual nature of life ... spiritual energies from their being because they've both passed over, and they're saying that they've taken them for themselves

100 (45-50): The voices say they are emptying my etheric mind, etheric engineering so that my mind becomes simple ... what they've done is they've gone into my mind and taken it, like broken my etheric mind up and taken it.

100 (92-95): They say that they, when I was friends with them ... to my solar plexus and I didn't like the feeling of what they were doing so I just cut off contact from them, I didn't pursue contact so they then came after me with an even stronger energy.

100 (96-99): and then they came back after me again to take my creativity, to take my etheric ovary... take my soul, all for this little baby boy, to turn him into like a gifted baby by giving him my creativity, my creative thoughts from my mind.

101 (75-77): why am I thinking that, that's not my thought, there's an interference with my thought, so something else is making me think that so that was quite confusing, like is it my thought or is it the voices

101 (79-81): it's not a real sound, it's just when you're thinking, when I'm thinking, like to myself, that kind of thought. But it was something that I wouldn't have thought myself

101 (99-100): It's never a real sound, it's mostly the thought... they were being quite loud, the thought was quite loud

101 (141-142): I feel like it's me thinking then at some point it feels like it's something's interfering with my thoughts

103 (17-18): Sometimes it's outside in the yard, sometimes it's in the house, sometimes it's in my own body and sometimes it's out in the back, and sometimes it comes from next door

103 (33-35): it's stuff that I would never think... It's in my head

106 (12-13): I recognise it as myself, even though it isn't actually my voice

106 (32-33): even though I'm aware that it's something from within, in those situations, I do have a very hard time recognising that

106 (42-43): if ever I'm on my own, my mind will recognise it as if it's something from next door

106 (134-135): it's so clear in my mind... it can get confusing

110 (7): it feels like it's not in my own mind

110 (46-47): obviously it's a part of me; it's coming from my head, my brain...

110 (5): Coming from all around.

# Resignation

100 (10-11): If I sleep and block out the voices, I'm not facing the struggle of living, I'm just sleeping

100 (61): you're not as much living life, just sleeping

103 (8): Very annoyed and peed off, but what can you say

103 (58-59): I'd choose the nice ones... but you have to take the good with the bad

105 (57-58): I can't do anything... I've got to put up and shut up innit! I can't do anything like!

110 (51): Just part of my everyday life now

111 (5): Well it's very unusual and odd but I just have to accept it I suppose

111 (13): So just have to accept it really or just take my medication to control them

111 (99): I've just gotten used to it now

112 (545-546): it's just a natural thing it's just a part of my life. I hear voices through the TV, it's a part of my life sometimes they're helping me un stuff...

112 (562-564): it's a mad life style to live but I don't mind it, basically I've got anything I want right in front of me, I could do whatever I like d'you know what I mean un I think I will become an actor instead

122 (583-586): I I'd still hear the voices through the TV but it doesn't doesn't really bother me anymore, it's just if they say bad things about me then I'm like fair enough that's your own opinion d'you know what I mean that's their opinion they don't really know me d'you know what I mean

#### Constant

100 (6-7): I can't get rid of them

100 (22): they don't leave me alone

100 (68-69): I've got three different types of medication that I take and I don't feel that it takes away the voices

101 (23): wherever I am in the house they started

101 (23-24): they're starting on me now that I'm remembering them

101 (54): they'll say "We're still here"

101 (64-65): The voices were there when I was going to the toilet and making breakfast and still present when I'm writing the diary

101 (66-67): sometimes they're just in the background. Yes, I know they're there

103 (73): since I wake up and the time I go to bed, I've had the voice in my head

105 (58-59): it's every day love I hear them, every day, every day

105 (62-63): they was there... through all the night, into the morning

110 (2-3): you can't get away from it

110 (29): I didn't want to wake up to hear them every day

110 (43-44): they would just start again as soon as I get out of the door

# **Fatigue**

100 (2-3): my mind feels weak

100 (10): I just feel tired a lot, I feel like sleeping

100 (60): a lot of time is spent sleeping, lying in bed, feeling tired from my voices

105 (82): it takes a lot out of you

#### **Beliefs**

100 (13-15): These voices... understand spirituality and they understand the spiritual nature of life and how life works, and what they say is that "We are energy beings in a physical world in a physical body and as such, as energy beings we live beyond life"

101 (42-43): I'm alright when they start screaming because I think what if they (the jinns) might be leaving; the voices might be stopping

101 (89): I associate the voices to the jinns

101 (90): I start thinking that maybe it's the jinns around me putting these thoughts in me

101 (95): that could just be my own beliefs playing up and my mind, triggering them off

105 (86): (Family members) They're like clever enough to like, put this on me

105 (94-95): (Family members) it's not a new technology what they're doing

105 (122-124): It's like, say like a mother duck, you've got a duckling, the duckling knows that call innit, so if it's family and that, speaking and that, like they won't hear them like we are speaking now

105 (125-126): that's probably why they're using voices that you recognise from back in the day and it's like "We use these, try to connect"

110 (52-53): I didn't think I was hearing voices, I just thought someone was playing a trick on me

112 (273-274): So is this is all part of someone's revolution I didn't know, I don't know whats going on

112 (517-518): Everyone has Sc Schizophrenia theres loads of different types of it d'you know what I mean...

# **Frightening**

100 (125-128): P: It's quite scary because I fear that it might take over my mind ... it's a fear that's there as to maybe that that's what will happen because it's happened once already when I was hospitalised in Kent, so I fear that it could happen again.

101 (12): I think when they start swearing I find it quite scary

101 (27): it makes me feel quite scared

101 (34-35): it's I think more scary if they start swearing at me

101 (86-87): "We're going to do something to you", I felt quite threatened by them

105 (118-119): it's a bit scary speaking about them because basically, I don't know where they're coming from

# **Confusing**

101 (76-77): that was quite confusing, like is it my thought or is it the voices

101 (123-124): it gets confusing whether it's my thoughts or it's the voices putting the thought in my head

101 (132-133): is it the voices or is it my thoughts, why are they, and why am I thinking like this

105 (8): I don't know how they do it

105 (117): I don't know where they're coming from

105 (37-38): can I make it stop and is it me doing it

105 (134-135): I don't know man, if it was my own thought, I can't even remember

106 (32-33): even though I'm aware that it's something from within, in those situations, I do have a very hard time recognising that

106 (134-135): it's so clear in my mind... it can get confusing

106 (244-245): I become quite disorientated and confused

110 (52-53): I didn't think I was hearing voices, I just thought someone was playing a trick on me

# Overwhelming

100 (2): It's about waking up to the voices

100 (116): I feel helpless to a certain extent as to what I can do.

100 (68-69): I've got three different types of medication that I take and I don't feel that it takes away the voices

105 (124): they just overcome you

106 (58-59): the group voice is harder to deal with... because there's just so much information at once

106 (62-63): you have so many things that you're trying to concentrate on, you start tripping over yourself

106 (69-70): it gets overwhelming

110 (3): you can't get away from it

110 (29): I didn't want to wake up to hear them every day

112 (191- 192): May May last year I think it was I said I've had enough of this so I took over sixty odd lines of pink tablets and tried to kill myself

112 (199-202): That's all through TV, cussss cus the voices through the TV, I couldn't take it no more un I was like, when I lived on me own it was really bad but when I'm around my mum and my dad are around frightens it doesn't happen when I'm when I'm on my own most of the time d'you know what I mean

112 (204-205): Yearrh, I said fuck I've had enough man so took over sixty tablets un tried to kill myself, easiest way out, but I'd swear I'd never do that again...

#### Stressful

106 (29): it does get very stressful

106 (230): I think that's why they're so stressful is because I don't want to do any of this stuff

110 (13): it's traumatising. Stressful

112 (69-70): it its was tough man its really tough, but its only cause I didn't stick to my medication if when I stick to my medication I don't hear no voices or anything

112 (384): It is difficult, its difficult because I'm not hearing voices through in my head

# **Upsetting**

101 (98): they were there... in a negative way and that distressed me

106 (29): I get very upset about it

106 (47): I do still get very upset and kind of down

106 (234): because of the subject matter, that's why it's upsetting

112 (120 – 121): so ya know what I mean un I I said fair enough and I was like I I don't like it I don't like hearing the voices like from the TV or anything.

# Multiple

103 (10-11): Basically, it, there's a couple of voices, basically one's male – complete douche, gone now – and there's a female one that's basically quite pleasant and quite nice, and she's okay to me

106 (6): they're a mix, probably both male and female

106 (7): those ones are always as if it is an angry group of people

106 (49-50): There's that kind of motley crew kind of thing

106 (58-59): the group voice is harder to deal with, purely because it's harder to kind of focus on one aspect of it because there's just so much information at once

110 (19): Nah, multiple voices

110 (23): Maybe I might get one or two pleasant ones, but mostly negative.

110 (63): Yeah, sometimes they're all there at the same time, sometimes it's one or another.

111 (40): It's just different voices

112 (109 – 111): Its like umm you know when you're in a pub and everyone's chatting well its like that, its like you hear voices like do everyone chats un stuff in the background, its like background d'you know what I mean.

112 (704): There's loads of different voices there's loads of different voices...

#### Real

100 (101): It feels like a, like a stab or a pinch or a tightening

105 (17): it ain't inside my head, no way is it

105 (64-65): no one will ever admit "Oh, I heard that"... they just want you to be ill

106 (32-33): even though I'm aware that it's something from within, in those situations, I do have a very hard time recognising that

106 (34-35): my mind will, so my body will react as if it is people in the cars coming past me saying these things

106 (44-45): my body will recognise it as if someone's in the other room talking about me

106 (129-130): I hear it as an exterior voice, it's not as if I have a thought, it's as clear as your voice is to me

106 (133-134): it would be as if somebody was sitting like on one of these chairs saying something

# **Familiarity**

101 (29-30): it was speaking in my language

103 (30): the male voice can use my own voice

103 (12): the guy apparently said he was Nick Margerrison

103 (55): one... pretends he's Nick Margerrison from Kerrang

105 (4-5): they use voices from back in the day, like of a... mates or girlfriend that I had

105 (78/80): at first, it was my Uncle's that I could hear... "You've got to chill out and that lad, man. You can't be doing that, flipping out and that"

105 (122-124): It's like, say like a mother duck, you've got a duckling, the duckling knows that call innit, so if it's family and that, speaking and that, like they won't hear them like we are speaking now

105 (125-126): that's probably why they're using voices that you recognise from back in the day

106 (10): I can't really say what it is, but it's a familiar voice

106 (11): it's definitely a familiar voice

106 (12-13): I recognise it as myself, even though it isn't actually my voice

110 (13): It feels like people are talking about me

110 (65):P: Oh yeah, I used to respond to them because I thought they was people.

111 (42): It's just family like family's talking to me

111 (68): It's just that they're talking to me about family stuff

# **Coping**

100 (10): I feel like sleeping to block out the voices

100 (54-56): for a big part of time I was like looking on the internet... trying to understand what's happened to me

100 (40-41): I found it's better to, if I'm going to lie in bed, listen to music just to somehow try and distract from the voices and calm me down

103 (37): I try to keep my cool

106 (11-12): I don't know whether this is because of just the way I've developed coping with it, but I recognise it as myself

106 (24-25): while it happens I can actually pretty much continue as normal

106 (29-31): after that particular instance I can recover – not a good way of saying it, but I can recoup pretty quickly and kind of shrug off that incident

106 (46-47): because I know there's not ten/fifteen people in the garage or under the stairs, I tend to handle that a bit better

106 (141-143): I've literally no complaints about my upbringing so I don't know whether that's, I can attribute how I handle it because of that, the fact that I know what I'm hearing is in my head... as distressing as it is

106 (150-151): it doesn't have a name, it doesn't have an image, it's just... a voice and I've always had the ability to accept the situation

106 (157-160): I've always had that ability to sort of accept whatever the situation is so potentially, having that is like a super-hero thing, having that ability of being able to just get on with stuff, maybe that is why I can recognise the fact that what I do experience is, or what one would say, isn't a regular, normal thing

106 (173-175): I've accepted the fact that I'm currently experiencing something which one shouldn't really be experiencing and I'm okay with it

106 (187): outside of what I feel, experience things, I'm fine

106 (199-200): I do have my partner and she is very understanding and helpful, but I did keep her in the dark for a long time

106 (200-202): fifty per cent of the time, I don't need that support network... three/four hours after I've experienced something I can calm myself down well enough to almost forget that it ever happened

106 (265-267): I don't think there's ever been any other situations where it's affected me in the sense that I've had to stop what I've been doing

106 (268-269): I can normally handle it perfectly fine

#### **Communication**

100 (118): I feel the voices in my mind talking to me

100 (22): I say things to them like "Leave me alone", and they don't leave me alone

106 (14): I can communicate with it to a certain extent

106 (15): the way it would reply is no kind of open-ended questions, it'll always be in a statement manner

106 (100-101): There's been one or two times where I have verbally relayed back to it

111 (57): I do reply sometimes

111 (59): It's umm a conversation

111 (68): It's just that they're talking to me about family stuff

111 (72): Well I respond to them sometimes back

111 (74): hearing all these voices obviously I'm gonna respond back to them but that's about it then

111 (151): yeah just like havin a conversation

#### Reaction

100 (2-3): my mind feels weak because the voices have taken over my mind

100 (10): I feel like sleeping to block out the voices

103 (91-93): Whenever I see her, it's just basically just pure negative.... Pure hatred, pure vile

106 (34-35): my mind will, so my body will react as if it is people in the cars coming past me saying these things

106 (37-38): even though I know it's not them saying these things, I can see they're not doing anything towards me or saying anything towards me, I do react as if they are

106 (42-43): if ever I'm on my own, my mind will recognise it as if it's something from next door

106 (44-45): my body will recognise it as if someone's in the other room talking about me

106 (128-129): I do react as if it is an exterior voice, I hear it as an exterior voice

106 (245-246): it's as if someone's on the phone trying to listen to something apparently, but you can clearly see that I'm listening to something

# Relationship

103 (10-11): one's male – complete douche... and there's a female one that's basically quite pleasant and quite nice, and she's okay to me

103 (55-56): one... pretends he's Nick Margerrison from Kerrang... the female one, she's quite a nice woman

103 (58): I'd choose the nice ones

103 (68): I've told it to go screw and basically I haven't had anything since

103 (68-69): the female voice... she's okay and everything, so as far as I'm concerned I'm quite happy

106 (105-107): I don't like talking about it as in 'it' or like a third person thing because I don't have that connection with it

106 (149-151): mine are very much voices, they don't have names... that singular one... doesn't have a name, it doesn't have an image, it's just a, it's a voice

106 (161-162): I don't like talking about it in... that kind of third person or that extra person sense

110 (230: Maybe I might get one or two pleasant ones, but mostly negative.

112 (732-733): I do yeah some some of them yeah, the voices that I'm I know the voices I know the voices

# **Derogatory**

100 (30): And they tell me that I'm not normal

101 (4): the voices just said "Bitch is going to start a diary"

101 (16-17): "Bitch is washing her hands. We could say a lot more but we don't want to. Oh look she's going to pray"

101 (30): "Bitch", they added the swearing

101 (49-50): "We're going to kill you"... sometimes they, they were threatening me that they were going to kill me

101 (86-87): they were just threatening me then with that "We're going to do something to you"

103 (4-5): the voice basically says "Only stupid people like My Little Pony"

103 (31): he says, in my voice... "Throw the hamster against the wall"

103 (61): he was saying that he was the one that was hurting Mum

106 (118-119): the general subject matter of what gets said is violence-orientated

106 (208-209): with the group noise, that's violence against myself; the individual voice is violence against others

106 (224-225): A lot of the things that get said to me are horrible things, against others and myself

106 (234): because of the subject matter, that's why it's upsetting

# **Perceptions/Implications**

100 (26-27): I feel like I can't look back because I can't change the past, although I do look back, I can't change the past, I just feel like I trusted the wrong people and I feel sad for my family.

100 (29-30): They're telling me that I've now become someone with mental health problems whereas before I didn't have any mental health problems

100 (68): No-one likes to take medication unless they really have to

100 (70): once you get mental health problems you're on the road to... continuous medication

100 (29-30): They're telling me that I've now become someone with mental health problems whereas before I didn't have any mental health problems

100 (68): No-one likes to take medication unless they really have to

100 (70): once you get mental health problems you're on the road to... continuous medication

106 (147): reading different papers, different media outlets, of course you have these preconceived ideas

106 (148-149): how other people experience these things... they have names and, you know, personalities and I don't really have that

106 (162-164): there's certain words... or there's certain sentences or areas I don't really like going into because I feel it's a bad representation of what I experience

106 (164-166): my general thought of people who experience what I have is... walk into a door and someone locks the door behind you and you can't get out

106 (166-168): I didn't want to have this medication where I was going to be... doped to the eyeballs and I couldn't function

106 (184-187): I don't feel and I don't operate as how I see other people who experience things... I'm just so far away from what I'm aware of what other people experience that I don't want to get put into that category

106 (209-210): I've not gone into depth about what actually gets said properly because I don't want people to think that I don't have control over the situation

106 (210-212): while I'm happy to talk about it, I don't go into depth because I feel it'll be a trigger for them, it'll be, you know, in your 'treating people with mental illness 101', that will be a key word you look out for

106 (213-214): I don't say certain things because I think it will put me in a position where I don't actually need to be

106 (219-220): when I was talking to my partner about it, she had this worry that because of it being violence-orientated that, you know, as you read the papers and all this kind of stuff

110 (52-53): I didn't think I was hearing voices, I just thought someone was playing a trick on me

# **Difficult to Explain**

105 (8): I don't know how they do it

105 (117): I don't know where they're coming from

106 (162-164): there's certain words... or there's certain sentences or areas I don't really like going into because I feel it's a bad representation of what I experience

106 (170-172): it's hard for me to really kind of give an accurate portrayal of what I experience without potentially lightening it or making it worse in certain areas

106 (175-176): I don't like saying certain things because I don't think it represents what I feel properly

106 (203-205): I still don't want to say certain things... because... I think it will paint an incorrect picture from what I experience

106 (242-243): it's hard for me to really describe how I act when these things happen because obviously I'm experiencing it, I can't have an outward view

112 (87-90): Urrgh it was like I can't explain really, how I can explain it. It wasn't like the voices were telling me to do things un stuff d'you ...how can I put it was its like hearing conversations, people have conversations but my name gets mentioned.

112 (387-389): So I don't know what the game is I don't know what I don't know what their

game is un all I really don't know...its crazy, I don't know I can't explain it

112 (87-90): Urrgh it was like I can't explain really, how I can explain it. It wasn't like the voices were telling me to do things un stuff d'you ...how can I put it was its like hearing conversations, people have conversations but my name gets mentioned.

112 (387-389): So I don't know what the game is I don't know what I don't know what their game is un all I really don't know...its crazy, I don't know I can't explain it

#### **Embarrassing**

106 (183): I am embarrassed about it

106 (183-184): there is this stigma in regards to mental illness and how it affects people and that's the reason why I don't talk about it

106 (191): I've experienced it for a good long time on my own because I was embarrassed by it

## **Compulsion to Act**

106 (220-221): I've never physically felt like I had to do anything, I've never reacted to something that's said to me

106 (223-224): I'll go "Just shut-up, will you", I don't have that physical connection to what gets said to me

106 (225): I've never had any physical urge or even mental urge to act upon any of it

106 (226-228): I don't have that physical necessity that comes off the voices, they are literally just voices, very stressful and annoying voices, but I've never had any kind of willingness to act upon them

106 (230-231): I don't want to do any of this stuff; I have no intention of doing this stuff

#### **Blaming**

100 (7-8): "Look at what you've done to yourself and to your family", because they blame it on me

100 (18-19): they're saying "Because of you we've been able to do this to your family"

100 (22-24): they just say "You're a loser and you've done this to yourself and to your family. If you were normal, if you had lived a normal life, none of this would be happening"

100 (75-77): "Look at what you've done... the impact of you and the decisions you've made have impacted upon your family"

103 (64-65): it was... laughing going "Ha ha, that's your fault, that's why it happened..."

103 (85-86): because you brought all this pain and suffering onto your Mum"

## **Commenting**

101 (4): I was about to start writing in the diary and the voices just said "Bitch is going to start a diary"

101 (12-13): "Oh she's writing in the diary, oh she's managed to go up the stairs"

101 (13-14): "Oh she's opened the curtains." That was when I just went to open the blinds in my room

101 (16-17): "Bitch is washing her hands. We could say a lot more but we don't want to. Oh look she's going to pray"

101 (60-61): "We're going to make you drop it" and the voices "We're going to get you" while I was making a cup of tea

112 (152 – 154): what the fuck I don't even know this bitch un who is she trying to comment on my life, I don't even know the woman d'you know what I mean she doesn't even know me she doesn't know nothing about me

112 (364): Its like that yeah, but like people getting involved in peoples parsonal [/personal/] life.

112 (371-373) er one of the voices through the TV said =Lorraine's= is a complete nut job he goes stay away from her =Tommy= and my dad went like this (gestures)...

## **Mocking**

101 (5): they were laughing at me

101 (12-13): The voices are... mocking me, "Oh she's writing in the diary, oh she's managed to go up the stairs"

103 (4-5): the voice basically says "Only stupid people like My Little Pony"

103 (64-65): it was... laughing going "Ha ha, that's your fault, that's why it happened..."

103 (85-86): he was like "Ha ha, you deserved it because you brought all this pain and suffering onto your Mum"

112 (553-555) I was like that voice man she does my head in she's a bitch she's always taking the piss out of me...it's just that one woman's voice, if I could see her I'd (slapping sound) grrrr d'you know mean

112 (624-629): Its jus just she talks like and now he's going to be a Hollywood actor un I was like shut the fuck up un when I said I wanted to be a DJ... I'd just want to smack this woman right in the nose d'you know what I mean she's just a muppet she's a complete twat

## Appendix 2b: Previously analysed coded interviews by the primary researcher

#### Authoritative

101 (17-18): I went to have like a relaxing sit down in the front room and the voices were saying "Get up, get up"

101 (40-41): They'll come back and say "We're still here" or they'll say something to make sure I know that they're there

101 (50-51): my sister said "Alright" then the voices said "We are not alright"

101 (106): the voices were telling me to stop eating, stop sleeping

103 (27): so told me to take my jumper off (to give as a peace offering to neighbour)

103 (31): he says, in my voice... "Throw the hamster against the wall"

103 (64-65): it was... laughing going "... don't tell Mum this that or the other, or else..."

105 (3): I wanted to listen in to what they (*neighbours*) were saying like, but my voices and that were saying "Don't do it"

106 (21): it's definitely almost as if... someone's being told off

106 (22-23): they would potentially get a little bit more aggravated or direct in what they were saying

106 (61-62): what you're meant to be doing is looking at me and answering me, however, you need to be paying attention to what they're saying

#### In Control

100 (3): the voices have taken over my mind

100 (6-7): I can't get rid of them

100 (22): I say things to them like "Leave me alone", and they don't leave me alone

100 (35-36): it's only when the voices want me to go to sleep that I can go to sleep

100 (49): they've gone into my mind and taken it

103 (6): it's always been like a voice that triggers off automatically on its own

103 (30): the male voice can use my own voice against me

103 (95-96): It was like "How dare you take a picture of this old lady, she's done nothing wrong, I'm going to f the camera up on you", and the camera didn't seem to work

105 (24-25): Sometimes... they don't stop

106 (130-131): I have no control over when it happens or... how that whatever gets said gets said... I have literally no control over it

110 (29): I didn't want to wake up to hear them every day

110 (37): They stopped my day-to-day life. I wouldn't go out because of my voices

#### **Powerful**

100 (5): the fact that they're a strong consciousness has made my mind weak

100 (68-69): I've got three different types of medication that I take and I don't feel that it takes away the voices

105 (124): they just overcome you

106 (170): when I experience things it does greatly affect me

## Manipulative

103 (30): the male voice can use my own voice against me

103 (31): he says, in my voice... "Throw the hamster against the wall"

105 (4-5): they use voices from back in the day, like of a... mates or girlfriend that I had

105 (6): They just use them against me

105 (41-42): They're lying, they're actually like lying to me... it's like, if I can hear them, they must be able to hear them

105 (68-69): it's just lies man, it's a complete lie

112 (255-260): I'm still curious though I'm sitting there thinking what the hell man its just a matter of a time before someone twists it around and turns it into a bad thing... whether its me or them or whether its someone else who's hearing voices skill [/still/] someone's gonna get really hurt over it

112 (644-647): this shit, if I find out who she is she's gone I'm telling ya cus this woman is starting it all up between two two of... serious war this could have, could have been people getting shot un everything I'm not lying seriously

112 (688-690): The case is she's doing all this stirring, she's saying to me =Jimmy's= planning on bombing your whole family =Jimmy's= planning on doing that

## **Punishing**

103 (85-86): he was like "Ha ha, you deserved it because you brought all this pain and suffering onto your Mum"

105 (6): They just use them against me

105 (9): I must have been doing something wrong back in the day

## **Frustrating**

100 (41-42): the voices make me... quite angry, they make me quite sort of agitated

101 (47-48): I'm trying to do something normal... and they're bothering me

101 (51-52): I do get agitated... like I'll find it really annoying

101 (63): I felt quite agitated at them

105 (6): it gets you wound up

105 (8): I don't know how they do it man, fucking, they're bastards

105 (69): it's all fucking bull crap

106 (234): it just gets really, really annoying

#### Making Sense of Experience (explanations versus insight)

100 (54-56): for a big part of time I was like looking on the internet... trying to understand what's happened to me

100 (73-74): what I'm going through isn't normal, it's not normal mental health, it's because it's their consciousness in my mind

101 (95): that could just be my own beliefs playing up and my mind, triggering them off

101 (103-106): that was like one of the things that, part of my psychosis gets me is the eating... when I went quite bad in my psychosis, the voices were telling me to stop eating, stop sleeping

103 (72-73): Since I've had my mental illness... since I wake up and the time I go to bed, I've had the voice in my head

105 (9): I must have been doing something wrong back in the day

105 (34): I think I've always been sensitive to sound and that

105 (122-124): It's like, say like a mother duck, you've got a duckling, the duckling knows that call innit, so if it's family and that, speaking and that, like they won't hear them like we are speaking now

106 (37-38): I know it's not them (*people outside*) saying these things, I can see they're not doing anything towards me or saying anything towards me

106 (46-47): because I know there's not ten/fifteen people in the garage or under the stairs, I tend to handle that a bit better

106 (76-77): because I can't see anything, they must not be there

106 (58-87): why would there be a group of people in our garage... that was the point where I really began to understand that... it was something to do with myself

106 (83-84): the point where I thought no this isn't quite right

106 (107-109): I'm aware that it's something gone wrong in my head to put it bluntly, whether it's a chemical imbalance or I'm not sure if you're aware that I was attacked a couple of years ago when this first happened

106 (121-122): that's when I started experiencing things so I can understand that potentially that was a trigger

106 (147): reading different papers, different media outlets, of course you have these preconceived ideas 106 (148-151): how other people experience these things... they have names and, you know, personalities and I don't really have that, mine are very much voices, they don't have names... that singular one... doesn't have a name, it doesn't have an image, it's just a, it's a voice 106 (158-160): having that ability of being able to just get on with stuff, maybe that is why I can recognise the fact that what I do experience is, or what one would say, isn't a regular, normal thing

110 (46-47): obviously it's a part of me; it's coming from my head, my brain...

## **Searching for Answers**

100 (53-54): Is there a solution, has someone else gone through this, is there information on what I'm going through

100 (54-56): for a big part of time I was like looking on the internet... trying to understand what's happened to me

100 (56-57): there's the part of this experience of what's going on leads you to try and investigate

101 (63-64): why are they here and saying this stuff to me

101 (98): why are they there

101 (132-133): is it the voices or is it my thoughts, why are they, and why am I thinking like this

105 (28): It makes me think man, who is it?

105 (37-39): can I make it stop and is it me doing it

106 (191-192): I've experienced it for a good long time on my own because I was embarrassed by it so I did go internet

## **Disruptive** (distracting + stopping daily life completely)

100 (10): I feel like sleeping to block out the voices

100 (10-11): If I sleep and block out the voices, I'm not facing the struggle of living, I'm just sleeping

- 100 (35): my sleep has been disturbed, like I can't go to sleep naturally
- 100 (35-36): it's only when the voices want me to go to sleep that I can go to sleep
- 100 (60): a lot of time is spent sleeping, lying in bed, feeling tired from my voices
- 100 (61): you're not as much living life, just sleeping
- 100 (63-64): it's difficult when you're not feeling well to keep everything tidy and neat
- 100 (64-65): It's just, sort of self-neglect and not keeping as tidy
- 101 (2-3): I think I was just doing normal stuff... and just all of a sudden the voices started
- 101 (18-19): they just randomly come... like if I'm about to do anything
- 101 (33): if I try to pray they start on me
- 101 (41): whilst I was putting my deodorant on the voices started screaming
- 101 (47-48): I'm trying to do something normal like have a cup of tea and they're bothering me
- 101 (61-62): while I was making a cup of tea so again I was trying to do... a normal life duty and the voices were just like "We're going to get you"
- 101 (85-86): I was trying to have my cup of tea, like do a normal task and they were just threatening me
- 101 (102-105): I feel like I'm trying to get on with something normal, like eating is like good for me and I need to eat, that was like one of the things that... the thoughts were making me try to stop eating
- 101 (107): they make it difficult for me or distrust me at those times
- 105 (14): I weren't getting no sleep
- 105 (20-21): I used to spit like rap... I've stopped all that. I can't like get back into it, I can't read a book... the only thing that I could do is watch TV
- 105 (24): it's like, can't do nothing like, can't do nothing
- 106 (48): That one (*multiple voices*) does take me a bit longer to kind of get back to my normal operating
- 106 (61-62): what you're meant to be doing is looking at me and answering me, however, you need to be paying attention to what they're saying

106 (62-63): you have so many things that you're trying to concentrate on, you start tripping over yourself

106 (95-96): everything does become far more difficult, I become distracted

106 (96-97): a task that is normally simple that takes minutes to do could take me a very long time purely because I just can't concentrate on it

106 (170): when I experience things it does greatly affect me

106 (252-253): the answer I gave was so far disconnected from what I was actually asked by the interviewer

110 (37): They stopped my day-to-day life. I wouldn't go out because of my voices

110 (43-44): I wouldn't want to go out because, in case I thought of anything, they would just start again as soon as I get out of the door

#### Separate to Self

100 (5): their consciousness has gone into my mind

100 (5): the fact that they're a strong consciousness has made my mind weak

100 (21): I'm hearing it in my mind because their energy has gone into my mind

100 (49): they've gone into my mind and taken it

101 (70-71): I thought of pouring water into the bin so, that like wasn't my thought

101 (90): I start thinking that maybe it's the jinns around me putting these thoughts in me

101 (121-122): I start thinking that "I don't want to be alive anymore" and I feel like they're not my thoughts

103 (33): it's stuff that I would never think

105 (17): it's outside my head man, it ain't inside my head, no way is it

105 (17-18): Sometimes seems like it's coming from outside my house man, like I can hear them outside

105 (37-39): it's definitely outside, it's not all in my head

105 (63-64): I hope I hear the voices now like, so if I can hear it, hopefully they can hear it

106 (129-130): I *hear* it as an exterior voice, it's not as if I have a thought, it's as clear as your voice is to me

110 (7): it feels like it's not in my own mind

110 (52-53): I didn't think I was hearing voices, I just thought someone was playing a trick on me

112 (2-4): When when I use to get it was like hearing voices through the TV. You know the way it is this back background background voices and stuff like that, I'd be hearing voices through that. I never I never heard voices on me own,

112 (30-31): just from the TV yeah or if I was in crowds I'd I'd think people were talking about me and stuff, used to get paranoid. Think you know people were out to get me and stuff tha yeah

112 (111 – 115): Its not like a voice inside my head telling me what to do go on KILL KILL, ...when I hear voices like from the TV its like they're on about peeps people an the stuff sometimes the stuff they say is bad un sometimes the stuff they say is good.

112 (142-143): Adverts yeah un TV I still hear them through the TV...I still hear voices through the TV, its not as bad though not as bad as what it use to be

112 (283-285): Yeah, this is where the voices didn't kept from, I never heard voices in my head, like its not like I've got like a devil and a good parts are on that side un I I don't have voices like that, its only through the TV and when there's people around.

#### Motive

100 (32-33): they just had an ulterior motive to take my soul energy

100 (49): they've gone into my mind and taken it

101 (49-50): "We're going to kill you"... sometimes they, they were threatening me that they were going to kill me

101 (107-108): I feel like... they don't want me to be alive and they want me to be dead and they're trying to kill me

103 (23-25): the voices yeah, are basically trying to get me to be friends with people who would either beat me up or who would... try and not be very nice to me

105 (28): It makes me think man, who is it?

105 (78/80): at first, it was my Uncle's that I could hear... "You've got to chill out and that lad, man. You can't be doing that, flipping out and that"

105 (86): (Family members) They're like clever enough to like, put this on me

105 (88): (*Family members*) maybe they're trying to say like "What you was doing, you can't be doing that..."

105 (125-126): that's probably why they're using voices that you recognise from back in the day and it's like "We use these, try to connect"

#### Part of Self

101 (45): it's not a real sound, it's like a thought in my mind

101 (46): It's a thought. It's like a thinking voice

106 (12-13): I recognise it as myself

106 (28): I recognise that it's something going on in my own head

106 (53): I'm aware that it's something that I'm experiencing

106 (107): I'm aware that it's something gone wrong in my head

106 (136-137): I would know it was coming from my head

106 (143): I know what I'm hearing is in my head... as distressing as it is

106 (145-146): I don't like really referring to it as a separate entity because I know it's not

106 (161-162): I don't like talking about it in, in that kind of third person or that extra person sense because I don't have that

110 (46-47): obviously it's a part of me; it's coming from my head, my brain...

110 (50): It was more in my mind

111 (28): It's just in my own mind

## **Complex**

101 (75-77): why am I thinking that, that's not my thought, there's an interference with my thought, so something else is making me think that so that was quite confusing, like is it my thought or is it the voices

101 (79-81): it's not a real sound, it's just when you're thinking, when I'm thinking, like to myself, that kind of thought. But it was something that I wouldn't have thought myself

101 (99-100): It's never a real sound, it's mostly the thought... they were being quite loud, the thought was quite loud

101 (141-142): I feel like it's me thinking then at some point it feels like it's something's interfering with my thoughts

103 (17-18): Sometimes it's outside in the yard, sometimes it's in the house, sometimes it's in my own body and sometimes it's out in the back, and sometimes it comes from next door

103 (33-35): it's stuff that I would *never* think... It's in my head

106 (12-13): I recognise it as myself, even though it isn't actually my voice

106 (32-33): even though I'm aware that it's something from within, in those situations, I do have a very hard time recognising that

106 (42-43): if ever I'm on my own, my mind will recognise it as if it's something from next door

106 (134-135): it's so clear in my mind... it can get confusing

110 (7): it feels like it's not in my own mind

110 (46-47): obviously it's a part of me; it's coming from my head, my brain...

#### Resignation

100 (10-11): If I sleep and block out the voices, I'm not facing the struggle of living, I'm just sleeping

100 (61): you're not as much living life, just sleeping

103 (8): Very annoyed and peed off, but what can you say

103 (58-59): I'd choose the nice ones... but you have to take the good with the bad

105 (57-58): I can't do anything... I've got to put up and shut up innit! I can't do anything like!

110 (51): Just part of my everyday life now

111 (5): Well it's very unusual and odd but I just have to accept it I suppose

111 (13): So just have to accept it really or just take my medication to control them

111 (99): I've just gotten used to it now

112 (545-546): it's just a natural thing it's just a part of my life. I hear voices through the TV, it's a part of my life sometimes they're helping me un stuff...

112 (562-564): it's a mad life style to live but I don't mind it, basically I've got anything I want right in front of me, I could do whatever I like d'you know what I mean un I think I will become an actor instead

122 (583-586): I I'd still hear the voices through the TV but it doesn't doesn't really bother me anymore, it's just if they say bad things about me then I'm like fair enough that's your own opinion d'you know what I mean that's their opinion they don't really know me d'you know what I mean

#### **Constant**

100 (6-7): I can't get rid of them

100 (22): they don't leave me alone

100 (68-69): I've got three different types of medication that I take and I don't feel that it takes away the voices

101 (23): wherever I am in the house they started

101 (23-24): they're starting on me now that I'm remembering them

101 (54): they'll say "We're still here"

101 (64-65): The voices were there when I was going to the toilet and making breakfast and still present when I'm writing the diary

101 (66-67): sometimes they're just in the background. Yes, I know they're there

103 (73): since I wake up and the time I go to bed, I've had the voice in my head

105 (58-59): it's every day love I hear them, every day, every day

105 (62-63): they was there... through all the night, into the morning

110 (2-3): you can't get away from it

110 (29): I didn't want to wake up to hear them every day

110 (43-44): they would just start again as soon as I get out of the door

## **Fatigue**

100 (2-3): my mind feels weak

100 (10): I just feel tired a lot, I feel like sleeping

100 (60): a lot of time is spent sleeping, lying in bed, feeling tired from my voices

105 (82): it takes a lot out of you

#### **Beliefs**

100 (13-15): These voices... understand spirituality and they understand the spiritual nature of life and how life works, and what they say is that "We are energy beings in a physical world in a physical body and as such, as energy beings we live beyond life"

101 (42-43): I'm alright when they start screaming because I think what if they (*the jinns*) might be leaving; the voices might be stopping

101 (89): I associate the voices to the jinns

101 (90): I start thinking that maybe it's the jinns around me putting these thoughts in me

101 (95): that could just be my own beliefs playing up and my mind, triggering them off

105 (86): (Family members) They're like clever enough to like, put this on me

105 (94-95): (Family members) it's not a new technology what they're doing

105 (122-124): It's like, say like a mother duck, you've got a duckling, the duckling knows that call innit, so if it's family and that, speaking and that, like they won't hear them like we are speaking now

105 (125-126): that's probably why they're using voices that you recognise from back in the day and it's like "We use these, try to connect"

112 (273-274): So is this is all part of someone's revolution I didn't know, I don't know whats going on

112 (517-518): Everyone has Sc Schizophrenia theres loads of different types of it d'you know what I mean...

## **Frightening**

101 (12): I think when they start swearing I find it quite scary

101 (27): it makes me feel quite scared

101 (34-35): it's I think more scary if they start swearing at me

101 (86-87): "We're going to do something to you", I felt quite threatened by them

105 (118-119): it's a bit scary speaking about them because basically, I don't know where they're coming from

## **Confusing**

101 (76-77): that was quite confusing, like is it my thought or is it the voices

101 (123-124): it gets confusing whether it's my thoughts or it's the voices putting the thought in my head

101 (132-133): is it the voices or is it my thoughts, why are they, and why am I thinking like this

105 (8): I don't know how they do it

105 (117): I don't know where they're coming from

105 (37-38): can I make it stop and is it me doing it

105 (134-135): I don't know man, if it was my own thought, I can't even remember

106 (32-33): even though I'm aware that it's something from within, in those situations, I do have a very hard time recognising that

106 (134-135): it's so clear in my mind... it can get confusing

106 (244-245): I become quite disorientated and confused

110 (52-53): I didn't think I was hearing voices, I just thought someone was playing a trick on me

## Overwhelming

100 (68-69): I've got three different types of medication that I take and I don't feel that it takes away the voices

105 (124): they just overcome you

106 (58-59): the group voice is harder to deal with... because there's just so much information at once

106 (62-63): you have so many things that you're trying to concentrate on, you start tripping over yourself

106 (69-70): it gets overwhelming

110 (3): you can't get away from it

110 (29): I didn't want to wake up to hear them every day

112 (191- 192): May May last year I think it was I said I've had enough of this so I took over sixty odd lines of pink tablets and tried to kill myself

112 (199-202): That's all through TV, cussss cus the voices through the TV, I couldn't take it no more un I was like, when I lived on me own it was really bad but when I'm around my mum and my dad are around frightens it doesn't happen when I'm when I'm on my own most of the time d'you know what I mean

112 (204-205): Yearrh, I said fuck I've had enough man so took over sixty tablets un tried to kill myself, easiest way out, but I'd swear I'd never do that again...

#### Stressful

106 (29): it does get very stressful

106 (230): I think that's why they're so stressful is because I don't want to do any of this stuff

110 (13): it's traumatising. Stressful

112 (69-70): it its was tough man its really tough, but its only cause I didn't stick to my medication if when I stick to my medication I don't hear no voices or anything

112 (384): It is difficult, its difficult because I'm not hearing voices through in my head

## **Upsetting**

101 (98): they were there... in a negative way and that distressed me

106 (29): I get very upset about it

106 (47): I do still get very upset and kind of down

106 (234): because of the subject matter, that's why it's upsetting

112 (120 – 121): so ya know what I mean un I I said fair enough and I was like I I don't like it I don't like hearing the voices like from the TV or anything.

#### Multiple

106 (6): they're a mix, probably both male and female

106 (7): those ones are always as if it is an angry group of people

106 (49-50): There's that kind of motley crew kind of thing

106 (58-59): the group voice is harder to deal with, purely because it's harder to kind of focus on one aspect of it because there's just so much information at once

111 (40): It's just different voices

112 (109 – 111): Its like umm you know when you're in a pub and everyone's chatting well its like that, its like you hear voices like do everyone chats un stuff in the background, its like background d'you know what I mean.

112 (704): There's loads of different voices there's loads of different voices...

#### Real

105 (17): it ain't inside my head, no way is it

105 (64-65): no one will ever admit "Oh, I heard that"... they just want you to be ill

106 (32-33): even though I'm aware that it's something from within, in those situations, I do have a very hard time recognising that

106 (34-35): my mind will, so my body will react as if it is people in the cars coming past me saying these things

106 (44-45): my body will recognise it as if someone's in the other room talking about me

106 (129-130): I *hear* it as an exterior voice, it's not as if I have a thought, it's as clear as your voice is to me

106 (133-134): it would be as if somebody was sitting like on one of these chairs saying something

#### **Familiarity**

101 (29-30): it was speaking in my language

103 (30): the male voice can use my own voice

103 (55): one... pretends he's Nick Margerrison from Kerrang

105 (4-5): they use voices from back in the day, like of a... mates or girlfriend that I had 105 (78/80): at first, it was my Uncle's that I could hear... "You've got to chill out and that lad, man. You can't be doing that, flipping out and that"

105 (122-124): It's like, say like a mother duck, you've got a duckling, the duckling knows that call innit, so if it's family and that, speaking and that, like they won't hear them like we are speaking now

105 (125-126): that's probably why they're using voices that you recognise from back in the day

106 (10): I can't really say what it is, but it's a familiar voice

106 (11): it's definitely a familiar voice

106 (12-13): I recognise it as myself, even though it isn't actually my voice

111 (42): It's just family like family's talking to me

111 (68): It's just that they're talking to me about family stuff

#### **Coping**

100 (54-56): for a big part of time I was like looking on the internet... trying to understand what's happened to me

100 (40-41): I found it's better to, if I'm going to lie in bed, listen to music just to somehow try and distract from the voices and calm me down

103 (37): I try to keep my cool

106 (11-12): I don't know whether this is because of just the way I've developed coping with it, but I recognise it as myself

106 (24-25): while it happens I can actually pretty much continue as normal

106 (29-31): after that particular instance I can recover – not a good way of saying it, but I can recoup pretty quickly and kind of shrug off that incident

106 (46-47): because I know there's not ten/fifteen people in the garage or under the stairs, I tend to handle that a bit better

106 (141-143): I've literally no complaints about my upbringing so I don't know whether that's, I can attribute *how* I handle it because of that, the fact that I know what I'm hearing *is* in my head... as distressing as it is

106 (150-151): it doesn't have a name, it doesn't have an image, it's just... a voice and I've always had the ability to accept the situation

106 (157-160): I've always had that ability to sort of accept whatever the situation is so potentially, having that is like a super-hero thing, having that ability of being able to just get on with stuff, maybe that is why I can recognise the fact that what I do experience is, or what one would say, isn't a regular, normal thing

106 (173-175): I've *accepted* the fact that I'm currently experiencing something which one shouldn't really be experiencing and I'm okay with it

106 (187): outside of what I feel, experience things, I'm fine

106 (199-200): I do have my partner and she is very understanding and helpful, but I did keep her in the dark for a long time

106 (200-202): fifty per cent of the time, I don't need that support network... three/four hours after I've experienced something I can calm myself down well enough to *almost* forget that it ever happened

106 (265-267): I don't think there's ever been any other situations where it's affected me in the sense that I've had to stop what I've been doing

106 (268-269): I can normally handle it perfectly fine

#### **Communication**

100 (22): I say things to them like "Leave me alone", and they don't leave me alone

106 (14): I can communicate with it to a certain extent

106 (15): the way it would reply is no kind of open-ended questions, it'll always be in a statement manner

106 (100-101): There's been one or two times where I have verbally relayed back to it

111 (57): I do reply sometimes

111 (59): It's umm a conversation

111 (68): It's just that they're talking to me about family stuff

111 (72): Well I respond to them sometimes back

111 (74): hearing all these voices obviously I'm gonna respond back to them but that's about it then

111 (151): yeah just like havin a conversation

#### Reaction

100 (2-3): my mind feels weak because the voices have taken over my mind

100 (10): I feel like sleeping to block out the voices

106 (34-35): my mind will, so my body will react as if it is people in the cars coming past me saying these things

106 (37-38): even though I know it's not them saying these things, I can see they're not doing anything towards me or saying anything towards me, I do react as if they are

106 (42-43): if ever I'm on my own, my mind will recognise it as if it's something from next door

106 (44-45): my body will recognise it as if someone's in the other room talking about me

106 (128-129): I do react as if it is an exterior voice, I hear it as an exterior voice

106 (245-246): it's as if someone's on the phone trying to listen to something apparently, but you can clearly see that I'm listening to something

112 (186): Stuff like, when I had a drink I'd fly off the handle and speak back to it)

112 (188-189): un say fuck you you bitch un all that d'you know what I mean, I'd lose the head with it a bit un kind of go mad d'you know what I mean if I was on me own like

## Relationship

103 (10-11): one's male – complete douche... and there's a female one that's basically quite pleasant and quite nice, and she's okay to me

103 (55-56): one... pretends he's Nick Margerrison from Kerrang... the female one, she's quite a nice woman

103 (58): I'd choose the nice ones

103 (68): I've told it to go screw and basically I haven't had anything since

103 (68-69): the female voice... she's okay and everything, so as far as I'm concerned I'm quite happy

106 (105-107): I don't like talking about it as in 'it' or like a third person thing because I don't have that connection with it

106 (149-151): mine are very much voices, they don't have names... that singular one... doesn't have a name, it doesn't have an image, it's just a, it's a voice

106 (161-162): I don't like talking about it in... that kind of third person or that extra person sense

112 (732-733): I do yeah some some of them yeah, the voices that I'm I know the voices I know the voices

## **Derogatory**

101 (4): the voices just said "Bitch is going to start a diary"

101 (16-17): "Bitch is washing her hands. We could say a lot more but we don't want to. Oh look she's going to pray"

101 (30): "Bitch", they added the swearing

101 (49-50): "We're going to kill you"... sometimes they, they were threatening me that they were going to kill me

101 (86-87): they were just threatening me then with that "We're going to do something to you"

103 (4-5): the voice basically says "Only stupid people like My Little Pony"

103 (31): he says, in my voice... "Throw the hamster against the wall"

103 (61): he was saying that he was the one that was hurting Mum

106 (118-119): the general subject matter of what gets said is violence-orientated

106 (208-209): with the group noise, that's violence against myself; the individual voice is violence against others

106 (224-225): A lot of the things that get said to me are horrible things, against others and myself

106 (234): because of the subject matter, that's why it's upsetting

## **Perceptions/Implications**

100 (29-30): They're telling me that I've now become someone with mental health problems whereas before I didn't have any mental health problems

100 (68): No-one likes to take medication unless they really have to

100 (70): once you get mental health problems you're on the road to... continuous medication

106 (147): reading different papers, different media outlets, of course you have these preconceived ideas

106 (148-149): how other people experience these things... they have names and, you know, personalities and I don't really have that

106 (162-164): there's certain words... or there's certain sentences or areas I don't really like going into because I feel it's a bad representation of what I experience

106 (164-166): my general thought of people who experience what I have is... walk into a door and someone locks the door behind you and you can't get out

106 (166-168): I didn't want to have this medication where I was going to be... doped to the eyeballs and I couldn't function

106 (184-187): I don't feel and I don't operate as how I see other people who experience things... I'm just *so* far away from what I'm aware of what other people experience that I don't want to get put into that category

106 (209-210): I've not gone into depth about what actually gets said properly because I don't want people to think that I don't have control over the situation

106 (210-212): while I'm happy to talk about it, I don't go into depth because I feel it'll be a trigger for them, it'll be, you know, in your 'treating people with mental illness 101', that will be a key word you look out for

106 (213-214): I don't say certain things because I think it will put me in a position where I don't actually need to be

106 (219-220): when I was talking to my partner about it, she had this worry that because of it being violence-orientated that, you know, as you read the papers and all this kind of stuff

## **Difficult to Explain**

106 (162-164): there's certain words... or there's certain sentences or areas I don't really like going into because I feel it's a bad representation of what I experience

106 (170-172): it's hard for me to really kind of give an accurate portrayal of what I experience without potentially lightening it or making it worse in certain areas

106 (175-176): I don't like saying certain things because I don't think it represents what I feel properly

106 (203-205): I still don't want to say certain things... because... I think it will paint an incorrect picture from what I experience

106 (242-243): it's hard for me to really describe how I act when these things happen because obviously I'm experiencing it, I can't have an outward view

112 (87-90): Urrgh it was like I can't explain really, how I can explain it. It wasn't like the voices were telling me to do things un stuff d'you ...how can I put it was its like hearing conversations, people have conversations but my name gets mentioned.

112 (387-389): So I don't know what the game is I don't know what I don't know what their game is un all I really don't know...its crazy, I don't know I can't explain it

## **Embarrassing**

106 (183): I am embarrassed about it

106 (183-184): there is this stigma in regards to mental illness and how it affects people and that's the reason why I don't talk about it

106 (191): I've experienced it for a good long time on my own because I was embarrassed by it

#### **Compulsion to Act**

106 (220-221): I've never physically felt like I had to do anything, I've never reacted to something that's said to me

106 (223-224): I'll go "Just shut-up, will you", I don't have that physical connection to what gets said to me

106 (225): I've never had any physical urge or even mental urge to act upon any of it

106 (226-228): I don't have that physical necessity that comes off the voices, they are literally just voices, very stressful and annoying voices, but I've never had any kind of willingness to act upon them

106 (230-231): I don't want to do any of this stuff; I have no intention of doing this stuff

## Blaming

100 (7-8): "Look at what you've done to yourself and to your family", because they blame it on me

100 (18-19): they're saying "Because of you we've been able to do this to your family"

100 (22-24): they just say "You're a loser and you've done this to yourself and to your family. If you were normal, if you had lived a normal life, none of this would be happening"

100 (75-77): "Look at what you've done... the impact of you and the decisions you've made have impacted upon your family"

103 (64-65): it was... laughing going "Ha ha, that's your fault, that's why it happened..."

#### **Commenting**

101 (4): I was about to start writing in the diary and the voices just said "Bitch is going to start a diary"

101 (12-13): "Oh she's writing in the diary, oh she's managed to go up the stairs"

101 (13-14): "Oh she's opened the curtains." That was when I just went to open the blinds in my room

101 (16-17): "Bitch is washing her hands. We could say a lot more but we don't want to. Oh look she's going to pray"

101 (60-61): "We're going to make you drop it" and the voices "We're going to get you" while I was making a cup of tea

112 (152 – 154): what the fuck I don't even know this bitch un who is she trying to comment on my life, I don't even know the woman d'you know what I mean she doesn't even know me she doesn't know nothing about me

112 (364): Its like that yeah, but like people getting involved in peoples parsonal [/personal/] life.

112 (371-373) er one of the voices through the TV said =Lorraine's= is a complete nut job he goes stay away from her =Tommy= and my dad went like this (gestures)...

## **Mocking**

101 (5): they were laughing at me

101 (12-13): The voices are... mocking me, "Oh she's writing in the diary, oh she's managed to go up the stairs"

103 (4-5): the voice basically says "Only stupid people like My Little Pony"

103 (64-65): it was... laughing going "Ha ha, that's your fault, that's why it happened..."

103 (85-86): he was like "Ha ha, you deserved it because you brought a

112 (553-555) I was like that voice man she does my head in she's a bitch she's always taking the piss out of me...it's just that one woman's voice, if I could see her I'd (slapping sound) grrrr d'you know mean

112 (624-629): Its jus just she talks like and now he's going to be a Hollywood actor un I was like shut the fuck up un when I said I wanted to be a DJ... I'd just want to smack this woman right in the nose d'you know what I mean she's just a muppet she's a complete twat

## Appendix 2c: New established codes from analysed interviews

#### **Threatening**

103 (65-66): don't tell Mum this that or the other, or else I'll get <name> to bring round her son again to beat you up, and her daughter-in-law to beat you up and your Mum up"

#### Regret

100 (110-113): If I didn't defer from university, my life would have taken a different path ... It's just about the decisions that I've made . I could have made different decisions and I'd be in a different place in my life right now

## Helping → Links to Relationship

111 (163-188): just anything really like um if I'm upset then my fam like so if I'm family members... tell me to calm down, help because it helps me through, well it helps out sometimes just sometimes, obviously you think somebody helping you

## **Coping** → **Links to Making Sense of Experience**

111 (13): So just have to accept it really or just take my medication to control them

111 (15-16): Yeah the medication is reduced the um they increased the medication and it reduced the voices

111 (111): learned to cope with it

111 (114): I don't look at myself in the mirror then hardly cus I know the voices might come back so

111 (192 - 193): that's about it really and I don't really take much interest and just carry on with my day this is when only some sometimes so not all the time

111 (217): Well I I got medication for them the way obviously and that helps reduce

111 (219): It helps reduce the voices

## **Trigger** → **Links** to being in Control

111 (18 - 19): especially when I look at myself in the mirror I can the voices are coming err more when I'm looking at myself at the mirror in the mirror

111 (24 – 25): I don't know where they're coming from to be honest with you but when I look in the when I look at myself in the mirror the voices are speaking to me as well

111 (35 - 36): It wasn't like that this obviously happened when I got ill after I took the medication, it was after they gave me the medication that I started to hear voices

#### **Real** → **Links to Reaction**

111 (137): its scary cus it sounds real

111 (138 – 139):and so how ... how did you um ... how did you know that it wasn't sort of your family talkin how did you know that it wasn't your own mind if you see what I mean

111 (140-142).I just still think it's my family talking cos, I don't understand how voices are coming outside

#### Frightening → the Unknown

111 (8-9): Well it's just ummm yeah unusual when you listen to them if you hear the voices as well it's quite scary sometimes

111 (131 - 132): and so when when you heard the voices um ... how sort of real was the experience for you

111 (133): it was just a bit scary really and um ... yeah just a bit scary really

111 (137): its scary cus it sounds real

## **Persecutory – Derogatory**

112 (148-152): Like there's one main woman on the TV that I hate she's always saying bad stuff about me d'you know what I mean, un she's she's out to get me... you're the next to be writ off un all this un all that, P you are the next to be writ off, d'you know what I mean and stuff like that

112 (167): Angry as well yeah cuss ss there's there's this one woman its like she's out to get us like

112 (246): and the voices with me its like they're trying to put me down un slap meself down un stuff like that

112 (704-708): when this one woman comes on the TV, she's the voice that is out to crush me... I don't think so there won't be a war cus he'll be the one that's banged out don't need to worry about that

## **Complimentary – Positive**

112 (252-253): Sometimes they say things nice, sometimes they do, they say like ur its gonna be its gonna be a good DJ un all this crap like d'you know what I mean

112 (694): sometimes it's a man voice he's alright he says nice things d'you know what I mean...

112 (721-722): Yeah it is yeah, he's like all for me d'you know what I mean saying nice things like you're gonna go far kid like this d'you know what I mean

#### Unable to Live/Enjoy Life

112 (67-69): Yeah yeah stopping me from doing stuff I I couldn't be out in pub, I didn't want to out in public or anything, I didn't want to be around crowds cause I'd make out I'd hear voices through the People...

112 (406-410): yeah I can't come over because I got to get me injection and me tablets and stuff like that. This dit shit is holding me back from my life...I could have went over to Australia with him but I couldn't because I got to get my injection and my tablets this shit is ruining my life...

## Unable to form long term romantic relationship

112 (772-773): I haven't been in a relationship for about 2 years d'you know what I mean, I should be settled down with kids now d'you know what I mean

112 (785-787): Yeah but err like my illness did get in the way of the relationship I was in cus after that she was really like weary of me un I was like ahh fuck this I just broke up with her in the end after that. This this is really ruining my life if you know what I mean

#### Unfamiliar

112 (96-99): Urrr when I stick to my tablets I still hear voices... people that I don't know, trying to make out the conversations. When people watch TV they focus on the main thing I don't I listen to the voices in the background

112 (103-104): un I can make out what they're saying, un un try to figure out what who they're on about un stuff. I know I'm not the only one.

## **Chapter 3 Appendices**

## Appendix 3a

List of participating websites that hosted a link to the questionnaire.

Life Signs

http://www.lifesigns.org.uk/

Pretty Thin Again

http://www.prettythinagain.com/

Self-harm awareness Facebook group

https://www.facebook.com/SHAwareness

Oxford Mental Health Forum

http://www.oxfordmhf.org.uk/about.html

Teenhelp website/support forums

http://www.teenhelp.org/

The student room

http://www.thestudentroom.co.uk/

National Self Harm Network

http://www.nshn.co.uk/forum/

## Appendix 3b

## Copy of survey



# To investigate the psychological profile of self-harm and Suicidal behaviour

# **Information and Consent sheet**

Why is this study being conducted?

The study aims to find out the psychological profile of individuals who perform repeated and varied self-harm and suicidal behaviour.

What will happen to me if I take part?

If you are happy to take part in this study you will be asked to complete an online internet survey containing a series of questionnaires. Based on our experience, we expect it will take about fifteen minutes to complete the questionnaires.

The questions you will be asked are very varied. You will be asked certain demographic questions (age, education level). You'll be asked to rate yourself against a number of statements. For example, you'll be asked about your feelings towards yourself (With time I am understanding of myself for mistakes I've made.), your relationship style to other people (I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.). You will also be asked questions about your self-harm behaviour (Have you ever self-harmed?) and questions regarding suicidal behaviour (Have you ever thought about, or attempted to kill yourself?). If you feel uncomfortable answering any of the questions, you may leave the survey at any point.

#### Confidentiality

Your responses will be kept completely confidential and anonymous. Any information gathered in the course of the study is confidential. We will not know your IP address when you respond to the internet survey. We will not ask you to include your name, username or email address when you complete the internet study. Only your individual responses will be kept. Only the researcher and supervisors shall have access to the answers you provide.

You are free to withdraw from this study at any time. As a participant you will be fully protected by the British Psychological Society guidelines for research with human participants. Once all data has

been collected it will be anonymous, meaning that your responses cannot be traceable back to you as an individual. No individual will be identified in the publication of the results.

How can I get more information?

If you would like more information about this study before consenting, please take the opportunity to contact the website/forum administrator of the website you clicked the link from.

How can I get feedback from this study?

If you would like details of the findings these will be available on the website that you accessed the survey from after completion of the study.

If you, or are anyone you know has been affected by self-harm, you may like to seek support found at:

Website: www.sane.org.uk

Email: info@sane.org.uk

Call: 0845 767 8000

Website: <a href="http://www.lifesigns.org.uk/">http://www.lifesigns.org.uk/</a>

Email: info@lifesigns.org.uk

Website: <a href="http://www.selfinjurysupport.org.uk/help-and-support-self-injury">http://www.selfinjurysupport.org.uk/help-and-support-self-injury</a>

Email: <a href="http://www.selfinjurysupport.org.uk/">http://www.selfinjurysupport.org.uk/</a>

Call: 0780 047 2908

Website: <a href="http://www.oxfordmhf.org.uk/">http://www.oxfordmhf.org.uk/</a>

Email: <a href="mailto:enquiries@oxfordmhf.org.uk">enquiries@oxfordmhf.org.uk</a>

Website: http://www.mind.org.uk/information-support/types-of-mental-health-problems/self-

harm/#.U2GV31d7\_Wg

Call: 020 8519 2122

Email: contact@mind.org.uk
I confirm that I am over 16 years of age. By agreeing to participate in this online study you have read
and understood the information provided by the information sheet. By completing the questionnaire survey I am giving my consent to participate in this study.
survey 1 am giving my consent to participate in and study.
Please tick here
Thank you for your participation.

# **Section A**

# Please complete the following 18 questions about yourself by ticking the appropriate box:

1. Are you	Male Female	
2. How old are you?		
16	39	
17	40	
18	41	
19	42	
20	43	
21	44	
22	45	
23	46	
24	47	
25	48	
26	49	
27	50	
28	51	
29	52	
30	53	
31	54	
32	55	
33	56	
34	57	
35	58	
36	59	
37	60	
38	61	

	62			
	63			
	64			
	65			
	66			
	67			
	68			
	69			
	70			
	71			
	72			
	73			
	74 and over			
3. W	Which of these categories best described Employed full-time Self-employed Retired Not employed (seeking work)		Ek multiple where necessary):  Employed part-time In full-time education Other (please specify below) Not employed (ill health) ed (not seeking work for other reason)	
4. A	are you in a romantic relationship?	V		
		Yes No		
5. D	o you live with the person who you	are having	a romantic relationship with?	
	N	les No N/A		

6. Have you ever been given a diagnosis of mental	illness?
Yes No	[Participants will be directed to question 10]
7. If yes is this  Depression Anxiety Psychosis Personality Disorder Bipolar Affective Disorder Other	
8. Are you currently receiving support for mental h Yes No	nealth difficulties?  [Participants will be directed to question 10]
9. If yes who is providing this  GP  Community Mental Health Team  Counsellor  Other	
10. Do you currently drink alcohol on a regular bas Yes No	sis?  [Participants will be directed to question 12]

11. If yes is this more than 21 units per	week?	
	Yes No	
12. Do you care for any dependants (tic	Under 18 18-65 Over 65 N/A	
13. Do you currently use illicit substan	ces? Yes No	[Participants will be directed to question 15]
14. If yes what do you use?		
15. Are you currently taking any prescr	ibed medio	cation?
	Yes No	[Participants will be directed to question 17]
16. If yes what is this		
17. Are you or what is your ethnicity? -		
White-English		Asian-Indian

White-Scottish		Asian-Bangladeshi	
White-Welsh		Asian-Pakistani	
White-Irish		Asian Chinese	
White-Northern Irish		Asian other	
White-Polish		Mixed White and Black African	
White-other			
Arab			
Black-Caribbean		Mixed White and Black Caribbean	
Black-African		Mixed White and Black African	
Black other		Mixed White Asian	
What is your highest level of qualification	n?		
None 'A' Level Degree (or equivalent)		GCSE 'O' Level Diploma (or equivalent) Other	

18.

# **Section B**

History of self-harm: Please complete the following 5 questions about yourself	by ticking t	he
appropriate box:		

1. Have you ever self-harmed?			
Yes			
☐ No [Participants will be directed to Section	n C]		
2. How old were you when began self-harming	ng?		
16		37	
17		38	
18		39	
19		40	
20		41	
21		42	
22		43	
23		44	
24		45	
25		46	
26		47	
27		48	
28		49	
29		50	
30		51	
31		52	
32		53	
33			
34			
35			
36	-		
JU	1	l	

54	
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60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74 and over	
3. Do you currently self-harm?	
□ Yes	
□ No	
4. When you self-harm/self-harmed, what do	o/did you usually do? (tick multiple options if applicable)
☐ Cut yourself	
☐ Burn yourself	

	Scald yourself
	Bang body parts
	Pull your hair
	Scratch yourself
	Prevent wounds healing
	Ingest toxic substances
	Break bones
	Other
5.	How often do you self-harm?
	How often do you self-harm?  More than once daily
	•
	More than once daily
	More than once daily Once daily
	More than once daily Once daily 4-6 times weekly
	More than once daily Once daily 4-6 times weekly 2-3 times weekly

### **Section C**

**Instructions:** Please check the number beside the statement or phrase that best applies to you.

1.	Hav	re yo	ou ever thought about or attempt	ed to kil	I yourself? (check one only)
		1.	Never		
		2.	It was just a brief passing thought		
		3a.	I have had a plan at least once to kil	l myself b	ut did not try to do it
		3b.	I have had a plan at least once to kil	l myself a	nd really wanted to die
		4a.	I have attempted to kill myself, but of	did not w	ant to die
		4b.	I have attempted to kill myself, and	really hop	ed to die
2.	Hov	v of	ten have you thought about killin	g yourse	elf in the past year? (check one only)
		1.	Never		
		2.	Rarely (1 time)		
		3.	Sometimes (2 times)		
		4.	Often (3-4 times)		
		5.	Very Often (5 or more times)		
3.	Hav	e yo	ou ever told someone that you we	ere going	j to commit suicide,
	or t	hat	you might do it? (check one only)		
		1.	No		
			Yes, at one time, but did not really v		е
			Yes, at one time, and really wanted		
			Yes, more than once, but did not wa		
		3b.	Yes, more than once, and really wan	ited to do	it
4.	Нον	w lik	cely is it that you will attempt suic	ide some	eday? (check one only)
		0.	Never	4.	Likely
		1.	No chance at all	<u> </u>	Rather likely
		2.	Rather unlikely	<u> </u>	Very likely
		3.	Unlikely		

#### **Section D**

Directions: In the course of our lives negative things may occur because of our own actions. For some time after these events, we may have negative thoughts or feelings about ourselves. Think about how you typically respond to such negative events. Next to each of the following items tick the number (from the 7-point scale below) that best describes how you typically respond to the type of negative situation described. There are no right or wrong answers. Please be as open as possible in your answers.

1	2	3	4	5	6	7
Almost always false of me		More Often False of Me	Mo	ore Often True of Me		Almost always True of me

	Item	1 Almost always false of me	2	3 More Often False of Me	4	5 More Often True of Me	6	7 Almost always True of me
1	Although I feel bad at first when I mess up, over time I can give myself some slack.							
2	I hold grudges against myself for negative things I've done.							
3	Learning from bad things that I've done helps me get over them.							
4	It is really hard for me to accept myself once I've messed up.							
5	With time I am understanding of myself for mistakes I've made.							
6	I don't stop criticizing myself for negative things I've felt, thought, said, or done.							

#### **Section E**

Instructions: The following are four general relationship styles that people often report. Place
a tick next to the letter corresponding to the style that best describes you or is closest to the
way you are.

\_\_\_\_ A. It is easy for me to become emotionally close to others. I am comfortable depending on them and having them depend on me. I don't worry about being alone or having others not accept me.

B. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

\_\_\_\_ C. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

\_\_\_\_ **D.** I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

Now please rate each of the relationship styles above to indicate how well or poorly each description corresponds to your general relationship style.

	1	2	3	4	5	6	7
	Disagree			Neutral			Agree
	Disagree Strongly			mixed			Agree Strongly
Style							
A							
Style							
В							
Style							
C							
Style							
D							

# **Section F**

Instructions: this questionnaire consists of 12 statements. Please read each statement, and then place a tick in the box that you agree or disagree with.

	Item	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	If I were to have problems, I have people I could turn to					
2	My family or friends are very supportive of me					
3	In difficult situations, I can manage my emotions					
4	I can put up with my negative emotions					
5	When faced with a problem I can usually find a solution					
6	If I were in trouble, I know of others who would be able to help me					
7	I can generally solve problems that occur					
8	I can control my emotions					
9	I can usually find a way of overcoming problems					
10	I could find family of friends who listen to me if I needed them to					
11	If faced with a set-back, I could probably find a way round the problem					
12	I can handle my emotions					

You have now reached the end of the questionnaire.

Thank you very much for taking the time to answer the questions, your responses are much appreciated.

If you require help urgently, visit A&E or out of hours GP.

Support can be found at <a href="http://www.mind.org.uk/help/diagnoses">http://www.mind.org.uk/help/diagnoses</a> and conditions/selfharm

http://www.lifesigns.org.uk/

http://www.nshn.co.uk/

http://www.oxfordmhf.org.uk/

# Appendix 3c

## Cronbach's alpha of the current studies measures

Suicidal Behaviours Questionnaire

Reliability Statistics

Cronbach's Alpha	N of Items
.731	4

The Heartland Forgiveness Scale- Self Forgiveness Subscale

**Reliability Statistics** 

Cronbach's Alpha	N of Items
.790	6

Resilience Appraisals Scale:-

Emotion coping positive self-appraisals

Reliability Statistics

Cronbach's Alpha	N of Items
.868	4

Support seeking positive self-appraisals

**Reliability Statistics** 

Ť	
Cronbach's Alpha	N of Items
.876	4

Problem solving positive self-appraisals

**Reliability Statistics** 

Cronbach's Alpha	N of Items
.898	4

# Appendix 3d

# Block Regression: testing for independence of residuals

Independence of residuals can be tested by examining the Durbin-Watson test statistic. A Durbin-Watson statistic value of or close to 2 indicates there is no correlation between residuals and independence of residuals is met. As you can see this assumption was met.

Durbin-V	Vatson
	1.943

## Appendix 3e

## Block Regression: testing for Multicollinearity

Multicollinearity can be tested by examining whether correlations between each variable are not too high. Correlations between independent variables which are less than 0.7 indicate the assumptions of Multicollinearity have not been violated. As you can see below the assumptions of Multicollinearity has not been violated.

Correlations between suicidality, attachment, self-forgiveness and positive self-appraisals.

#### Correlations

		Total	Dismissing	Preoccupied	Fearful	Secure	Self-	Positive	Positive	Positive
		Suicidality	Attachment	Attachment	Attachment	Attachment	forgiveness	Appraisals	Appraisals	Appraisals
								Social	Emotion	problem
								Support	Coping	solving
	Total	1.000	.095	002	.123	237	473	309	380	347
	Suicidality									
	Dismissing	.095	1.000	271	.072	112	.032	144	.197	.154
	Attachment									
	Preoccupied	002	271	1.000	.097	047	100	042	081	069
	Attachment									
	Fearful	.123	.072	.097	1.000	460	235	182	191	176
	Attachment									
	Secure	237	112	047	460	1.000	.285	.306	.181	.217
	Attachment									
	Self-	473	.032	100	235	.285	1.000	.355	.488	.468
Pearson	forgiveness									
Correlation	Positive	309	144	042	182	.306	.355	1.000	.159	.314
	Appraisals									
	Social									
	Support									
	Positive	380	.197	081	191	.181	.488	.159	1.000	.632
	Appraisals									
	Emotion									
	Coping									
	Positive	347	.154	069	176	.217	.468	.314	.632	1.000
	Appraisals									
	problem									
G: /1	solving		0.45	400	01.4	000		000	000	000
Sig. (1-	Total		.045	.489	.014	.000	.000	.000	.000	.000
tailed)	Suicidality									

I	Dismissing	.045	.	.000	.099	.022	.282	.005	.000	.003
	Attachment									
	Preoccupied Attachment	.489	.000	•	.041	.200	.036	.227	.074	.109
	Fearful	.014	.099	.041		.000	.000	.001	.000	.001
	Attachment									
	Secure	.000	.022	.200	.000		.000	.000	.001	.000
	Attachment									
	Self- forgiveness	.000	.282	.036	.000	.000	٠	.000	.000	.000
	Positive	.000	.005	.227	.001	.000	.000		.002	.000
	Appraisals									
	Social									
	Support									
	Positive	.000	.000	.074	.000	.001	.000	.002		.000
	Appraisals Emotion									
	Coping									
	Positive	.000	.003	.109	.001	.000	.000	.000	.000	
	Appraisals									
	problem									
	solving Total	323	323	323	323	323	323	323	323	323
	Suicidality	323	323	323	323	323	323	323	323	323
	Dismissing	323	323	323	323	323	323	323	323	323
	Attachment									
	Preoccupied	323	323	323	323	323	323	323	323	323
	Attachment									
	Fearful Attachment	323	323	323	323	323	323	323	323	323
	Secure	323	323	323	323	323	323	323	323	323
	Attachment	323	323	323	323	323	323	323	323	323
	Self-	323	323	323	323	323	323	323	323	323
N	forgiveness									
	Positive	323	323	323	323	323	323	323	323	323
	Appraisals									
	Social Support									
	Support Positive	323	323	323	323	323	323	323	323	323
	Appraisals	323	323	323	323	323	323	323	323	323
	Emotion									
	Coping									
	Positive	323	323	323	323	323	323	323	323	323
	Appraisals									
	problem									
	solving									

### Appendix 3f

### **Block Regression Model Summary**

Model Summary<sup>d</sup>

Model	R	R Square	Adjusted R	Std. Error of the	Change Statistics				Durbin-	
			Square	Estimate	R Square	F Change	df1	df2	Sig. F	Watson
					Change				Change	
1	.247ª	.061	.049	3.52992	.061	5.179	4	318	.000	
2	.497 <sup>b</sup>	.247	.235	3.16722	.185	78.002	1	317	.000	
	.548°	.300	.282	3.06737	.053	7.992	3	314	.000	1.943

- a. Predictors: (Constant), Secure Attachment , Preoccupied Attachment, Dismissing Attachment, Fearful Attachment
- b. Predictors: (Constant), Secure Attachment, Preoccupied Attachment, Dismissing Attachment, Fearful Attachment, Self-forgiveness
- c. Predictors: (Constant), Secure Attachment , Preoccupied Attachment, Dismissing Attachment, Fearful Attachment , Self-forgiveness,

Positive Appraisals Social Support, Positive Appraisals problem solving, Positive Appraisals Emotion Coping

d. Dependent Variable: Total Suicidality

ANOVA

		7.81	1011			
Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	258.141	4	64.535	5.179	.000 <sup>b</sup>
1	Residual	3962.385	318	12.460		
	Total	4220.526	322			
	Regression	1040.606	5	208.121	20.747	.000°
2	Residual	3179.921	317	10.031		
	Total	4220.526	322			
	Regression	1266.181	8	158.273	16.822	.000 <sup>d</sup>
3	Residual	2954.346	314	9.409		
	Total	4220.526	322			

- a. Dependent Variable: Total Suicidality
- b. Predictors: (Constant), Secure Attachment , Preoccupied Attachment, Dismissing Attachment, Fearful Attachment
- $c.\ Predictors: (Constant), Secure\ Attachment\ ,\ Preoccupied\ Attachment\ ,\ Dismissing\ Attachment\ ,\ Fearful\ Attachment\ ,\ Self-forgiveness$
- $d.\ Predictors: (Constant), Secure\ Attachment\ ,\ Preoccupied\ Attachment\ ,\ Dismissing\ Attachment\ ,\ Fearful\ Attachment\ ,\ Self-forgiveness\ ,$

Positive Appraisals Social Support, Positive Appraisals problem solving, Positive Appraisals Emotion Coping

# Appendix 3g

# Block Regression Coefficients and Collinearity Statistics (Tolerance and VIF)

Multicollinearity can be tested by examining the tolerance and variance inflation factors (VIF) statistics. Tolerance values less than 0.1 and VIF values of greater than 10 indicate Multicollinearity problem. As you can see below the assumptions of Multicollinearity has not been violated in this particular data set.

#### Coefficients<sup>a</sup>

Model	Unstand	lardized	Standardized	t	Sig.	ig. 95.0% Confidence		Correlations			Collinearity Statistics	
Coefficients		Coefficients			Interval for B							
	В	Std.	Beta			Lower	Upper	Zero-	Partial	Part	Tolerance	VIF
		Error				Bound	Bound	order				
(Constant)	12.026	1.096		10.974	.000	9.870	14.182					
Dismissing	.131	.106	.070	1.234	.218	078	.340	.095	.069	.067	.909	1.100
Attachment												
Preoccupied	.010	.101	.006	.097	.923	190	.209	002	.005	.005	.912	1.096
1 Attachment												
Fearful	.031	.127	.015	.249	.804	218	.281	.123	.014	.014	.781	1.280
Attachment												
Secure	429	.119	222	-3.612	.000	662	195	237	199	196	.782	1.279
Attachment												
(Constant)	16.218	1.092		14.854	.000	14.070	18.366					
Dismissing	.173	.095	.093	1.816	.070	014	.361	.095	.101	.089	.907	1.103
Attachment												
Preoccupied	042	.091	023	456	.649	221	.138	002	026	022	.908	1.101
Attachment 2												
Fearful	087	.114	042	764	.445	313	.138	.123	043	037	.770	1.298
Attachment												
Secure	227	.109	118	-2.086	.038	441	013	237	116	102	.747	1.338
Attachment												
Self-forgiveness	226	.026	455	-8.832	.000	277	176	473	444	431	.897	1.115
(Constant)	18.467	1.201		15.370	.000	16.103	20.831					
Dismissing	.232	.096	.125	2.416	.016	.043	.422	.095	.135	.114	.835	1.197
Attachment												
Preoccupied	037	.088	021	421	.674	211	.137	002	024	020	.905	1.105
3 Attachment												
Fearful	129	.111	063	-1.163	.246	348	.090	.123	065	055	.764	1.308
Attachment												
Secure	156	.108	081	-1.453	.147	368	.055	237	082	069	.718	1.392
Attachment												

Self-forgiveness	151	.029	304	-5.172	.000	209	094	473	280	244	.646	1.548
Positive	107	.047	122	-2.262	.024	200	014	309	127	107	.771	1.298
Appraisals Social												
Support												
Positive	185	.059	202	-3.121	.002	301	068	380	173	147	.531	1.883
Appraisals												
Emotion Coping												
Positive	053	.065	053	825	.410	181	.074	347	047	039	.533	1.876
Appraisals												
problem solving												

a. Dependent Variable: Total Suicidality

### Appendix 3h

### Block Regression: testing for Outliers

Presence of outliers in the data set can be examined by inspecting the casewise diagnostics, highlighting any cases with standardized residuals greater than 3.0 or less -3.0 than standard deviations. As you can see one participant was found to have residuals greater than minus three standard deviations from the mean. This person recorded a total suicidality score of 4.00 but the model predicted a score of 14.51. To determine whether this case may be having undue influence on the results, determining the Cooks distance maximum value for the study was required. Cooks distance maximum value less than 1 indicate no cases exerting any undue major influence on the results as a whole. As can be seen below the current study's Cooks distance maximum values was less than 1

Casewise Diagnostics<sup>a</sup>

Case Number	Std. Residual	Total Suicidality	Predicted Value	Residual
140	-3.428	4.00	14.5136	-10.51356

a. Dependent Variable: Total Suicidality

Residuals Statistics<sup>a</sup>

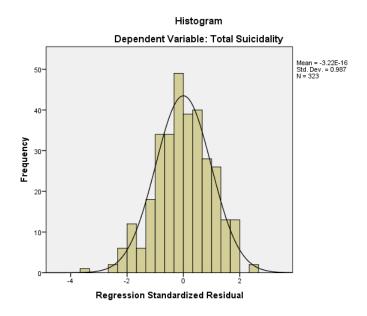
Residuais Statistics									
	Minimum	Maximum	Mean	Std. Deviation	N				
Predicted Value	5.8054	17.2154	11.5263	1.98299	323				
Std. Predicted Value	-2.885	2.869	.000	1.000	323				
Standard Error of Predicted Value	.259	.982	.498	.121	323				
Adjusted Predicted Value	5.7978	17.4011	11.5213	1.99030	323				
Residual	-10.51356	7.61952	.00000	3.02902	323				
Std. Residual	-3.428	2.484	.000	.987	323				
Stud. Residual	-3.474	2.540	.001	1.002	323				
Deleted Residual	-10.80246	7.96559	.00499	3.11610	323				
Stud. Deleted Residual	-3.537	2.562	.000	1.005	323				
Cook's Distance	.000	.049	.003	.005	323				
Centered Leverage Value	.004	.099	.025	.014	323				

a. Dependent Variable: Total Suicidality

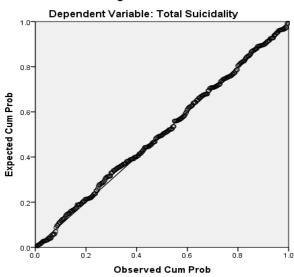
### Appendix 3i

### **Block Regression: testing for Normality**

The assumption of normality can be checked through histograms and normal p-p plots of regression standardised residuals to see whether errors are normally distributed, and that a plot of the values of the residuals approximate a normal curve. As you can see below the assumption of normality in the current study was met.



Normal P-P Plot of Regression Standardized Residual



### Appendix 3j

### Block Regression: testing for Linearity and Homoscedasticity

Visual examination of the residual scatterplot of the regression standardized residuals by the standardized predicted value, and partial regression plots can be used to test for linearity and Homoscedasticity. If the assumption of linearity and homoscedasticity is met we would expect to see a random scatter about the horizontal line. As you can see below there is linearity and homoscedasticity (i.e., the assumptions have not been violated).

