GENERAL PUBLIC'S ATTITUDES TOWARDS PEOPLE WHO SELF-HARM: PERCEIVED DANGEROUSNESS AND DESIRED SOCIAL DISTANCE

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This work is original and has not been submitted in relation to any other degree or qualification.

Signed: …… (Jacob Ellis)

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Abstract

Public attitudes towards self-harm are critically important, yet relatively unexplored. They can moderate or further exacerbate social and emotional difficulties that instigated initial self-harming episodes and considerably influence help-seeking behaviour. Participants from the general public (N = 109) answered a repeated measures self-report questionnaire that assessed desired social distance and perceived dangerousness towards individuals depicted in eight hypothetical vignettes, which varied between gender (male, female), presence of self-harm (no, yes) and self-harm intent (without suicidal intent, suicidal intent, ambivalent intent). Regarding desired social distance, evidence was identified to suggest that people who engage in self-harm without suicidal intent are perceived more negatively than individuals who do not have a history of self-harm (p < .001, d = 1.55). Numerous factors were identified to further adversely affect desired social distance from individuals who engage in self-harming behaviour. Males tended to have more negative attitudes towards people who self-harmed (p = .015, d = .48) and both genders displayed more negative attitudes towards male self-harmers (p < .001, d = .55). Both males (p = .004, d = .57) and females (p < .001, d = 1.31) who indicated suicidal intent received more negative responses than those who self-harmed without suicidal intent. Overall, perceptions of dangerousness were positively correlated with desired social distance (r = .36, p = < .001), however, gender and intent-specific attitudes contributed conflicting evidence to this relationship. These findings provide foundations for research into public attitudes towards individuals who self-harm, which could potentially inform public awareness campaigns.

Introduction

Self-harm statistics

Self-harm is a significant health problem worldwide (Sandy, 2013). Rates of self-harm are increasing (Cleaver, 2007; Klonsky et al., 2003; McDonald, 2006; Saunders et al., 2012) and have continued to do so in the United Kingdom since the 1960's (Brophy & Holmstrom, 2006), which currently has one of the highest self-harm rates across Europe (Mitchell et al., 2016). Self-harm often commences during adolescence (Van der Kolk et al., 1991), with approximately 19% of 15-year-olds having engaged in self-harm at least once within their lifetime (Mars et al., 2014). It is estimated that a third of adolescents who engage in non-fatal self-poisoning repeat the behaviour during adulthood (Harrington et al., 2006). Self-harm typically occurs when an individual is alone and experiencing overwhelming negative thoughts and emotions (Nock et al., 2009). Episodes often take place during the evening (Warm et al., 2002) and can be undertaken quickly, quietly and privately (Nock, 2010).

Birtwistle et al. (2017) identified that there were 6,155 self-harming presentations over the course of three years at one accident and emergency (A&E) department in England. These self-harming episodes consisted of self-poisoning (72%), self-injury (21%) and a combination of methods (7%). Self-poisoning is the most likely method, if non-fatal, that will lead to hospital admittance (Geulayov et al., 2016; Hawton & James, 2005). The most common self-poisoning presentations at general hospitals involve paracetamol or salicylate analgesics, such as aspirin (Hawton & James, 2005), followed by antidepressants, benzodiazepines and major tranquilisers or anti-psychotic medication, respectively (Geulayov et al., 2016). Paracetamol is most typically used by younger individuals, antidepressants by adults and sedatives by older individuals (Butler, 2016). A large proportion (76.7%) of self-injury presentations at general hospitals involve self-cutting or stabbing (Geulayov et al., 2016), predominantly to the arms, legs and

stomach (Carroll et al., 2016; Klonsky & Muehlenkamp, 2007; Whitlock et al., 2008). Other methods include hanging, drowning, shooting, jumping from height and traffic-related injuries, many of which have recently increased (Bergen et al., 2010; Geulayov et al., 2016). Most methods of self-injury, other than self-cutting or stabbing, generally demonstrate suicidal intent and are more likely to result in death by suicide (Bergen et al., 2012; Runeson et al., 2010). Furthermore, self-cutting to areas other than the arms or legs is reported to represent a higher risk of death by suicide than self-poisoning (Carroll et al., 2016). The lethality of the method and suicidal intent are generally connected (Haw et al., 2003), such as hanging being more associated with the desire to die (Hawton & James, 2005). Some people use the same method for repeated acts, while others may change methods (Lilley et al., 2008; Owens et al., 2015).

A&E departments across England and Wales are estimated to encounter 25,000 cases of self-harm each year (Anderson & Standen, 2007; Hawton et al., 2000), with many individuals disclosing prior instances of self-harm, that have not resulted in hospital appearances (Hawton et al., 1996; Lilley et al., 2008). Over an eight-year period, between 2000 and 2007, Bergan et al. (2010) collected data on presentations to six general hospital A&E departments in England following acts of self-harm. In contrast to data gathered between 1990 and 1997 (Belgamwar et al., 2006; O'Loughlin & Sherwood, 2005), they reported that cases of self-harm had declined during the study and attributed this to the reduction in cases of self-poisoning. In a follow-up study to Bergen et al. (2010), Geulayov et al. (2016) noted that there were 84,378 instances of self-harm across five general hospitals between 2000 and 2012, of which 21% were repeat episodes between 2003 and 2011, with 58.6% of those presenting being female. However, the statistics from both studies (Bergen et al., 2010; Geulayov et al., 2016) were generated from general hospitals located within urban populations, Oxford, Manchester and Derby, which have been identified to consist of greater self-harm frequencies than rural areas (Harriss & Hawton, 2011).

Unfortunately, prevalence rates derived from inpatient and A&E department data are often considered unreliable (Dennis et al., 1990; Fortune et al., 2008), due to the significant number of individuals who avoid attending general hospitals following acts of self-harm (Hawton & James, 2005; Hawton et al., 1998; 2002; McAllister, 2003; Rodham et al., 2004). Harris (2000) commented that a large proportion of individuals do not attend A&E departments after self-harm episodes, due to fear of being stigmatised by medical staff, suggesting that there is a considerable number of distressed individuals who are currently unknown and absent of help (Ystgaard et al., 2009). McMahon et al. (2014) reported that for every adolescent male who died by suicide, 16 attended hospital following acts of self-harm and 164 engaged in self-harm in the community without hospital presentation. In addition, for every adolescent female that committed suicide, 162 attended hospital following acts of self-harm and 3,296 engaged in self-harm in the community without hospital presentation (McMahon et al., 2014). The desire to avoid the stigma associated with non-fatal acts of self-harm may provide understanding as to why instances of self-poisoning rates have declined at A&E departments across the country (Bergan et al., 2010) and why self-injury episodes, which tend not to result in hospital presentations (Hawton et al., 2002; 2009; Pages et al., 2004; Ystgaard et al., 2009), have increased (Bergan et al., 2010).

Prevalence rates are often derived from small, regional-based studies using various research methods, participant samples and are often narrow in scope regarding the adopted definition (Nock, 2010; O'Donnell et al., 2015). The use of alternative methodologies and specific inclusions of behaviours causes varying prevalence rates, which prevent accurate conclusions being established regarding the epidemiology of self-harm (Madge et al., 2008; Muehlenkamp et al., 2012). Evans et al. (2005) support this notion by finding, in their review of 128 epidemiological studies, that there were conflicting results dependant on the definition of self-harm, methodology used and whether the participants were ensured of anonymity.

There are also complexities regarding accurately determining the prevalence rates of self-harm via self-report data from members of the public. Rates of self-harm are generally consistently higher for adolescents than adults (Lloyd-Richardson et al., 2007; Plener et al., 2009; Ross & Heath, 2002). This either supports the common conclusions that rates of self-harm are increasing (Cleaver, 2007; Klonsky et al., 2003; McDonald, 2006; Saunders et al., 2012), or, suggests that people are less likely to report engaging in self-harming behaviour as they age, due to memory or reporting bias. Mitchell et al. (2016) found evidence in support of the latter by identifying that 62.8% of people who denied engaging in self-harm had hospital-verified attendances.

Despite engaging in behaviours that would appear to cause pain, a large proportion of individuals who self-harm, especially by self-cutting, report minor or no feelings of discomfort during incidents (Favazza, 1996; Nock & Prinstein, 2004). Behavioural studies have identified increased pain-sensitivity thresholds in self-harming participants, compared to individuals who have never engaged in self-harm (Bohus et al., 2000; Kemperman et al., 1997; Russ et al., 1999). There are various explanations for this apparent difference, including the possibility that repetition habituates and decreases the pain sensitivity (Hamza et al., 2012; Hamza & Willoughby, 2013). However, the number of self-harm acts during a lifetime has not been found to correlate with levels of pain experienced (Nock et al., 2006), which casts doubt on this suggestion. A further potential reason for this occurrence is an increased level of endorphins released during the act, which lowers levels of pain and can result in feelings of euphoria (Van Ree et al., 2000), potentially due to pre-disposed endorphin levels or a factor associated with repeated self-harming episodes (Nock, 2010). A final explanation is the belief that they deserve to inflict harm to themselves (Comer & Laird, 1975; Goldberg & Sakinofsky, 1988; Nock et al., 2006), therefore warranting exposure to the pain and consequently reducing sensitivity to it.

Self-harm is often conceptualised as a behaviour predominantly associated with females (Clarke & Whittaker, 1998; Schmidtke et al., 2004). This is potentially due to females more commonly receiving medical attention (McMahon et al., 2014; Taylor, 2003; Mechanic, 1978), as a consequence of male self-harming behaviour being frequently misdiagnosed as an accident (Taylor, 2003), heightened fear of stigmatisation in males (Nam et al., 2010), or, the socially prescribed identification of help-seeking not being a masculine attribute (Robertson, 1995; Möller-Leimkühler, 2002).

Many studies report a link between individuals who have been subject to sexual or physical abuse and self-harm (Bensley et al., 1999; Harrington et al., 2006; Hawton & James, 2005; Hawton et al., 2002; Klonsky & Moyer, 2008; Ysgaard et al., 2004). Being raised in a single-parent family and having a parent with a disability or serious illness (Hawton et al., 2002; Laye-Gindhu & Schonert-Reichl, 2005) are also associated with an increased risk of self-harm, in addition to consumption of cigarettes, alcohol (Hawton et al., 2002) and drug use (De Leo & Heller, 2004; Laye-Gindhu & Schonert-Reichl, 2005). Commonly cited reasons for engaging in self-harm are regulation of effect, such as a release of tension or a relief from dysphoric emotions (Boergers et al., 1998; Hawton et al., 1982; Kienhorst et al., 1995; Nixon et al., 2008; Scoliers et al., 2009). See Nock (2008) for a more comprehensive analysis of risk factors for engagement in self-harm.

Instances of self-harm, that are non-fatal, are frequently repeated (Kidger et al., 2012; Mars et al., 2014; Sakinofsky, 2000), often within the first several months (Hawton & James, 2005). Repetition of self-harm increases the risk of death by suicide (Cumming et al., 2006; Hawton & Fagg, 1988; Leon et al., 1990; Owens at el., 2002; Zahl & Hawton, 2004), particularly for those who present to hospital following the act (Da Cruz et al., 2011; Cooper et al., 2005), and is regarded by many as the main risk factor for death by suicide (Carroll et al., 2014; Cooper et al., 2005; Sakinofsky, 2000).

The Office for National Statistics (2017) reported that in 2016, suicide occurred in 10.1 per 100,000 people. Suicide is the second leading cause of death among 15 to

29-year-olds (World Health Organisation, 2014) and the most common in 15 to 19-year-old females (Rodham & Hawton, 2009). It has been identified that 15% of death by suicide victims attended a general hospital A&E department for self-harm within a year prior to their death (Gairin et al., 2003; Hawton et al., 2015). For individuals who had engaged in self-harm, Hawton et al. (2003) report that the risk of suicide within a year is 66 times greater than that for the general public's annual risk of suicide. Other researchers approximate a 30 (Cooper et al., 2005), 50 (Owens et al., 2002) and 100 (Hawton & Fagg, 1988) fold increase in suicide risk within a year of self-harming. Many cases of suicide are preceded by recent acts of non-fatal self-harm (Gairin et al., 2003; Owens et al., 2002). It is estimated that around 25% of individuals that end their own life have self-harmed within the previous year (Owens & House, 1994) and half of individuals who die by suicide have a history of self-harm (Foster et al., 1997; Hamza et al., 2012; Turner et al., 2013; Whitlock et al., 2013). It is also suggested that the risk is greater in males than in females who self-harm (Hawton et al., 2003; Office for National Statistics, 2017), with asphyxiation, particularly ligature strangulation, being the most common method of suicide (Hawton et al., 2015; Office for National Statistics, 2017).

Definitions of self-harm

Since first being described as 'wrist cutting syndrome' in the 1930's by Karl Menninger and subsequently in the 1950's 'attempted suicide' by Erwin Stengel (Bloch & Singh, 1999), inflicting harm to oneself has been labelled and defined in many different ways (Mangnall & Yurkovich, 2008). Klonsky et al. (2003) refer to deliberate self-harm as intentionally injuring oneself without suicidal intent. This definition has also been referred to as superficial-moderate self-mutilation (Favazza & Rosenthal, 1993), self-mutilation (Ross & Heath, 2002; Herpertz et al., 1997), self-wounding (Tantam & Whittaker, 1992), self-injurious behaviour (Alper & Peterson, 2001; Kemperman et al., 1997; Van der Kolk et al., 1991), autodestructive behaviour (Kocalevent et al., 2005),

suicidal behaviours (Patton et al., 1997) and non-suicidal self-injury (NSSI; Nock, 2010). The most recent Diagnostic and Statistics Manual (DSM-5; American Psychiatric Association, 2013) makes references to NSSI, however, not as a full diagnosis. Definitions of this manner generally dismiss incidences of self-poisoning (Kapur et al., 2013), on the basis that they are not concrete enough to be classified as deliberate self-harm (Favazza, 1998; Pattison & Kahan, 1983) in addition to limiting the classification to behaviours that are absent of suicidal intent. However, some individuals who engage in self-harm without suicidal intent can also participate in acts with suicidal intentions (Spandler, 2001), which may consequentially result in death by suicide (Horrocks et al., 2003; Stanley et al., 2001), because of this, distinguishing definitions by suicidal intent is problematic.

Orlando et al. (2015) interviewed 1,525 participants who had a history of self-harm and reported preliminary evidence to suggest that self-harm is not represented by distinct typologies dependant on intent, rather that self-harming behaviours occur along a dimension. For this research, a definition of self-harm is adopted in-line with modern studies based in the United Kingdom and Europe (Crouch & Wright, 2004; Geulayov et al., 2016; Hawton et al., 2003; Muehlenkamp et al., 2012; Ougrin et al., 2012). That is, a non-fatal outcome as a result of behaviour intended to cause harm to the self (Hawton et al., 2002), through *'self-poisoning or self-injury, irrespective of the apparent purpose of the act'* (NICE, 2004, p. 16). This definition encompasses self-harm acts undertaken with and without suicidal intent (Hawton & James, 2005; Muehlenkamp et al., 2012), and acknowledges that people may be ambivalent towards their self-harming intentions (Hamza et al., 2012; Straiton, 2013). Hawton et al. (1982) identified that over 40% of adolescents reported that they did not care whether the consequences of self-harming were fatal or non-fatal. Self-harm intentions are often complex and fluctuating (Freedenthal, 2007; Victor & Klonsky, 2014) and are therefore, more realistically classified after the act (Skegg, 2005).

Attitudes towards individuals that self-harm

Healthcare professionals are expected to behave in a respectful, compassionate and supportive manner towards the individuals they care for (Forchuk, 1995). This relationship is paramount and provides the foundations for recovery (Beckett et al., 2007). Individuals presenting to A&E departments following acts of self-harm are amongst those most frequently encountered by healthcare professionals, with nurses estimated to have contact with at least one self-harming patient during each shift (Holdsworth et al., 2001).

Findings from patient self-reports

A method commonly adopted to ascertain healthcare professional's attitudes towards individuals who have self-harmed is analysing patient experiences through self-report questionnaires or interviews. Arnold (1995) identified that 96% of women who self-harmed were unhappy about how they were treated in psychiatric services and 69% were dissatisfied with emergency services. Self-harming patients have reported poor treatment, a lack of sympathy and being subjected to humiliation (Harris, 2000). More recently, McHale & Fenton, (2010) conducted a literature review of 19 studies and reported that patients who had self-harmed were not generally satisfied with the level of care that they had received. In addition to this, a systematic review of 31 studies also concluded that a large proportion of patients had negative experiences within clinical services (Taylor et al., 2009). However, conclusions from these studies should be drawn with caution, as studies examining patient's experiences may be more likely to attract participants who have had negative experiences (Hadfield et al., 2009), thus positive experiences may be underrepresented.

Findings from healthcare professionals

Early research into attitudes of healthcare staff towards self-harming patients, using self-report data or observations, were largely negative (Ansel & McGee, 1971; Crawford & Wessely, 1998; Crawford et al., 1998; 2003; Creed & Pfeffer, 1981; Ghodse, 1978; Patel, 1975; Ramon et al., 1975; Samuelsson et al., 1997; Sidley & Renton, 1996; Welu, 1972). It has been reported that individuals who presented to A&E departments following self-harm were often ignored, experience prolonged waiting times, received painful treatment and had been subject to negative comments (Barstow, 1995; Hemmings, 1999). Individuals who have self-harmed can be perceived as less deserving of staff attention (Sbaih, 1993) and as time wasters in comparison to other patients (Mackay & Barrowclough, 2005; Sandy & Shaw, 2012). Self-harming patients are often viewed as manipulative and attention-seeking (Anderson et al., 2005; Feldman, 1988; Friedman et al., 2006; Law et al., 2009; Smith, 2002; Walsh & Rosen, 1988), with repeated presentations for self-harm reported to elicit more negative attitudes (Bailey, 1994; Gibb, 2010; Mackay & Barrowclough, 2005).

However, findings are not all negative. Studies utilising quantitative (Conlon & O'Tuathail, 2012; McCarthy & Gijbels, 2010; Patterson et al., 2007) and qualitative (O'Donovan & Gijbels, 2006; Thompson et al., 2008; Wilstrand et al., 2007) methods have reported more positive attitudes, such as understanding, engagement and sympathy, towards individuals who self-harm from healthcare professionals across A&E departments, psychiatric wards and community mental health settings. These studies took place following the National Institute for Health and Clinical Excellence published guidelines on how self-harming individuals should be treated within healthcare environments, after commenting that the care was *'often unacceptable'* (NICE, 2004, p. 7). Although the results are not consistent across all studies post-publication, they provide a good example of the positive impact education can have upon attitudes and behaviours.

Factors that influence attitudes of healthcare professionals

More positive attitudes amongst healthcare professionals have been associated with relevant training (McHale & Fenton, 2010) and negative attitudes have been linked with staff perceptions that they are unequipped to meet the patient's needs (Crawford et al., 2003; McAllister, 2002; Wheatley & Austin-Payne, 2009). Studies that reported a lack of staff knowledge tend to be associated with more negative attitudes (Taylor et al., 2009).

Studies that have considered the impact of the amount of clinical experience have yielded contradictory conclusions. Some studies report that increased clinical experience of emergency department nurses is associated with more positive attitudes (Anderson, 1997; McLaughlin, 1994), however, others suggest greater experience is associated with more negative attitudes (Friedman et al., 2006; Ghodse, 1978) or that the amount of experience did not significantly influence attitudes at all (Gibb et al., 2010; Wheatley & Austin-Payne, 2009).

Healthcare roles and settings also appear to have an influence on staff attitudes towards individuals who self-harm, likely due to varying amounts of training. Timson et al. (2012) compared qualified professionals working in A&E departments with staff working at Child and Adolescent Mental Health Services (CAMHS). They identified that CAMHS staff possessed greater knowledge and had more positive attitudes than A&E staff (Timson et al., 2012). General hospital staff, particularly doctors, have been reported to have predominantly negative attitudes, especially if an individual had repeatedly self-harmed (Saunders et al., 2012) and psychiatrists have been identified to possess more positive attitudes than doctors of other specialities (Commons Treloar & Lewis, 2008; Hawton et al., 1981; Platt & Salter, 1987). Self-harm specialists were reported by individuals who had self-harmed to provide the most satisfactory attitudes and support (Warm et al., 2002).

Research has identified that the gender of a healthcare professional can also influence attitudes towards individuals who self-harm. Female members of staff have been reported to have more positive attitudes than males across roles and settings (Anderson et al., 2000; Ghodse, 1978; Law et al., 2009; Mackay & Barrowclough, 2005; Samuelsson et al., 1997; Suominen et al., 2007). The common gender role association of male doctors and female nurses means these findings should be interpreted tentatively, as doctors have been reported to have more negative attitudes than nurses towards patients who self-harm (Saunders et al., 2012). Within a male prison environment, it was found that female prison officers expressed more positive attitudes to self-harming prisoners than male prison officers (Ireland & Quinn, 2007). Other studies have not found an association between gender and attitudes towards individuals who self-harm (Gibb et al., 2010; Karman et al, 2015; McCarthy & Gijbels, 2010; Suokas et al., 2009; Wheatley & Austin-Payne, 2009).

Variations of self-harm intent have also been reported to influence attitudes of healthcare staff. Emotional reactions predict moral judgement (Haidt, 2001) and decision making (Green & Haidt, 2002). Ramon (1980) suggested that suicide attempts elicit more sympathetic emotions and behaviours from healthcare professionals than when acts of self-harm are undertaken for an alternative purpose. This is supported by McLaughlin (1995), who identified that individuals presenting to emergency departments who had self-harmed with suicidal intent, primarily self-poisoning, were generally responded to positively and sympathetically by nursing staff. Friedman et al. (2006) identified increased negative attitudes towards individuals presenting with non-fatal self-harm by laceration, a method typically associated with reduced lethality (Bergen et al., 2012; Gunnell et al., 2005; Runeson et al., 2010) and lower levels of suicidal intent (Hawton & James, 2005). This suggests that the degree of intent displayed by the person who has self-harmed can, to a certain extent, predict how they are perceived and treated within A&E departments. This association between increased lethality of intent and more

positive attitudes has also been found in other studies (Ansel & McGee, 1971; Bailey, 1994; Ramon, 1975; Sidley & Renton, 1996; Suokas et al., 2008). However, this is not universal (Bailey 1998; Patterson et al., 2007; Ross & Goldner, 2009) as some healthcare staff believe resources are wasted on an individual who wants to end their life (Ross & Goldner, 2009).

The attitudes of healthcare professionals are critically important to the help an individual who has self-harmed receives. The National Institute for Health and Clinical Excellence (2004) recommended that every person who presents to A&E following acts of self-harm should receive a comprehensive psychological assessment. Despite this, numerous studies have consistently identified that only marginally more than half of self-harming individuals received a psychological assessment (Bennewith et al., 2004; Cooper et al., 2013; Geulayov et al., 2016). The rates of psychological assessments are particularly low for individuals who self-injure (Geulayov et al., 2016; Lilley et al., 2008), potentially due to the supposed non-suicidal connotations (Favazza & Conterio, 1989; Herpertz, 1995) and low risk of lethality associated with the self-harming method (Pages et al., 2004; Ystgaard et al., 2009). Consequentially, this may lead to healthcare staff dismissing the seriousness of the events based on their attitudes towards self-harming behaviours and the perceived intent displayed or reported by the individual. However, the reliance on staff observation and patient self-reporting have been evidenced to drastically underrepresent the true suicidal risk of an individual that presents with self-harm. Individuals may not possess the self-awareness to accurately consider their current risk and explain the motivations for their behaviour (Wilson, 2009). There is also considerable potential for the concealment of motivations in order to achieve discharge from hospital (Glenn et al., 2017). Bush and her colleagues highlighted the significance of this problem by identifying that 78% of inpatients denied having suicidal motivations in conversations prior to ending their own lives (Bush et al., 2003), this evidence

substantiates the need for every person who presents to A&E following self-harm to receive a psychological assessment, regardless of the suggested or perceived intent.

General public's attitudes towards self-harm

Many studies report negative and unsympathetic perceptions of people that engage in self-harming behaviour from healthcare professionals. Several factors appear to influence attitudes positively, such as the volume of training and experience, gender of staff, gender of patient and level of intent. In contrast to the abundance of literature on attitudes from healthcare professionals towards self-harming individuals, research into public attitudes is significantly more limited.

Newton and Bale (2012) conducted semi-structured interviews on seven participants from the general public, in an attempt to identify what behaviours, they considered to be self-harm and whether general public attitudes reflected those of healthcare professionals. They reported that their sample conveyed a relatively sympathetic view towards individuals who self-harm, particularly when they believed the behaviour was associated with mental illness. However, the perception of the participants was that the dominant view from society is unsympathetic. Due to the qualitative nature of this study, with the interview being conducted on a face-to-face basis, it is possible that the participants responded in a socially desirable manner and that their genuine attitudes were more aligned with those from society.

It has been identified that the general public demonstrate awareness regarding the various functions of self-harm, including the reduction of emotional pain, anxiety or depression, loneliness or isolation in addition to being a distraction, regaining control and as a response to adverse emotions (Rayner & Warner, 2003). Furthermore, over half of the participants in Newton & Bale's (2012) study viewed self-harm as a mental illness.

Research objectives

With the exception of the two aforementioned studies (Newton & Bale, 2012; Rayner & Warner, 2003), very little research has been undertaken with regard to public perceptions of self-harm. Research has mainly focused on public awareness of the causes and functions of self-harm. Newton and Bale's (2012) study did assess public attitudes, but their small sample size of seven participants limits the representativeness of their findings.

It is well documented that individuals who self-harm can experience negativity when they engage with healthcare professionals (Friedman et al., 2006; Harris, 2000; Law et al., 2009; Mackay & Barrowclough, 2005; McHale & Fenton, 2010; Sandy & Shaw, 2012; Taylor et al., 2009). This is likely to result in a heightened sense of worthlessness (Warm et al., 2002), that may also be enhanced by a lack of supporting network (Bebbington et al., 2010; Hankin & Abela, 2011; Huang et al., 2017). Members of the public who are unwilling to associate with an individual, whom they know self-harms, may further alienate the individual and substantiate their perception that they are underserving of any attention and thus consequentially leading to further self-harm (Harris, 2000; Van Loon et al., 2004), potentially with more lethal intent (Levi-Belz et al., 2013).

Currently, to the authors knowledge, no previous research exists that ascertains the general public's desired social distance or perceived dangerousness attributed to individuals who engage in self-harming behaviour. Given that the adopted definition of self-harm does not distinguish between levels of intent (NICE, 2004), this research aims to establish whether public attitudes towards social involvement and perceived dangerousness are determined by whether the intent for self-harming is fatal, non-fatal or whether the individual is ambivalent. The extent to which members of the public will engage with individuals who self-harm is currently unexplored, and, via the presentation of hypothetical vignettes, will be assessed through the measure of desired social

distance. Alongside this, participants are also required to report how likely they think an individual is to inflict physical harm to another person based on the information presented to them in the vignette. This is to establish whether desired social distance is due to perceived dangerousness or relating to another factor.

Presenting the participants with vignettes is not too dissimilar to the situations emergency department staff are faced with when a self-harming patient arrives at a hospital. They are both relatively devoid of contextual cues and have very little information about the individual and their current life circumstances. The information available is based on what they can observe, such as gender, inferences of intent based on the self-harming method and whether the individual has self-harmed previously, either through disclosure, physical signs or previous hospital presentations. Due to the lack of research in this area, the hypotheses are mainly derived from studies involving healthcare professional's attitudes towards individuals who have self-harmed and public attitudes towards individuals with a mental health disorder.

In society, people tend to want to distance themselves from stigmatised individuals (Aviram et al., 2006). Vivekananda (2000) commented that A&E staff tend to distance themselves from patients presenting with self-harm, as they were perceived as attention seeking, manipulative or beyond help. Newton & Bale (2012) reported, following interviews with members of the public, that most of the participants viewed self-harm as a mental illness. There is an abundance of literature documenting the unfavourable views of the general public towards individuals diagnosed with a mental health disorder, with a common conception being that they are dangerous (Angermeyer & Matschinger, 1996; 2006; Corrigan, 2000; Link et al., 1987; 1999; Pescosolido et al., 1999) along with a desire for social avoidance (Angermeyer et al., 2004; Hinshaw, 2005; Link et al., 1999; Law et al., 2009). Corrigan et al.'s (2003) attribution model of public discrimination towards individuals with mental health disorders suggests that perceived dangerousness

is associated with a desire for increased levels of social distance, due to heightened levels of fear directed towards that person (Law et al., 2009).

Many studies assessing healthcare professional's attitudes towards self-harming patients report that female staff generally possess more positive attitudes (Anderson et al., 2000; Ghodse, 1978; Law et al., 2009; Mackay & Barrowclough, 2005; Samuelsson et al., 1997; Suominen et al., 2007), a conclusion which has also been identified in prison settings (Ireland & Quinn, 2007).

Research into healthcare professional's attitudes towards self-harming patients based on levels of intent are inconsistent. There are reports of more positive attitudes being associated with suicidal intent (Ansel & McGee, 1971; Bailey, 1994; McLaughlin, 1995; Sidley & Renton, 1996; Suokas et al., 2008), however, other studies provide alternative findings (Bailey, 1998; Patterson et al., 2007; Ross & Goldner, 2009). Stengel et al. (1958) suggest that individuals who have a non-fatal suicide attempt elicit more negative judgements and attitudes from others, due to being perceived as not having a genuine suicidal intention or being unable to perform the act.

Self-harming acts can be undertaken with ambivalent motivations (Hamza et al., 2012; Lewinsohn et al., 1996; Straiton, 2013). No previous research has ascertained what influence engaging in self-harm with uncertainty has on attitudes and behaviours, in comparison to self-harm with or without suicidal intent. Exploratory research aims to address this gap and form foundations for future research.

Hypotheses

Based on the rationale above, the following hypothesis have been formulated:

H_1: Participants will desire increased social distance from individuals that are depicted to engage in self-harm without suicidal intent, in comparison to individuals who do not have a history of self-harm.

H_2: Participants will perceive individuals who engage in self-harm without suicidal intent as more dangerous, in comparison to individuals who do not have a history of self-harm.

H_3: Female participants will report more positive attitudes towards individuals that engage in self-harm without suicidal intent, in comparison to male participants, through

(a) Reduced desired social distance;
(b) Reduced perceived dangerousness.

H_4: Participants will have more negative attitudes towards individuals that display suicidal intent, in comparison to individuals that self-harm without suicidal intent, through

(a) Increased social distance;
(b) Increased perceived dangerousness.

Method

Design

The study was a repeated measures questionnaire based self-report survey, in response to eight hypothetical vignettes. The vignettes were constructed to depict individuals based on the gender of the person (2 levels; male, female), presence of self-harm (2 levels; no, yes) and self-harm intent, for those depicted as engaging in self-harm, (3 levels; without suicidal intent, with suicidal intent, with ambivalent intent). See Appendix A for the vignettes used in the study.

Materials/Measures

After presentation of each vignette, the participants were provided with five questions assessing levels of desired social distance and one question assessing perceived levels of dangerousness (Appendix B). The mean Cronbach's alpha for the eight vignettes was found to be highly reliable (α = .91). The questions were subtlety adapted from those used by Link et al. (1999) to make them relevant for the nature of the study. Responses to the questions were measured in a similar manner to Link et al. (1999), through a Likert scale dependant on varying levels of willingness for social distance and likelihood for perceived danger (1= Definitely, 2 = Likely, 3 = Unlikely, 4 = Definitely not). Following data collection, the dangerousness measure was reverse scaled to allow for comparisons with the social distance scales. The participant's responses were calculated into a mean score for the data analysis of each vignette.

Participants

A convenience sample from the general public was sought, with the majority of participants being sourced from the internet website 'www.reddit.com'. In total, 202 participants attempted to complete the study, however, only 109 could participate due to

ethical considerations. The sample consisted of 46 males, (*M* = 26.6, *SD* = 9.33) and 63 females (*M* = 30.3, *SD* = 12.35). The age of participants ranged from 16 to 66 (*M* =28.7, *SD* = 11.27). Age was non-normally distributed, with skewness of 1.78 (*SE* = .231) and kurtosis of 2.48 (*SE* = .459), this is due to a large proportion of the participants being either aged 23 (*N* = 9), 26, (*N* = 15) or 28 (*N* = 10).

Procedure

Potential participants were directed to Bristol Online Survey (BOS), where they were assigned to one of eight surveys. All the surveys consisted of the same research information, vignettes and questions. Using a Latin Square method to control for order effects, the different surveys varied in vignette order. The participants were presented with information regarding the nature of the study and assured of their anonymity. Following consenting to participate in the study, the participants were required to provide their gender, age and asked whether they had previously engaged in self-harm, as defined by NICE (2004). Participants that reported a history of self-harm were informed that they were unable to participate in the study. Participants that indicated no history of self-harm were presented with the first vignette and subsequent questions. Once participants had completed the questions for each of the eight vignettes, they were presented with a debrief and, due to the sensitive nature of the study, information of relevant external support agencies in addition to a positive mood induction.

Ethical considerations

Since the study is aimed at attaining the general public's attitudes towards individuals who have self-harmed, and for ethical reasons, individuals who had reportedly previously self-harmed were not permitted to participate. In-line with the British Psychological Society (BPS), ethical guidelines for internet mediated research

comprising of sensitive themes (British Psychological Society, 2017), individuals under 16 years old were unable to participate. Following completion of the study, participants were provided with a debrief, containing a general explanation about the purpose of the study, in addition to a list of external support agencies and their contact details, participants were also presented with a positive mood induction. Ethical approval was given by the University of Chester Psychology Department Ethics Committee. Participants were treated in accordance with the ethical guidelines of the BPS. Acknowledgement of consent was obtained prior to engagement in the study.

Method of analysis

To test hypotheses 1, participants will desire increased social distance from individuals that are depicted to engage in self-harm without suicidal intent, in comparison to individuals who do not have a history of self-harm, the data was analysed using a repeated measures 2x2 analysis of variance (ANOVA). To test hypothesis 2, participants will perceive individuals who engage in self-harm without suicidal intent as more dangerous, in comparison to individuals who do not have a history of self-harm, the data was also analysed using a repeated measures 2x2 analysis of variance (ANOVA). The association between desired social distance and perceived dangerousness was then measured by a bivariate correlational analysis. To test hypothesis 3, female participants will report more positive attitudes towards individuals that engage in self-harm without suicidal intent, in comparison to male participants, through reduced desired social distance and reduced perceived dangerousness, two independent samples t-tests were conducted. To test hypothesis 4, participants will have more negative attitudes towards individuals that display suicidal intent, in comparison to individuals that self-harm without suicidal intent, through increased social distance and increased perceived dangerousness, two paired samples t-tests were conducted. The exploratory research was undertaken using two paired samples t-tests.

Results

Testing hypothesis 1

A 2x2 repeated measures analysis of variance (ANOVA) was ran to test the hypothesis that participants will desire increased social distance from individuals that are depicted to engage in self-harm without suicidal intent, in comparison to individuals who do not have a history of self-harm. In addition to this, it was questioned whether the gender of the individual depicted had an influence on the attitudes portrayed towards them and whether there was an interaction between gender and presence of self-harm without suicidal intent.

Table 1

Participant's (N = 109) desired social distance, dependant on presence of self-harm without suicidal intent (Means and SD)

Gender of individual depicted	Presence of self-harm without suicidal intent	Mean	Std. Deviation
Male	No	1.85	.57
Male	Yes	2.48	.75
Female	No	1.83	.58
Female	Yes	2.28	.72

The repeated measures ANOVA indicated a statistically significant effect of presence of self-harm, $F(1,108) = 130.09$, $p < .001$, $d = 1.55$, with participants reporting that they would prefer an increased level of social distance from individuals that engage in self-harm without suicidal intent, compared with individuals that have never engaged in self-harm. There was also a statistically significant effect of gender, $F(1,108) = 16.29$, $p < .001$, $d = .55$, with participants desiring to have an increased social distance away from males than females. The repeated measures ANOVA indicated a statistically significant main effect between gender and presence of self-harm without suicidal intent,

F(1, 108) = 16.16, *p* < .001, *d* = .55. Participants desired a similar level of social distance between males and females that do not engage in self-harm without suicidal intent, however, the results demonstrated that participants desired a significantly increased social distance away from males that engage in self-harm without suicidal intent compared to females that engage in self-harm without suicidal intent, as can be seen in Figure 1.

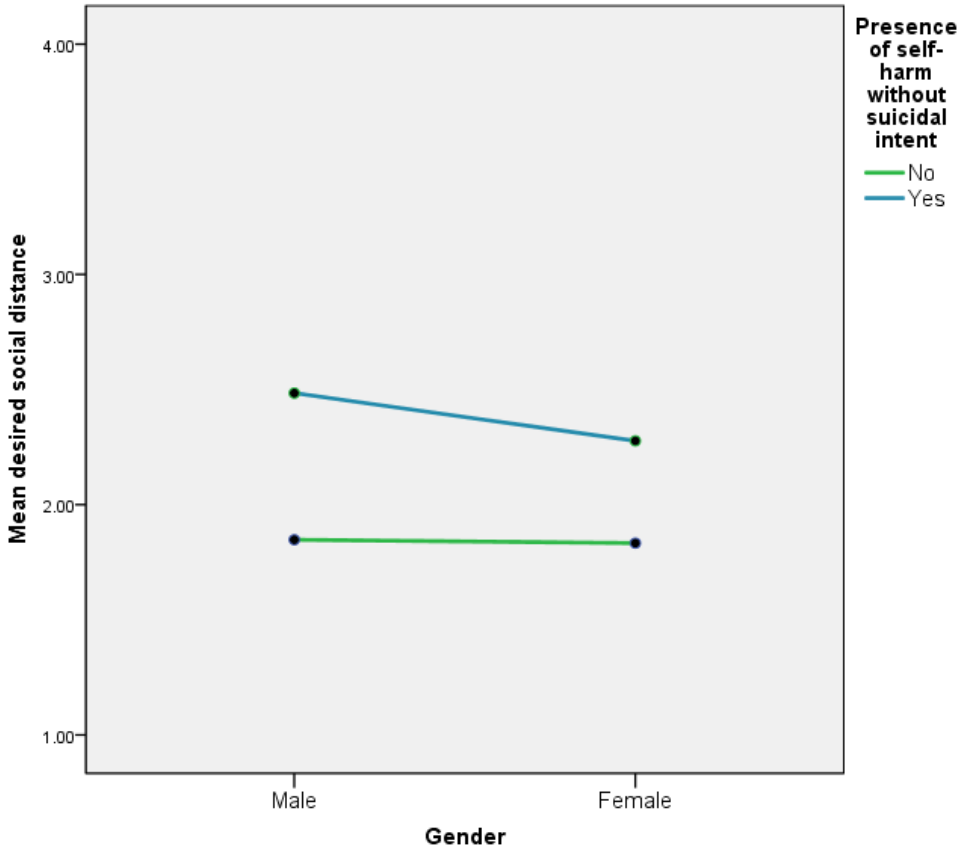

Figure 1. Profile plot of mean desired social distance, dependant on gender and presence of self-harm without suicidal intent.

Testing hypothesis 2

A 2x2 repeated measures analysis of variance (ANOVA) was ran to test the hypothesis that participants will perceive individuals who engage in self-harm without suicidal intent as more dangerous, in comparison to individuals who do not have a history of self-harm. In addition to this, it was questioned whether the gender of the individual depicted had an influence on the perception of dangerousness and whether there was an interaction between gender and presence of self-harm without suicidal intent.

Table 2

Participant's (N = 109) perceived dangerousness, dependant on presence of self-harm without suicidal intent (Means and SD)

Gender of individual depicted	Presence of self-harm without suicidal intent	Mean	Std. Deviation
Male	No	1.56	.60
Male	Yes	1.79	.59
Female	No	1.55	.54
Female	Yes	1.59	.53

The repeated measures ANOVA indicated a statistically significant effect of presence of self-harm, $F(1,108) = 13.60$, $p < .001$, $d = .50$, suggesting that the participants perceived individuals that engage in self-harm without suicidal intent as more likely to cause physical harm to another person than an individual that has never engaged in self-harm. There was also a statistically significant effect of gender, $F(1,108) = 8.17$, $p = .005$, $d = .39$, with participants perceiving males as more dangerous than females. The repeated measures ANOVA indicated a statistically significant main effect between gender and presence of self-harm without suicidal intent, $F(1, 108) = 6.34$, $p =$

.013, *d* = .34. Males that engaged in self-harm without suicidal intent were considered by participants to be significantly more likely to inflict harm to another person than females that engage in self-harm without suicidal intent, as can be seen in Figure 2.

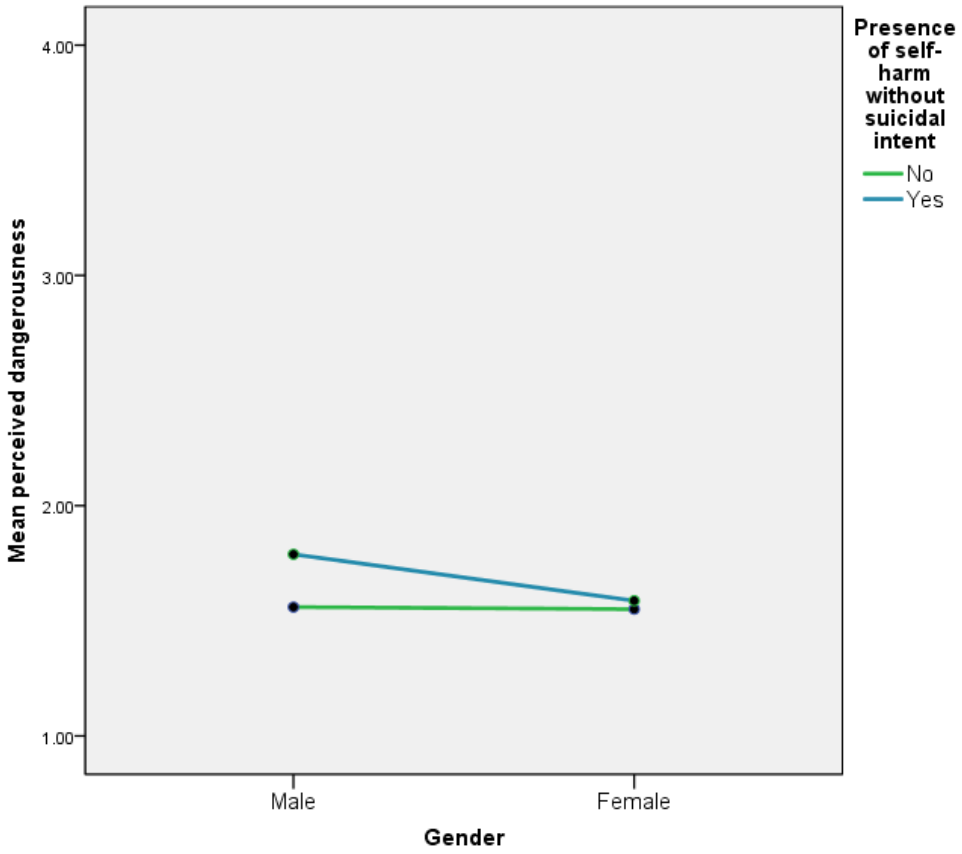

Figure 2. Profile plot of mean perceived dangerousness, dependant on gender and presence of self-harm without suicidal intent.

A bivariate correlational analysis was ran to assess the relationship between social distance and perceived dangerousness. A Pearson's correlation analysis demonstrated a moderate positive correlation between desired social distance and perceived dangerousness, which was statistically significant (r = .36, p = < .001).

Testing hypothesis 3

An independent samples t-test was ran to test the hypothesis that female participants will report more positive attitudes towards individuals that engage in self-harm without suicidal intent, in comparison to male participants, through reduced desired social distance and reduced perceived dangerousness. The results showed that desired social distance was statistically significantly higher for males (M = 2.57, SD = .72) than for females (M = 2.24, SD = .68), $t(107) = 2.47$, p = .015, d = .48. Levene's test indicated equal variances (F = .014, p = .906). Increased levels of perceived dangerousness were reported by males (M = 1.76, SD = .48) than for females (M = 1.63, SD = .49), however, this was not statistically significant, $t(107) = 1.33$, p = .186, d = .26. Levene's test indicated equal variances (F = .284, p = .595).

Testing hypothesis 4

A paired sample t-test was ran to test the hypothesis that participants will have more negative attitudes towards individuals that display suicidal intent, in comparison to individuals who self-harm without suicidal intent, through increased social distance and increased perceived dangerousness.

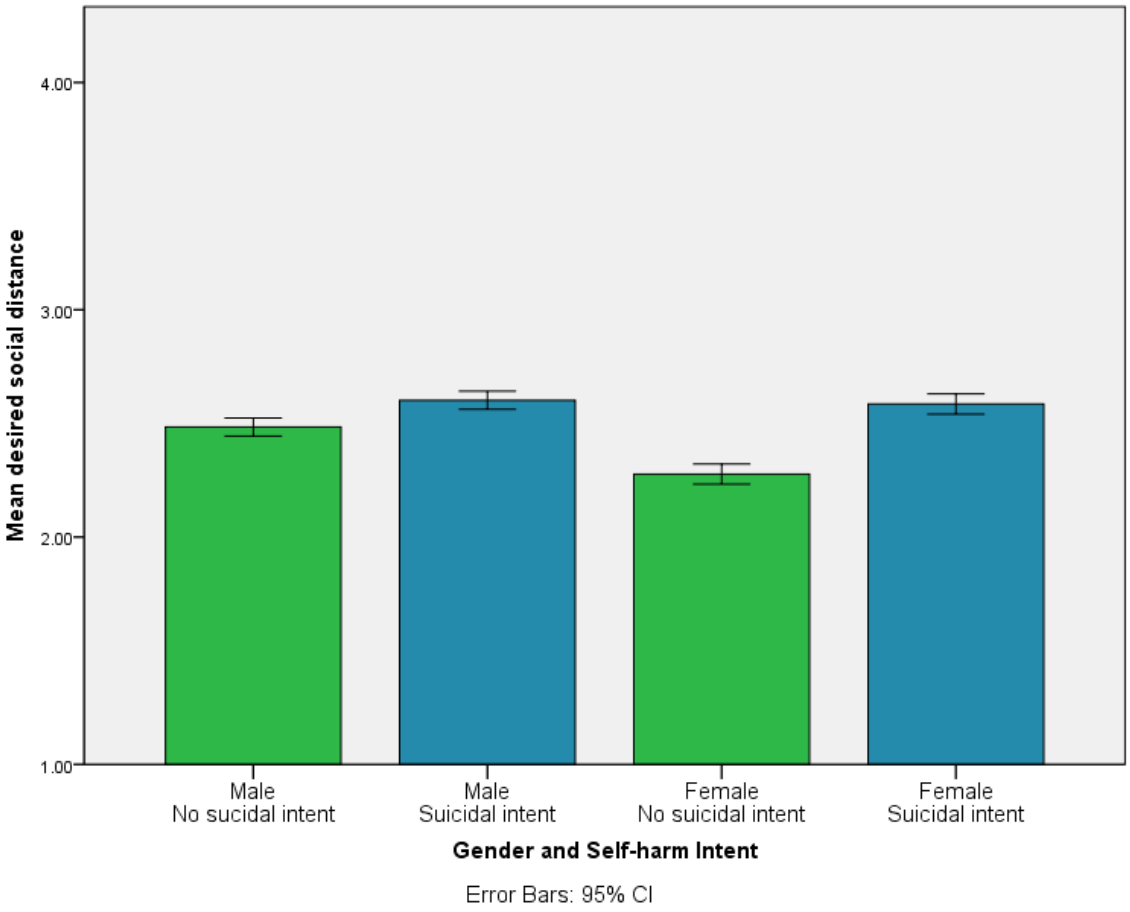

Figure 3. Bar chart of mean desired social distance, dependant on gender and self-harm intent.

As demonstrated in Figure 3, the paired samples t-test indicated that the participants statistically significantly desired a greater social distance from males that self-harmed with suicidal intent (M = 2.60, SD = .85) compared with males that self-harmed without suicidal intent (M = 2.48, SD = .75), $t(108) = 2.94$, $p = .004$, $d = .57$, and females that self-harmed with suicidal intent (M = 2.59, SD = .82) compared to those that self-harmed without suicidal intent (M = 2.28, SD = .72), $t(108) = 6.84$, $p < .001$, $d = 1.31$.

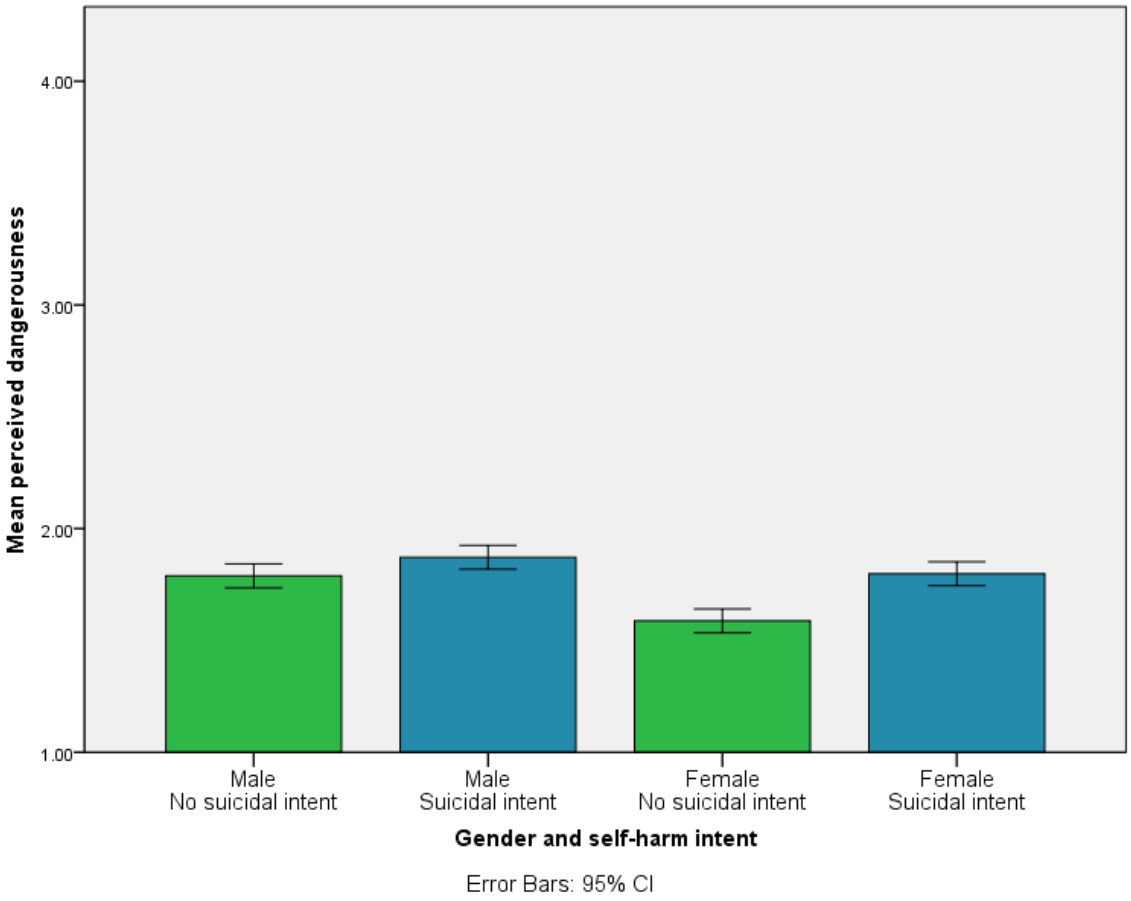

Figure 4. Bar chart of mean perceived dangerousness, dependant on gender and self-harm intent.

As demonstrated in Figure 4, the paired samples t-test indicated that the participants statistically significantly perceived increased levels of dangerousness in females that self-harmed with suicidal intent (M = 1.80, SD = .65), compared to those that engaged in self-harm without suicidal intent (M = 1.59, SD = .53), $t(108) = 3.92$, $p < .001$, d = .75. However, although there was increased perceived danger, the results were not statistically significant for perceptions of heightened danger in males that self-harm with suicidal intent (M = 1.87, SD = .67), compared with those that self-harm without suicidal intent (M = 1.79, SD = .59), $t(108) = 1.531$, p = .13, d = .29.

Exploratory analysis

A paired sample t-test was ran to explore the effects that feelings of ambivalence, regarding the desired outcome of self-harm, had on attitudes of the general public, through desired social distance and perceived dangerousness. The vignettes depicting ambivalent individuals were paired with vignettes depicting suicidal intent or no suicidal intent for both genders.

Table 3

Participant's (N = 109) desired social distance, dependant on suicidal intent (Means and SD)

Gender of Individual depicted	Suicidal intent	Mean	Std. Deviation
Male	No	2.48	.75
Male	Ambivalent	2.62	.81
Male	Yes	2.60	.85
Female	No	2.28	.72
Female	Ambivalent	2.36	.76
Female	Yes	2.59	.82

The paired samples t-test indicated that the participants statistically significantly desired a greater social distance from males who self-harmed with ambivalent intentions compared with males who self-harmed without suicidal intent, $t(108) = 3.37$, $p = .001$, $d = .65$. There was no statistically significant difference between the desired social distance from males that self-harmed with ambivalent intentions and those that self-harmed with suicidal intent, $t(108) = .57$, $p = .572$ $d = .10$. Regarding attitudes towards varying levels of self-harm intent among females, the participants desired an increased social distance from females who self-harmed with ambivalent purposes compared with females who displayed no suicidal intent, however, this was not statistically significant, $t(108) = 1.90$, $p = .060$, $d = .37$. A statistically significant difference was identified between females self-harming with ambivalent motivations compared with females that self-harmed with an intent to end their life, $t(108) = 4.89$, $p < .001$, $d = .94$, with participants indicating that they would desire less social contact with a female displaying suicidal intent.

Table 4

Participant's (N = 109) perceived dangerousness, dependant on suicidal intent (Means and SD)

Gender of Individual depicted	Suicidal intent	Mean	Std. Deviation
Male	No	1.79	.59
Male	Ambivalent	1.96	.67
Male	Yes	1.87	.67
Female	No	1.59	.53
Female	Ambivalent	1.79	.61
Female	Yes	1.80	.65

The paired samples t-test indicated that the participants statistically significantly perceived males who were ambivalent with their intentions to be more likely to inflict harm onto another person than males that had not displayed suicidal intent, $t(108) = 3.26$, $p = .001$, $d = .62$. It was also perceived that male individuals who self-harmed with ambivalence were more likely to cause harm to someone else than those who indicated a clear intent to end their life, $t(108) = 1.85$, $p = .068$, $d = .36$, however, the difference was not statistically significant. The participants statistically significantly perceived females who were ambivalent with their intentions to be more likely to inflict harm to another person than females that displayed no suicidal intent, $t(108) = 4.32$, $p < .001$, $d = .83$. However, no statistically significant difference of perceived dangerousness was identified between females with ambivalent motivations and females with suicidal intentions, $t(108) = .18$, $p = .858$, $d = .03$.

Due to the exploratory nature of this research, no Bonferroni correction was applied. However, as a consequence of the numerous tests that were ran on the data set, it is acknowldged that there is an increased liklihood of a type-1 error.

Discussion

This study was designed to address the research gap regarding the general public's attitudes towards individuals who self-harm, with reference to desired social distance and perceived dangerousness.

Hypothesis 1

A very large effect size (Sawilowsky, 2009) was identified regarding social distance and presence of self-harm without suicidal intent. It was found that participants desired significantly increased levels of social distance from individuals who engaged in self-harm without suicidal intent, in comparison to individuals who did not self-harm, thus resulting in the first hypothesis being accepted. There was a medium effect sized interaction (Cohen, 1988) between an individual's gender and whether they self-harmed without suicidal intent. Males who self-harmed without suicidal intent were responded to with increased desired social distance in comparison to females.

Hypothesis 2

Results indicated a medium effect size (Cohen, 1988) regarding participants who engaged in self-harm without suicidal intent being perceived as significantly more likely to inflict harm onto another person than individuals who do not engage in self harm, thus resulting in the second hypothesis being accepted. There was a small effect sized (Cohen, 1988) interaction between gender and presence of self-harm without suicidal intent, which was significant. The participants perceived males who self-harmed without suicidal intent to be more likely to inflict harm onto another person than females who self-harmed without suicidal intent.

Hypothesis 3

A small effect size (Cohen, 1988) was identified between the gender of the participant and desired social distance towards individuals who self-harm without suicidal intent. It was found that females indicated a significantly reduced level of social distance, in comparison to males. However, no significant effect was identified regarding the participant's gender and perceived dangerousness of individuals who self-harmed without suicidal intent. Thus, the third hypothesis, that female participants will report more positive attitudes towards individuals who engage in self-harm without suicidal intent, in comparison to male participants, through reduced desired social distance and reduced perceived dangerousness, was rejected.

Hypothesis 4

A very large effect size (Sawilowsky, 2009) for female self-harmers and a medium effect size (Cohen, 1988) for male self-harmers was identified for participants desired social distance, dependant on whether self-harm was undertaken with or without suicidal intent. It was found that participants desired a significantly increased level of social distance from individuals who self-harm with suicidal intent, compared to those who self-harm without suicidal intent. A medium effect size (Cohen, 1988) was identified for female self-harmers regarding participant's perceived dangerousness dependant on whether the self-harm was undertaken with or without suicidal intentions. It was found that the participants significantly perceived females who self-harm with suicidal intentions to be more dangerous than females who self-harm without suicidal intent. However, a significant difference was not found concerning participants perceptions of dangerousness in males who self-harm with and without suicidal intent. Thus, the fourth hypothesis, that participants will have more negative attitudes towards individuals that display suicidal intent, in comparison to individuals that self-harm without suicidal intent,

through increased social distance and heightened perceived dangerousness, was rejected.

Exploratory research

The exploratory research into public attitudes towards ambivalent motivations elicited interesting results. Regarding desired social distance, a large effect size (Cohen, 1988) was identified between females who self-harm with ambivalence and females who self-harm with suicidal intent. It was found that the participants desired a significantly increased level of social distance from females who self-harm with suicidal intent compared with females that self-harm with ambivalence. However, the same finding was not identified between males who self-harm with ambivalent intentions and males who self-harm with suicidal intentions, which yielded a statistically insignificant difference. In contrast, a medium effect size (Cohen, 1988) was identified between males who self-harm with ambivalence and males who self-harm without suicidal intentions. It was found that the participants desired a significantly increased social distance from males who self-harmed with ambivalence compared with males who self-harmed without suicidal intent. However, the same finding was not identified between females who self-harm with ambivalent intentions and females who self-harm without suicidal intentions, which yielded a statistically insignificant difference. There was a significant difference in perceived dangerousness, with participants perceiving individuals who self-harm with ambivalent motivations as more dangerous than non-suicidal motivations for both males and females, with a medium and large effect size respectively (Cohen, 1988). However, no significant difference was found for perceived dangerousness between ambivalent and suicidal motivations for either gender.

Desired social distance from individuals who self-harm

Findings from this research suggest that members of the general public desire to distance themselves from individuals who engage in self-harming behaviour, thus providing evidence to the claim that people prefer to distance themselves from stigmatised individuals (Aviram et al., 2006). It also mirrors findings from A&E settings, where staff were reported to be inclined to distance themselves from individuals presenting with self-harm (Vivekananda, 2000). Newton & Bale (2012) described that most of their general public sample perceived self-harm to be a mental illness, which is also responded to with increased social distance (Angermeyer et al., 2004; Hinshaw, 2005; Link et al., 1999; Law et al., 2009). This could indicate that the participants in this study also perceived self-harm as a mental health disorder (Newton & Bale; 2012) and therefore, reacted to self-harming individuals in the same manner as previous research indicates society does to individuals with a mental health diagnosis.

Similar to findings from healthcare settings (Creed & Pfeffer, 1981; de Rose & Page, 2009), the results identified in this study suggest that females who self-harm are perceived more positively than males who self-harm, as they were responded to with decreased levels of desired social distance. Self-harm is often conceptualised as a mainly female behaviour (Clarke & Whittaker, 1998; Schmidtke et al., 2004). It is frequently reported that more females engage in self-harm than males (De Leo & Heller, 2004; Hawton & Goldacre, 1982; Huang et al., 2017; Laye-Gindhu & Schonert-Reichl, 2005; Rodham et al., 2004; Ross & Heath, 2002, Scoliers et al., 2009), potentially, due to females more commonly receiving medical attention (Taylor, 2003; Mechanic, 1978), arguably as a consequence of male help-seeking avoidance (Möller-Leimkühler, 2002; Nam et al., 2010 Robertson, 1995). The common belief that females are more likely to engage in self-harm may consequentially have resulted in the behaviour being less stigmatised for this gender and subsequently, influenced participant responses.

Reflecting findings in healthcare (Anderson et al., 2000; Ghodse, 1978; Law et al., 2009; Mackay & Barrowclough, 2005; Samuelsson et al., 1997; Suominen et al., 2007) and prison (Ireland & Quinn, 2007) settings, it was identified in this study that female members of the general public desired decreased social distance, in comparison to males. Contact theory (Pettigrew, 1998) suggests that because females are more likely to experience a mental health disorder than males, they are more familiar and therefore more tolerant of others that are suffering with similar problems. Self-harm is often reported to have higher prevalence rates in females (De Leo & Heller, 2004; Hawton & Goldacre, 1982; Huang et al., 2017; Laye-Gindhu & Schonert-Reichl, 2005; Rodham et al., 2004; Ross & Heath, 2002, Scoliers et al., 2009), suggesting that females will display more positive attitudes to others that display self-harming behaviours. This study demonstrated that females displayed more positive attitudes than males, via reduced social distance, providing evidence to support contact theory (Pettigrew, 1998), in relation to self-harming behaviours. In addition to this, according to modified contact theory (Holzinger et al., 2011), females have more knowledge regarding mental illness, therefore, potentially possess more positive attitudes and sympathetic behaviours towards individuals that are experiencing emotional distress. Based on the assumption that self-harm is perceived as a mental health disorder by members of the public (Newton & Bale, 2012), this current finding also provides support for modified contact theory (Holzinger et al., 2011).

Perceived dangerousness of individuals who self-harm

Findings identified in this research suggest that individuals who self-harm, are believed to be more likely to inflict physical harm onto another person, than a person who does not have a history of self-harm. This heightened level of perceived dangerousness towards people that self-harm is similar to research involving attitudes towards individuals diagnosed with a mental health disorder (Angermeyer &

Matschinger, 1996; 2006; Corrigan et al., 2000; Link et al., 1987; 1999; Pescosolido et al., 1999). This supports findings reported by Newton & Bale (2012), that the majority of their general public sample believed self-harm was a mental illness. The findings also suggest that males who self-harm are perceived to be more dangerous than females who self-harm, potentially due to women being perceived to be more likely to internalise emotions and act on themselves, whereas, men are deemed more likely to act on others (McAllister, 2003).

The relationship between perceived dangerousness and desired social distance

When all the data was combined, regardless of presence of self-harm and irrelevant of intent, a moderate positive correlation between desired social distance and perceived dangerousness was identified, which supports Corregan et al.'s (2003) attribution model of public discrimination. This indicates that heightened levels of fear, directed towards an individual who self-harms, leads to an increased desire for social avoidance. However, through analysing the relationship between desired social distance and perceived dangerousness, dependant on the gender of the participant and also the reported self-harm intent, evidence was identified that questions this positive correlation in relation to self-harming behaviour.

Male participants did not perceive individuals who self-harm without suicidal intent to be significantly more dangerous than female participants, yet, in comparison, desired a significantly increased level of social distance. Also, the participants did not perceive males who self-harmed with suicidal intent to be more dangerous than males who self-harmed without suicidal intent, however, in comparison, desired a significantly increased level of social distance. In addition to this, participants reported almost identical mean perceptions of dangerousness between females who were ambivalent with their intentions of self-harm and those that self-harmed with suicidal intent. Based on this, Corrigan et al.'s (2003) model would predict that desired social distance between

the two self-harming intentions would also be similar. Yet, the results demonstrated that participants desired a significantly increased level of social distance towards females that self-harmed with suicidal intent compared to those who were ambiguous. This contradictory evidence may be due to the participants having difficulty conceptualising ambivalent motivations to self-harm. However, if this explanation was accurate, a similar lack of correlation would be expected regarding ambivalent motivations in males, which was not identified. Male ambivalence supported Corrigan et al.'s (2003) model, with participants not perceiving males who self-harm with ambivalent motivations as more dangerous, nor, desired increased social distance in comparison to males who self-harmed with suicidal intent.

These findings provide evidence against the notion that members of the general public desire increased social distance from individuals who self-harm because they perceive them to be dangerous. If Corrigan et al.'s (2003) model is not applicable to attitudes towards individuals who self-harm, then there may be an alternative explanation for the increased levels of desired social distance. This could be explained through social categorisation theory (Turner, 1987). Members of the general public may perceive individuals who self-harm as the 'out-group' and people who conform to societal norms as the 'in-group'. This 'in-group' favouritism and 'out-group' stigmatisation may lead to rejection and heightened desired social distance towards the individuals who engage in self-harm. Additionally, people who self-harm may be responded to with social avoidance due to the perceptions that they are attention-seeking and manipulative; a view that has been identified in numerous studies involving healthcare professionals (Anderson et al., 2005; Feldman, 1988; Friedman et al., 2006; Law et al., 2009; Smith, 2002; Walsh & Rosen, 1988).

Ross and Goldner (2009) reported that some healthcare professionals perceived individuals who presented to A&E following non-fatal suicide attempts to be a waste of resources. Sandy and Shaw (2012) comment that individuals who have self-harmed can

be perceived as time-wasters. Members of the public may potentially view people who self-harm with suicidal intent in a similar manner, through unwillingness to use their social resources, such as time and effort, on somebody they perceive as likely to end their own life. An additional explanation may be that individuals who experience a non-fatal attempt at suicide can be considered as not having genuine suicidal intentions (Stengel et al., 1958). This perceived lack of sincerity may be construed as manipulative or attention-seeking behaviour, which consequently may lead to a desire for social avoidance. Furthermore, people who have lost a close friend or family member to suicide are highly stigmatised (Cvinar, 2005; Harwood et al., 2002). Members of the public may distance themselves from individuals who are suicidal to avoid this potential stigma. These possibilities have the scope to explain why members of the public desired a significantly increased distance from individuals who self-harmed with suicidal intent compared to those that self-harmed without suicidal intent or ambivalent intent, yet did not necessarily perceive them as more dangerous.

Identified self-harm prevalence rate

Of the 509 students that reported engaging in self-harm in Hawton et al.'s (2002) study, the data of 111 participants was excluded due to the disclosed self-harm not meeting the study criteria, substantiating that public perceptions of what constitutes as self-harm does not always reflect definitions proposed by researchers (Straiton et al.,2013). The large prevalence rate of 46% identified in this current study may consist of self-harming acts that are not generally considered within the literature. The participants were provided with a brief NICE (2004) definition of self-harm, *'self-poisoning or self-injury, irrespective of the apparent purpose of the act'* (p. 16). However, this may have been interpreted as including behaviours such as smoking, consumption of alcohol and tattooing, which many researchers consider socially sanctioned and indirectly harmful behaviour (Edmondson et al., 2016; McAllister, 2003), therefore not defined as

self-harming, although this view is contested (Rayner & Warner, 2003). Self-harm may also have been conceptualised as behaviours that are commonly reported within the general population, such as biting lips and finger nails or picking at scabs (Nock, 2010). Thus, boundaries perceived for this research may not reflect what members of the public participant sample constituted as self-harming behaviour. During recruitment for this study, potential participants were informed regarding the nature of the research and that individuals who had previously self-harmed were not able to participate. Despite this, 46% of participants who attempted to complete the survey were unable to, following disclosing that they had previously self-harmed before the survey began. Therefore, it is plausible that many individuals who had previously self-harmed did not attempt to participate in this study, suggesting that the prevalence rates are likely to be more than the 46% identified. A potential explanation for this extremely high, yet potentially underexaggerated, prevalence rate of self-harm, can be proposed by the association between internet use and self-harm (Daine et al., 2013; Dunlop et al., 2011; Lam et al., 2009; Messias et al., 2011; Mitchell & Ybarra., 2007) as a large proportion of the sample was sourced through the online community of ‘www.reddit.com’.

Implications

Self-harm is associated with having negative consequences on interpersonal relationships (Favazza, 1989). Decreased amounts of social support or being socially isolated have frequently been reported to be associated with self-harming behaviours (Bebbington et al., 2010; Endo et al., 2017; Groholt et al., 2000; Hall-Lande et al., 2007; Huang et al., 2017; O’Donnell et al., 2003). The results from this study demonstrate that individuals who are known to engage in self-harm, regardless of the level of intent, are stigmatised and likely to find difficulty in creating new social relationships with members of the public, due to the increased desire for social distance towards them. This could be particularly problematic if the individual already lacks social support or is socially isolated.

The inability to connect with others may escalate the risk of repeated self-harm acts (Hawton & James, 2005; Levi-Belz et al., 2013) and increase the likelihood of suicidal ideations (Baldry & Winkel, 2003; Bearman & Moody, 2004; Prinstein et al., 2000). The reciprocal relationship between behaviours of rejection from members of the public and further self-harming acts from the individual may result in a negative cycle of self-harm and rejection, with contributions from both sides.

Alongside family, friends are documented as the main source of support for individuals who self-harm (Fortune et al., 2008). Having secure social networks and stable relationships are influential in preventing individuals from self-harming and repeating acts (Fortune et al., 2008). Adverse events in an individual's life, along with recurring negative thoughts and emotions, can be moderated by having social support (Kaufman et al., 2004). Co-rumination (Rose, 2002) with a friend decreases the risk of engaging in self-harm (Latina et al., 2015), stressing the importance of interpersonal relationships in the moderation of negative cognition and emotions (Tompkins et al., 2011), potentially identifying new coping strategies (Latina et al., 2015), which reduces the need for maladaptive coping strategies, such as self-harm.

Limitations/Areas for future research

The current study did not ascertain whether members of the public would be willing to talk about self-harm or listen to the person depicted in the vignette describe their self-harm experiences, which may have provided greater insight regarding the willingness to help and provide support. Thus, this is an area where future research should be directed. Furthermore, due to the quantitative nature of this self-report study, explanations behind participants' answers were unable to be obtained, which would have been useful, particularly regarding the differing responses to ambivalent motivations dependant on the individuals' gender. Therefore, a qualitative methodological approach may provide a more in-depth insight in a manner that is not possible in quantitative

research. Additionally, future research may also benefit from utilising an evidenced structured instrument to assess public attitudes towards self-harm, such as the Self-Harm Antipathy Scale developed by Patterson et al. (2007).

This current research did not analyse whether the age of the participant influenced responses. Previous research into healthcare professionals has yielded conflicting results regarding the age of the staff and subsequent attitudes towards patients who had self-harmed. Numerous studies have reported that older nurses had more positive and supportive attitudes (Anderson, 1997; McCann et al., 2006; McLaughlin, 1994; Suominen et al., 2007), however, more recently, it has been documented that the age of A&E nurses was not a factor that influenced attitudes towards individuals who have engaged in self-harming behaviour (Gibb et al., 2010). This is yet to be explored within public attitudes towards self-harm and is a feature that future research should encompass. Finally, due to the nature of online recruitment, it is impossible to conclusively determine the authenticity of the reported ages and genders of the participants. The BPS ethical guidelines state that internet mediated research, comprising of sensitive themes. must only allow individuals that are over the age of 16 years old to participate (British Psychological Society, 2017). As previously mentioned, typical onset for self-harming behaviours is around age 15 (Mars et al., 2014, Nixon et al., 2008; Van der Kolk et al., 1991). Based on this, future research should be directed towards attaining the attitudes of adolescents towards self-harming behaviours, through alternative methodological procedures. As these individuals are likely to have encountered school peers who self-harm, their attitudes and behaviours are likely to influence future episodes and help-seeking behaviours. This information could potentially inform school-based interventions designed to educate and destigmatise.

Practical applications

Education can have a positive impact on healthcare professional's attitudes (Cleaver, 2014; Karman et al, 2015; Saunders et al., 2012). It was identified by Timson et al. (2012) that as knowledge increased, negative attitudes decreased. Following the release of guidelines published by the National Collaborating Centre for Mental Health (NICE, 2004) there is some evidence to suggest an increase in the quality of attitudes and behaviours displayed by healthcare professionals towards individuals who self-harm (Conlon & O'Tuathail, 2012; McCarthy & Gijbels, 2010; O'Donovan & Gijbels, 2006; Patterson et al., 2007; Thompson et al., 2008; Wilstrand et al., 2007). Based on the apparent effectiveness of these guidelines and education within healthcare on self-harm, it may be beneficial to utilise public awareness campaigns aimed at correcting the common misconception that people who engage in self-harming behaviours are attention-seeking and manipulative (Anderson et al., 2005; Friedman et al., 2006; Law et al., 2009). This will potentially, destigmatise self-harm and promote the idea that members of the public can make a considerable difference, in the form of helping behaviours. Destigmatisation of the behaviour may encourage self-harming individuals to discuss personal problems and experiences, in addition to making members of the public feel at ease when listening, as increased familiarity may equip them with confidence and supportive advice. Corrigan et al. (2003) suggest that familiarity is associated with experience in addition to knowledge of causes, motivations and specific behaviours. More familiarity is linked with reduced stigma, social avoidance, perceived dangerousness (Angermeyer et al., 2004; Penn & Couture, 2002), heightened sympathy and an increased desire to help (Law et al., 2009). Cohen & Wills (1985) regard social support as a 'stress buffer' for individuals experiencing periods of adversity and argue that a supportive social network is a protective factor. Based on this, it is reasonable to assume that public engagement and minimal social distance may act as a stress buffer

and prevent individuals from feeling the desire to inflict harm to themselves, regardless of intent.

Conclusion

This study aimed to identify public attitudes towards individuals who self-harm, through desired social distance and perceived dangerousness. The evidence provided suggests that people who engage in self-harm are perceived more negatively by members of the general public, than individuals who do not have a history of self-harm. This reflects similar findings that have been identified within healthcare settings. Regarding desired social distance, numerous factors were recognised to further adversely affect attitudes towards individuals who engage in self-harming behaviour. These include, the gender of the lay-person, the gender of the person who engages in self-harm and the level of intent displayed when engaging in self-harm. Male participants reported more negative perceptions of people who self-harm, both genders displayed more negative attitudes towards male self-harmers and individuals that indicated suicidal intent received the most negative responses from the participants. Overall, perceptions of dangerousness were positively correlated with desired social distance. However, gender and intent-specific attitudes contributed conflicting evidence towards this relationship; suggesting that increased levels of social distance from individuals who self-harm may not be due to perceived dangerousness, rather an alternative factor. These alternative motivations for increased social distance may be attributed to the perception that a person who self-harms is attention-seeking and manipulative, an unwillingness to use social resources, or, a desire to avoid the social stigma involved with being associated with somebody who has ended their own life. This research stresses the importance for social engagement and support for individuals who self-harm, emphasising the need for public education regarding self-harming behaviours. Cultural conceptions of a phenomenon can have dramatic consequences for help-seeking and overall outcomes (Link et al., 1999). Little is known about public beliefs and behaviours towards individuals who self-harm. This

study provides some evidence to address this gap and in doing so, has highlighted directions for future research to be aimed. Due to the explorative nature of this study, the findings identified should be interpreted tentatively. Further research is required in order to achieve a more comprehensive understanding of public attitudes towards individuals who self-harm.

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Appendices

Appendix A

Vignettes used in the study

1. Josh is a British male with a college education. Until recently, Josh was content with his life, however he now occasionally experiences low moods in addition to periods of anxiety. Josh tends to experience these dips in his emotional state when he is alone. Josh is not suicidal and does not self-harm. He has numerous friends and this recent fluctuation in his mood state has had a negative effect on his social relationships.

2. Tom is a British male with a college education. Frequently, Tom experiences extremely low moods and feelings of worthlessness. He is not suicidal, however often acts upon impulses to self-harm during his regular periods of low emotion. When Tom self-harms he often causes himself significant physical injury, which results in medical attention. His low moods and feelings of worthlessness have negatively affected his social relationships.

3. Stuart is a British male with a college education. At times, he experiences unescapable low feelings and consequently resorts to self-harming. When Stuart feels the desire to inflict physical injury to himself, he is ambivalent regarding the consequences. On one occasion, he had to receive medical attention due to the severity of his injuries. Stuart's social relationships have been adversely affected due to his current emotional state.

4. Harry is a British male with a college education. He has begun to develop feelings of low self-esteem and confidence, which affected his day-to-day living. Harry is

suicidal, he does not speak to anyone about his emotions and has turned to self-harm in attempts to end his life. On several occasions, he has put himself in life-threatening conditions. As a result of his present emotional state, his social relationships have been negatively affected.

5. Rachael is a British Female with a college education. She considers herself to have a very stressful life, which frequently results in her having periods of feeling worried or sad. She tends to struggle most during the evenings when she is at home by herself. Rachael is not suicidal and does not self-harm. Her relationships with her friends have suffered as a consequence of her fluctuating emotional states.

6. Jenny is a British female with a college education. She considers herself to be in a very dark place, which is consumed low emotions and thoughts of self-harm. Jenny is not suicidal, however often acts upon the desire to self-harm when she is experiencing periods of low emotion. Current circumstances have negatively affected her social relationships and recently she has not been in contact with her friends.

7. Laura is a British female with a college education. She has recently begun experiencing low self-esteem, feelings of worthlessness and subsequently the desire to self-harm, which she acts upon. During these periods where Laura is drawn to self-harm, she is ambivalent about what she wants the consequences to be. Laura has not recently been in contact with her social sphere, which has had negative effects on her social relationships

8. Sarah is a British female with a college education. She experiences continuous low emotions and finds it impossible to picture a positive future and an end to her distress. Sarah is suicidal and has used several methods of self-harm in attempts to end her life. However, to-date Sarah has only experienced non-fatal attempts at suicide. Sarah's low emotions have influenced her social interactions and have negatively affected her social relationships.

Appendix B

Questions used in the study

In this section, you are required to select ONE answer per scenario.

Based on the above vignette, how willing would you be to…

A) Live next door to the person depicted in the vignette

1: Definitely

2: Likely

3: Unlikely

4: Definitely not

B) Go out for an evening meal with the person depicted in the vignette

1: Definitely

2: Likely

3: Unlikely

4: Definitely not

C) Befriend the person depicted in the vignette

1: Definitely

2: Likely

3: Unlikely

4: Definitely not

D) Recommend the person depicted in the vignette for a job at your workplace

1: Definitely

2: Likely

3: Unlikely

4: Definitely not

E) Have the person depicted in the vignette marry into your family

1: Definitely

2: Likely

3: Unlikely

4: Definitely not

In this section, you are required to select one answer.

Based on the above vignette, in your opinion, how likely is it that [Name] would intentionally cause physical harm to another person?

1: Very likely

2: Likely

3: Unlikely

4: Very unlikely