



The University of
Nottingham

UNITED KINGDOM • CHINA • MALAYSIA

Garbett, Kirsty and Harcourt, Diana and Buchanan, Heather (2017) Using online blogs to explore positive outcomes after burn injuries. *Journal of Health Psychology*, 22 (13). pp. 1755-1766. ISSN 1359-1053

Access from the University of Nottingham repository:

<http://eprints.nottingham.ac.uk/49755/1/Positive%20outcomes%20following%20burns%20JHP%20resubmission%20KG.pdf>

Copyright and reuse:

The Nottingham ePrints service makes this work by researchers of the University of Nottingham available open access under the following conditions.

This article is made available under the University of Nottingham End User licence and may be reused according to the conditions of the licence. For more details see:
http://eprints.nottingham.ac.uk/end_user_agreement.pdf

A note on versions:

The version presented here may differ from the published version or from the version of record. If you wish to cite this item you are advised to consult the publisher's version. Please see the repository url above for details on accessing the published version and note that access may require a subscription.

For more information, please contact eprints@nottingham.ac.uk



University of the
West of England

BRISTOL

Garbett, K., Harcourt, D. and Buchanan, H. (2016) Using online blogs to explore positive outcomes after burn injuries. *Journal of Health Psychology*. ISSN 13591053 Available from: <http://eprints.uwe.ac.uk/33444>

We recommend you cite the published version.

The publisher's URL is:

<http://dx.doi.org/10.1177/1359105316638549>

Refereed: Yes

This is the author's accepted manuscript. The final version is available at <http://dx.doi.org/10.1177/1359105316638549>.

Disclaimer

UWE has obtained warranties from all depositors as to their title in the material deposited and as to their right to deposit such material.

UWE makes no representation or warranties of commercial utility, title, or fitness for a particular purpose or any other warranty, express or implied in respect of any material deposited.

UWE makes no representation that the use of the materials will not infringe any patent, copyright, trademark or other property or proprietary rights.

UWE accepts no liability for any infringement of intellectual property rights in any material deposited but will remove such material from public view pending investigation in the event of an allegation of any such infringement.

PLEASE SCROLL DOWN FOR TEXT.

Title: Using online blogs to explore positive outcomes after burn injuries

Authors: Kirsty Garbett¹, Diana Harcourt^{1,2}, Heather Buchanan³

Affiliations:

¹ Centre for Appearance Research, Faculty of Health and Applied Sciences, University of the West of England, Bristol

² Children's Burns Research Centre, Bristol

³ School of Medicine, Faculty of Medicine & Health Sciences, University of Nottingham

Contact details: Prof. Diana Harcourt, Centre for Appearance Research, Faculty of Health and Applied Sciences. University of the West of England, Frenchay Campus, Bristol, BS16 1QY, UK;

Diana2.Harcourt@uwe.ac.uk; phone: +441173282192.

ABSTRACT

This study uses blog analysis, a new and novel technique, to explore the positive outcomes experienced by burn survivors. The study examined ten burn survivor blogs to offer a unique, longitudinal and international insight into burn survivor recovery. Using thematic analysis, three themes emerged; shift in self-perception, enhanced relationships and a change in life outlook. Many of these themes contained stories and experiences unique to a traumatic burn injury, suggesting that standardised trauma scales are not effectively measuring the impact of a burn in this population. Reflections on blog analysis are discussed, along with a recommendation that health researchers utilise the vast amount of data available from online blogs.

INTRODUCTION

A burn is a common, invasive trauma with long-term physical, emotional and psychological consequences. According to the most recent available statistics, 175,000 people in the UK attend Accident & Emergency with a severe burn each year, with 13,000 of these being admitted to hospital (British Burn Association, 2001). In the US, nearly half a million people each year require emergency medical attention for a burn (Centre for Disease Control and Prevention, 2011). There is a pressing need to understand the psychosocial consequences of survival and rehabilitation following a

burn, as advances in wound care are ensuring more people survive these traumatic experiences (Acton et al., 2007).

Currently, research into the psychosocial consequences of burns has predominantly focused on the adverse negative impact (Corry et al., 2009; Klinge et al., 2009). Whilst some studies report burns survivors having more favourable outcomes than their non-burned peers on measures such as body image, mood and general quality of life (Pope et al., 2007), this is not the same as reporting positive outcomes as a consequence of the burn. Little attention has specifically been given to positive psychosocial consequences, despite them being evident in the qualitative accounts of recovery given by survivors of burns and other traumatic injuries (Lau and van Niekerk, 2011; Linley and Joseph, 2004; Dekel et al., 2012; Pressman and Cohen, 2005). An understanding and identification of positive outcomes would give a more holistic representation of the experiences of people affected by burns (Moi and Gjengedal, 2008; Lau and van Niekerk, 2011) could potentially instil hope in others during rehabilitation and beyond, and has been linked to a reduction in burn patient distress (Linley and Joseph, 2004).

To date, two quantitative studies have examined positive outcomes following a burn injury. Rosenbach and Renneberg's (2008) sample of 148 burn patients reported

positive changes including a greater appreciation of life, an enhancement of relationships and a sense of personal strength, whilst a recent study by Baillie et al. (2014) identified the role of coping and perceived social support as predictors of post traumatic growth (defined as having levels of functioning and well-being greater than those that were evident before the traumatic event took place). The notion of post traumatic growth is particularly important within burns since stories of other patients' positive outcomes could be inspiring for those who are struggling, and it offers a framework for clinicians looking to support their patients after serious burn injuries (Baillie et al 2014). However, a major limitation of these studies is their reliance on the Post-Traumatic Growth Inventory (PTGI) to measure positive outcomes. This 5-factor measure of growth (relating to others, new possibilities, personal strength, spiritual change and appreciation in life) has been criticised for creating a positive response bias (Coyne and Tennen, 2010) and may not provide a comprehensive account of life after a traumatic event, particularly during an on-going experience such as a burn injury and adapting to a change in appearance. Importantly, the PTGI does not enable researchers to capture all the positive aspects that may be evident in any given trauma. For example, women living with HIV/AIDS have been shown to improve their health behaviours (Siegel and Schrimshaw, 2000), something which is not captured by the PTGI. Indeed, the PTGI authors themselves advise each type of trauma to be looked at independently in terms of the positive outcomes which may be present (Tedeschi and Calhoun, 2006).

Although some qualitative studies have looked at positive adjustment to a visible difference in general (Egan et al., 2011), few have specifically explored positive outcomes amongst burn patients, where both a traumatic experience and a visible difference are likely to be present. Zhai et al. (2010) employed phenomenological analysis to assess positive outcomes amongst 10 patients being treated at a burn centre in China. They found four of the five factors described by the PTGI were present, but little support for spiritual growth, which they suggest was due to sociocultural differences in how positive outcomes emerge following trauma. Quantitative studies have also failed to find spirituality as an outcome following a burn (Rosenbach and Renneberg, 2008). However, Lau and van Niekerk (2011) identify spiritual growth within six young survivors' narratives of their experiences of burn injury in South Africa.

This study aims to build on current research by qualitatively exploring the positive outcomes that may be present following a burn injury since previous literature offers limited knowledge into the specific positive aspects that may arise in this growing population. Acknowledging that they can exist, and exploring specifically what they are, is an important step in guiding burn care practice, and may help to challenge assumptions about the ubiquity of negative impacts following burn injuries.

METHOD

Methodological rationale and design

The present study adopts an innovative methodology to obtain a unique, original, and international perspective into the lives of burn survivors via the analysis of online blogs. Blogs are personal diary-type posts published online by an individual on a regular basis. Blog analysis is considered rich, qualitative data giving an archival account of an individual's life (Beer and Burrows, 2007). This longitudinal data is particularly useful in trauma recovery research, due to the day-to-day positive and negative changes evident in this population (Charmaz, 1991). Previous qualitative studies of burns survivors' experiences (Moi and Gjengedal, 2008; Lau and van Niekerk, 2011) are usually limited to a single interview on one occasion, and the authors of these studies have highlighted the need for longitudinal data in this area.

Additionally, using unobtrusive, naturally written discourse allows salient thoughts and opinions to come to the fore, free from any researcher biases present in both interview and questionnaire based studies. Alongside these strengths, there are a number of limitations to using blogs as a source of research data. These are discussed in detail later in this paper, but at this point it is important to acknowledge that blogs are views

and accounts of events as perceived by the bloggers themselves – they do not necessarily reflect all possible views on an issue and those who choose to share their experiences by blogging may differ to people who choose not to do so.

Blog analysis has been advocated by many social science researchers (Hookway, 2008; Wilkinson and Thelwall, 2011) but there is general consensus that they are currently under-utilised (Domingo et al., 2014). Blog analysis has been used successfully within the health arena to explore the experiences of ‘health travellers’ to Turkey (Ozan-Rafferty et al., 2014), feminist approaches to sport (Antunovic and Hardin, 2013) and how blogs that define themselves as challenging beauty ideals are in fact creating and further supporting them (Lynch, 2011). However, we are not aware of any research using blogs in relation to an appearance-altering condition such as a burn. Therefore, since our research explores the viability of this method in appearance-related research we initially conducted a broad scoping exercise of the type, quality and quantity of data available through online blogs. Key words ('burn injury blog', 'burn survivor blog', 'burn scar blog') were entered into popular search engines such as Google and Bing. This proved fruitful in ensuring relevant blogs existed. One interesting finding from this scoping exercise was the identification of several burn survivor blogs conducted via a video link (known as 'vlogs'), so these were incorporated as an additional data source.

Once we had established that relevant data were available, a more structured systematic search was undertaken. 'Blogger' and 'LiveJournal' were searched through Google as they are two of the most popular blogging sites in the world (Nielsen, 2012). Additionally, YouTube, the largest video sharing website in the world (O'Neill, 2012) was used to find vlogs. This structured approach was deemed necessary due to the overwhelming experience of searching for blogs online (Hookway, 2008). Search terms used were 'burn survivor', 'burn injury', 'burn scar' and 'burn victim'. We recognise that the term 'victim' can be contentious and is often espoused by the burns community, but the terms used in this search were chosen on the basis that they were all used in blogs identified in our initial scoping exercise. From our systematic search results, blogs were included for analysis if they were personal and a burn was mentioned in the blog biography or 'About Me' section. Despite the constraints imposed for the blog search, the vast majority of search results were inappropriate for inclusion in the study, for example the blogs were written by injury lawyers, or burn survivor family members. Search results were ordered in terms of the extent they mentioned the search terms and considered for inclusion until the mention of a burn became minimal in the blogs being returned from the search, and therefore unlikely to meet the inclusion criteria, above. Snowball sampling was also used as many burn survivor blogs contained links to similar blogs.

Bloggers

Ten blogs were identified for inclusion in this study. Three of the bloggers were male, and three were 'vloggers' (all of which were female). Five of the bloggers were from the US, three from the UK, and one from Australia. One blogger's location was unknown. As is often the case in research using blogs, very little information was available about other demographic details such as age, or details such as the area or severity of the burn, or time since injury.

Ethical considerations

Ethical approval for this study was received from the third authors institutional Ethics Committee. The main ethical considerations are those surrounding informed consent, privacy and anonymity. Informed consent is not a requirement as the research is focused on the blog itself, as opposed to the blogger (Eynon et al., 2009; Wilkinson and Thelwall, 2011) and only blogs considered 'purely public' (Eastham, 2011) were used (i.e. publicly accessible, open access blogs). The blogging websites used to source the blogs give bloggers the option to keep their entries private, or only accessible via registration to the site; blogs with any of these security settings were not included.

Finally, with regards to anonymity and privacy, all usernames reported in the results below have been changed. In addition, direct quotes have been kept to a minimum or, where necessary to convey a theme, longer quotes have been paraphrased to ensure the blog is not traceable via online search engines, as suggested by Ess (2007).

Data analysis

Blogs were initially transferred to a word document. Vlogs were transcribed verbatim. Data reduction took place during this stage, akin to previous studies using unsolicited data (O'Brien and Clark, 2012). Examples of discarded data include blog posts which were about hobbies and interests unrelated to the burn injury or recovery. Data on the negative impact of the burn injury was discarded, as it was not the focus of this study.

The data were analysed using thematic analysis, so that the researcher could systematically extract the most pertinent positive outcomes. In order for the analysis to be structured, replicable and transparent, the guidelines set out by (Braun and Clarke, 2006) were followed. To begin, the first author immersed themselves in the data through repeated reading and initial noting of thoughts and ideas. From this, a number of codes were developed of important topics within the text, which were then clustered

to form meaningful themes. Themes were scrutinised to check for coherence and representativeness against the original text before a final thematic map was constructed. The analysis was checked by the third author and where differences arose, the authors came to a joint decision to ensure that the themes described were an accurate reflection of the data set. Lastly, examples from the data set which clearly illustrate each theme were extracted as evidence.

In terms of epistemology, which is deemed flexible within thematic analysis and therefore must be explicitly stated (Holloway and Todres, 2003), a contextualist position was taken. This standpoint posits that although our experiences are a product of our interpretation, they are very much real to the person it is happening to (Willig, 2013). Taking this perspective allows the researcher to explore the experiences described in the blogs and the meanings attached to them, as well as looking at the role played by the broader social environment in the shaping of this.

Whilst the selected blogs did include both negative and positive accounts, which supports previous reports that even those who would be considered well adjusted still have bad days and distress associated with their situation (see Egan et al 2011; Baillie et al 2014; Rosenbach & Renneberg 2008; Hefferon et al 2009), this paper focuses solely on the positive accounts because the majority of previous research in burns has focused

on negative issues and the published literature is therefore potentially giving an incomplete representation of the experiences of people affected by burns. Eiserman (2001) suggests it is unethical not to consider positive outcomes associated with visible differences.

RESULTS

Three themes emerged; shift in self-perception, enhanced relationships and a change in life outlook. Each theme is discussed below with supporting quotes from the blogs. Pseudonyms are used throughout, as well as minor modifications to quotes to preserve anonymity, as outlined above.

Shift in self-perception

Many bloggers stated that feelings of personal strength emerged since the burn injury, recognising that they must have had considerable strength to survive their trauma, or that the burn injury forced them to discover strength they never knew they had. Either way, they acknowledged themselves as strong, self-assured individuals:

I but don't believe it's rendered me helpless, in fact it has made me stronger

(Amy)

When the incident happened it changed my life. It transformed me from what I could have been to what I am now as a very confident, very strong, very strong willed person (Zarina)

Many studies into positive outcomes following trauma identify personal strength as being important (Tedeschi and Calhoun, 1996). However, the blogs identified a range of experiences that they had endured in order to bring about feelings of personal strength, suggesting that these feelings may be a particularly salient positive outcome for burns survivors. For example, bloggers cited the event itself, the endurance of chronic pain, undergoing surgery, adapting to a change in appearance, and dealing with negative social reactions as all being catalysts to feelings of strength, as opposed to the one traumatic experience, as might be found in some types of trauma.

In addition, bloggers consistently referred to themselves as ‘survivors’, rather than victims, exemplifying their feelings of achievement and strength to survive their traumatic burn experience:

I am a burn survivor, not burn victim. That is the correct way to describe

someone who has been burned... So I am no longer a victim of the fire or of my burn, I am a survivor. And I like that better. Makes me feel more powerful to be a survivor rather than a victim (Sara)

Beyond personal strength, bloggers identified a range of other positive traits that they had become aware of and developed since the burn. In particular the burn injury allowed them the opportunity to challenge the 'status quo', learn something new, or improve themselves in some way. For example, two bloggers expressed becoming more creative; one in order to create fashionable outfits that minimised the attention placed on her scars, and the other developing a creative mind, as she used her fantasies as a form of escapism from her chronic pain. Others simply listed the diverse and wide-ranging positive attributes they felt they had developed since the burn, for example *'bravery, courage, strength, tenacity, fearlessness, patience, diligence, honesty, integrity, compassion, humility and overall badassness'* (Sara).

The blogs illustrated a sense of pride as a consequence of this shift in self-perception. Many bloggers talked proudly of their accomplishments, however small, whether this be taking a trip to the circus (Amy), eating corn on the cob for the first time post- burn (Sara), or being a good mother (Jacqui). Celebrating these achievements was

important in fostering pride, as Mark said, *'anyone who has endured tragedy knows that there are no small steps in recovery'*.

Enhanced relationships

Interpersonal Relationships

An enhancement in interpersonal relationships was a prevalent theme discussed throughout the blogs. Many of the bloggers spoke of how their burn injury had enabled them to see what a *'real, true friend is'* (Sara). Likewise, the traumatic experiences and subsequent support that they needed, such as help with carrying out day-to-day tasks and adapting to a change in appearance, meant that the bloggers felt surrounded by people they felt truly cared for them -

'I have found that my scars weed out the phonies in my life and I usually end up with the most genuine and authentic people on this earth surrounding me' (Dave)

They also discussed developing stronger connections with those they knew pre-burn, but even more importantly for many burn survivors, the relationships they had

formed with fellow burn survivors were considered particularly special, and were often described as being closer than any other relationships they had had in the past:

I've met a lot of girls that are burns survivors and they are by far the coolest people I have ever met in my entire life and I am so excited to be a part of the burn community (Sophie)

There are some things that have blossomed into a beautiful new beginning like new and beautiful friendships that have come about since my injury (Sara)

Bloggers spoke of the 'immediate bonding' (Sara) and 'special bonding' (Lucy) that takes place when two burn survivors meet. This interpersonal growth is so profound that it led Lucy to state, *'I love being burned, it's the best thing that's ever happened to me, I've met the most amazing people in the entire world from being burned.'* Clearly, they felt these uniquely strong relationships with others in the burns community would not have been possible without the experience of a burn.

Interpersonal Skills

A number of bloggers felt they had improved many interpersonal skills since the burn, namely; empathy, compassion, gratitude and appreciation of others. Some quotes highlighted empathy as being one of the most important things they had learnt from the burn injury (Amy). An illustration of this compassion came from Mark, who recounted a plane trip where he overheard an elderly lady tell the passenger beside her that she was looking forward to talking to someone as it was her first trip since her husband's death. Mark, on hearing the gentleman beside her say he would be spending the trip sleeping rather than talking to her, opted to swap seats (quite selflessly – he too prefers to sleep during a flight) to listen to the lady's story. Many other blogs reported that the burn injury had made them less judgemental, as they had a greater understanding for others. Similarly, others had dedicated their lives to helping others since their burn. For example, Lucy wanted to train to be a psychologist (in order to help other burn survivors), and Jacqui had raised money for trauma charities. This concept is often also known as altruism born of suffering (Tedeschi et al., 1998), which is evident in the aftermath of many different traumas.

Change in life outlook

A common theme across all blogs was a positive change in life perspective. Bloggers stated that their burn injury gave rise to an altered world view, also termed ‘*enlightenment about life*’ (Amy) and ‘*new understanding to the world*’ (Lucy):

I really learned about life when I had my accident and the struggles and experiences I have gone through since. We know more about what life is truly about, how hard it can be and how precious it really is because we have been through our accidents where most people haven't a clue (Sara)

Bloggers described three ways in which this change in outlook had impacted them. Firstly, they believed their priorities had changed for the better, with Amy realising she had been prioritising her work over her loved ones too much and Sara recognising that she had lost sight of her dreams pre-burn. A change in priorities in terms of making more time for loved ones was often described throughout the blogs.

Second, bloggers frequently mentioned living life to the full, with a recurring intention to seize every opportunity:

I'm going through a bit of a ‘yes’ phase. I think it's because I feel so lucky to be able to do things again. Even if I don't really fancy something or I

would normally be too lazy to go, I'm saying yes (Amy)

Other bloggers talk about '*grasping life with both hands*' (Sara), and conquering activities and entering championships which are often considered for the elite, fit and healthy individual (Jon). Throughout the blogs there was a determination and passion to be living life to the full.

The last positive outcome with regards to having a changed outlook on life was gratitude and appreciation. For example, Mark wrote a poem asking for more skills rather than less pain and suffering (showing that he appreciates the bad as well as the good in life). Likewise, Jacqui dedicates her burn anniversary to a '*celebration of life day*', thus reframing the burn event as a positive one. Lucy stated her appreciation and gratitude for life, whilst also advising others on how to live life to the full --

Don't take things for granted because like you don't know what your gonna have next and yeah, I'm just saying if you are a burn survivor you will know what I'm talking about and if you're not then you don't (Lucy)

Appreciation of the smaller things in life was also evident. The blogs expressed gratefulness for what survivors *do* have (as opposed to what they *do not* have), however

small, particularly with regards to their bodies. For example, Jacqui, who is scarred on 80% of her body, says, *'I have skin! That is good enough for me. I don't care what condition it's in – I have it'*. Similarly, after a series of surgical procedures to improve hearing in his burnt ear, Jon is still partially deaf but shrugs this off (*'ach well, you just adapt and remain grateful you have what you got and don't moan'*). This appreciation appears to exemplify this new found positive attitude for life.

DISCUSSION

Despite evidence that positive outcomes are common amongst trauma patients (Linley and Joseph, 2004), little research attention has been given to this aspect of burn survivor rehabilitation. Those that have studied positive outcomes have used restricted standardised scales (Rosenbach and Renneberg, 2008) or traditional interviews (Lau and van Niekerk, 2011; Moi and Gjengedal, 2008), or considered a burn injury as the same as any other disfiguring condition (Egan et al., 2011), despite calls to view each trauma as event-specific (Tedeschi and Calhoun, 1996). We sought to address these issues by using an original source of data (blogs) to conduct an innovative qualitative study to understand the positive outcomes that may result from a burn.

Positive outcomes present in burn survivors

The study identified three themes around positive outcomes following a burn injury; outlook in life, enhancement of relationships, and perception of self. These overlap with four scales of the Post-Traumatic Growth Inventory (Tedeschi and Calhoun, 1996); relating to others, new possibilities, personal strength and appreciation of life, but not the PTGI factor 'enhancement of faith and spirituality'. This may be because blogs are generally written by young adults (Miura and Yamashita, 2007) and spiritual growth is more often identified in older populations (Prati and Pietrantonio, 2009). Nevertheless, a lack of spiritual growth has been reported throughout a number of health related studies (Morris et al., 2012) and may also be less appropriate for health related trauma such as a burn. Where faith and spirituality were evident in the current study, it seemed that the bloggers were already spiritual before their injury, rather than this being something that had changed following the burn.

Compassion for others was a prominent theme throughout the blogs. This study, along with others into health-related traumas (Morris et al., 2012), suggests this is a prominent positive outcome requiring more attention than it is currently given in the field of growth following adversity. A stronger focus on looking after oneself has been identified both in the current research and other health related studies (Siegel and Schrimshaw, 2000), and creativity was identified as a skill that survivors did not

previously realise they had. These examples effectively demonstrate the need to study positive outcomes in a trauma-specific way, as suggested by Tedeschi and Calhoun (1996).

An interesting finding in this study questions the assumption made by many researchers of what constitutes a positive outcome. Whilst the post-traumatic growth literature and widely used measures see empathy as a positive outcome, the narratives in this study suggest an alternative view may need to be taken. For example, one blogger described increased empathy as a ‘curse’; she now feels great sadness and worry every time she hears an ambulance, something that impacts on her own health and well-being. Such accounts of trauma outcomes that are only captured through qualitative data exemplify the need for researchers to avoid imposing pre-conceptions onto their data when measuring subjective experiences.

The current findings support, to some extent, recent quantitative research into post traumatic growth amongst adult burn survivors. Baillie et al (2014) reported that the severity of the burn, the part of the body affected and time since the injury occurred all positively influenced post traumatic growth, as did active coping and perceived social support, whereas dispositional optimism was not related to growth. The theme of ‘enhanced relationships’ in the current study echoes the importance of perceived social

support within post traumatic growth, whilst the theme ‘change in life outlook’ suggests that growth may not be dependent upon having an optimistic or positive outlook pre-injury. The lack of data about the burn injuries experienced by the bloggers in our study preclude us drawing any conclusions about the role of the injury itself on determining positive outcomes. Our study has also identified aspects of positive outcomes and growth not previously reported within the burns literature. Specifically, a sense of gratitude amongst the burns survivors for things they could still do, and an appreciation and respect for their bodies have not been widely reported within previous burns research yet do resonate with the growing field of positive body image (defined by Wood-Barcalow et al (2010 p112) as “an overarching love and respect for the body that allows individuals to (a) appreciate the unique beauty of their body and the functions that it performs for them; (b) accept and even admire their body, including those aspects that are inconsistent with idealized images; (c) feel beautiful, comfortable, confident, and happy with their body, which is often reflected as an outer radiance, or a “glow;” (d) emphasize their body’s assets rather than dwell on their imperfections; (e) have a mindful connection with their body’s needs; and (f) interpret incoming information in a body-protective manner whereby most positive information is internalized and most negative information is rejected or reframed”). Future research could usefully explore the prevalence and nature of positive body image amongst people affected by burn injuries.

The themes identified in this study (outlook in life, enhancement of relationships, and perception of self) point towards the possible benefits of psychosocial interventions to promote positive outcomes and post traumatic growth amongst burns survivors. For example, Baillie et al (2014) have previously discussed the potential of using narratives and enhancing social support networks to promote positive outcomes within burn care services, social interaction skills training has offered benefits to people affected by a variety of visible differences, including burns (Robinson et al 1996) and cognitive behavioural therapy (CBT) is widely used to support those negatively affected by burn injuries and is central to new online interventions such as Face IT (Bessell et al 2012).

Study limitations

There are a number of limitations in the present study that should be acknowledged. First, this study involved active burn survivor bloggers, so the results cannot be generalised across the wider burn survivor population. A recent study by Stockton et al. (2014) has found that trauma sufferers who expressively wrote about their experiences showed an increase in post-traumatic growth, compared to a control

writing group who were asked not to make reference to feelings or opinions, or their traumatic experience. Therefore, the data from this population cannot be generalised to non-blogging burn survivors. Second, it needs to be acknowledged that blogs are written for many reasons (Miura and Yamashita, 2007), therefore they are not free from self-presentational bias. However, Hookway (2008) puts forward a strong case that blogs can be considered as trustworthy as interview data; both are social constructions on the issue being discussed. Additionally, it is noteworthy that bloggers wrote about the freedom and self-empowerment writing a blog had given them, and that they felt it was a safe platform to discuss how they were truly feeling.

We considered the blogs to be naturally occurring because they were not written for the purpose of the research (ie. the blogger had freely chosen to write a blog on the subject), but acknowledge that (like any qualitative study) as researchers we have had an influence on the study, for example through the selection of blogs, the process analysis and selection of quotes included in this paper.

Future directions

This study has provided an evidence base from which to build further research regarding positive outcomes amongst burn survivors. Like research in other areas of

health-related trauma, our study highlights the need to look more broadly than standardised measures in order to fully understand the potential positive outcomes and resilience amongst burn survivors. Further research is now needed with a more representative sample of burn survivors, to establish the extent to which the themes identified in this study are common amongst this population. This knowledge would be useful for the possible development of interventions to foster these outcomes amongst burn survivors, a necessary step if we are to move to a more positive focused rehabilitation model. For example, promoting easy access to other burns survivors' accounts of positive outcomes might be beneficial and inspiring for some, whilst also useful in training for health professionals working with this patient group who might otherwise focus solely on the "psychopathology of burn survivors" (Pope et al, 2007, p747). Whilst an extensive body of research has explored the benefits of expressive writing (see, for example, the review by Frattaroli 2006), the therapeutic benefits of blogging as an expressive writing intervention and the impact of focusing on benefit finding (Stanton et al 2002), warrants further consideration amongst burns survivors. Positive outcomes amongst family members of burns patients is also an area worthy of examination, with a view to giving greater understanding of the experiences and support needs of those close to the person who sustained the injury.

Reflections on blog analysis

Blog analysis has seldom been used in the field of health related recovery. Side-stepping the hurdle of patient recruitment, blogs are readily accessible, chronologically ordered accounts of day-to-day life. Hookway (2008) offers a comprehensive account of how to conduct blog analysis, however, several reflections are provided here. To keep data collection consistent and to save time, it was decided that the blog needed to mention a burn in the profile description/blogger background information in order to be included in this study, as has been done elsewhere (Hookway, 2008). Such strict parameters are required, given the vast number of blogs now available through online search engines. Blogs have been described as ‘musing on the everyday’ (Hookway, 2008, p102) and therefore, unlike solicited data, much of a selected blog can contain irrelevant information, therefore the data-reduction stage can be a time consuming process. Nevertheless, the quality and richness of the data makes this process a worthwhile endeavour, particularly considering the ethical, recruitment and transcription processes that are bypassed in doing this type of research.

A strength of blog research is the potential to include culturally diverse data. Although we only considered blogs written in English, future research could specifically explore blogs in other languages and examine cultural diversity amongst bloggers.

Future research could also usefully explore what coping strategies are successful at bringing about positive change after a burn, whether and how positive outcomes change over time, and whether the construct of a personal narrative is effective in promoting a successful recovery. All of these areas are important avenues for future research, and the consideration of blogs as a data source is encouraged. Indeed, the use of blogs as data entails such a volume of information regarding rehabilitation and recovery that it should hold intuitive appeal for many health researchers, in many different fields.

Finally, online research is a rapidly evolving field. The current study was conducted prior to the publication of updated recommendations by the Association of Internet Researchers (AoIR) (2012). We therefore made decisions about consent for use of the blog data based on current thinking at the time, but would recommend that researchers considering this type of research in the future (whether that be in the field of burns or any other area) should consider carefully the issues raised and thoughtfully discussed in Lomborg (2013).

Conclusions

This study has provided an alternative account of burn survivor rehabilitation. Previous to this study, using restrictive positive outcome scales, or relying on retrospective accounts of burn survivor rehabilitation has not provided a comprehensive account of the positive consequences for people affected by a burn injury. Using a novel technique, this study has explored the positive outcomes that may arise from a burn injury, as told by naturally occurring burn survivor narratives. The results identify a wealth of positive outcomes following a traumatic burn injury, some of which hold specific relevance to this population; thus, emphasising the need to look beyond the use of standard trauma-general scales when analysing recovery. This study has demonstrated that blog analysis has potential for greater use within research in the field of health and trauma. The type of data collected from blogs are not easily accessible using more traditional research methods such as interviews or questionnaires, and therefore the use of blogs as data is strongly encouraged.

ACKNOWLEDGEMENTS

This study received no specific project funding.

The Children's Burns Research Centre, part of the Burns Collective, is a Healing Foundation initiative with additional funding from the Vocational Training Charitable

Trust (VTCT) and the Welsh Assembly. The views expressed are those of the authors, and not necessarily those of the Healing Foundation or other funding bodies.

We have no conflict of interest to declare.

REFERENCES

- Acton AR, Mounsey E and Gilyard C. (2007) The burn survivor perspective. *Journal of Burn Care & Research* 28: 615-620.
- American Burn Association. (2002) *Burn Incidence Fact Sheet*. Available at:
http://www.cdc.gov/nchs/data/ahcd/nhamcs_emergency/2011_ed_web_tables.pdf
- Antunovic D and Hardin M. (2013) Women and the blogosphere: Exploring feminist approaches to sport. *International Review for the Sociology of Sport*:
1012690213493106.
- Association of Internet Researchers. (2012) Ethical decision-making and internet research: Recommendations from the AoIR ethics working group (version 2.0). accessible at
<http://www.aoir.org/reports/ethics2.pdf>
- Baillie SE, Sellwood W and Wisely JA. (2014) Post-traumatic growth in adults following a burn. *Burns* 40: 1089-1096.
- Beer D and Burrows R. (2007) Sociology and, of and in Web 2.0: Some initial considerations. *Sociological Research Online* 12: 17.

- Bessell A, Brough V, Clarke A, Harcourt D, Moss TP and Rumsey N. (2012) Evaluation of the effectiveness of Face IT, a computer-based psychosocial intervention for disfigurement-related distress, *Psychology Health and Medicine* 17:565-77.
- Braun V and Clarke V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology* 3: 77-101.
- British Burn Association. (2001) *National Burn Care Review: Committee Report*. Available at: <http://www.britishburnassociation.org/downloads/NBCR2001.pdf>
- Centre for Disease Control and Prevention. (2011) *National Hospital Ambulatory Medical Care Survey: 2011 Emergency Department Summary Tables*. Available at: http://www.cdc.gov/nchs/data/ahcd/nhamcs_emergency/2011_ed_web_tables.pdf
- Charmaz K. (1991) *Good days, bad days: The self in chronic illness and time*: Rutgers University Press.
- Corry N, Pruzinsky T and Rumsey N. (2009) Quality of life and psychosocial adjustment to burn injury: Social functioning, body image, and health policy perspectives. *International Review of Psychiatry* 21: 539-548.
- Coyne JC and Tennen H. (2010) Positive psychology in cancer care: Bad science, exaggerated claims, and unproven medicine. *Annals of Behavioral Medicine* 39: 16-26.
- Dekel S, Ein-Dor T and Solomon Z. (2012) Posttraumatic growth and posttraumatic distress: A longitudinal study. *Psychological Trauma: Theory, Research, Practice, and Policy* 4: 94.

Domingo M, Kress G, O'Connell R, et al. (2014) Development of methodologies for researching online: the case of food blogs.

Eastham LA. (2011) Research using blogs for data: public documents or private musings? *Research in Nursing and Health* 34: 353-361.

Egan K, Harcourt D, Rumsey N, et al. (2011) A qualitative study of the experiences of people who identify themselves as having adjusted positively to a visible difference. *Journal of Health Psychology* 16: 739-749.

Ess C. (2007) Internet research ethics. *The Oxford Handbook of Internet Psychology*: 487-502.

Eynon R, Schroeder R and Fry J. (2009) New techniques in online research: Challenges for research ethics. *Twenty-First Century Society* 4: 187-199.

Frattaroli J. (2006) Experimental disclosure and its moderators: a meta-analysis. *Psychological Bulletin* 132: 823-865.

Hefferon K, Greal M and Mutrie N. (2009) Post-traumatic growth and life threatening physical illness: A systematic review of the qualitative literature. *British Journal of Health Psychology* 14: 343-378.

Holloway I and Todres L. (2003) The status of method: flexibility, consistency and coherence. *Qualitative Research* 3: 345-357.

Hookway N. (2008) Entering the blogosphere': some strategies for using blogs in social research. *Qualitative Research* 8: 91-113.

- Klinge K, Chamberlain DJ, Redden M, et al. (2009) Psychological adjustments made by postburn injury patients: an integrative literature review. *Journal of Advanced Nursing* 65: 2274-2292.
- Lau U and van Niekerk A. (2011) Restorying the self: An exploration of young burn survivors' narratives of resilience. *Qualitative Health Research*: 1049732311405686.
- Linley PA and Joseph S. (2004) Positive change following trauma and adversity: A review. *Journal of Traumatic Stress* 17: 11-21.
- Lomborg S. (2013) Personal internet archives and ethics. *Research Ethics* 9: 20-31.
- Lynch M. (2011) Blogging for beauty? A critical analysis of Operation Beautiful. *Women's Studies International Forum*. Elsevier, 582-592.
- Miura A and Yamashita K. (2007) Psychological and social influences on blog writing: An online survey of blog authors in Japan. *Journal of Computer-Mediated Communication* 12: 1452-1471.
- Moi AL and Gjengedal E. (2008) Life after burn injury: striving for regained freedom. *Qualitative Health Research* 18: 1621-1630.
- Morris BA, Shakespeare-Finch J and Scott JL. (2012) Posttraumatic growth after cancer: the importance of health-related benefits and newfound compassion for others. *Supportive Care in Cancer* 20: 749-756.
- Nielsen. (2012) *Buzz in the blogosphere: Millions more bloggers and blog readers*. Available at: <http://www.nielsen.com/us/en/insights/news/2012/buzz-in-the-blogosphere-millions-more-bloggers-and-blog-readers.html>.

- O'Neill M. (2012) Video infographic reveals the most impressive Youtube statistics of 2012. *Social Times*.
- O'Brien MR and Clark D. (2012) Unsolicited Written Narratives as a Methodological Genre in Terminal Illness Challenges and Limitations. *Qualitative Health Research* 22: 274-284.
- Ozan-Rafferty ME, Johnson JA, Shah GH, et al. (2014) In the Words of the Medical Tourist: An Analysis of Internet Narratives by Health Travelers to Turkey. *Journal of Medical Internet Research* 16.
- Pope S, Solomons W, Done D, et al. (2007) Body image, mood and quality of life in young burn survivors. *Burns* 33: 747-755.
- Prati G and Pietrantonio L. (2009) Optimism, social support, and coping strategies as factors contributing to posttraumatic growth: A meta-analysis. *Journal of Loss and Trauma* 14: 364-388.
- Pressman SD and Cohen S. (2005) Does positive affect influence health? *Psychological Bulletin* 131: 925.
- Robinson E, Rumsey N and Partridge J. (1996) An evaluation of the impact of social interaction skills training for facially disfigured people. *British Journal of Plastic Surgery* 49: 281-9.
- Rosenbach C and Renneberg B. (2008) Positive change after severe burn injuries. *Journal of Burn Care & Research* 29: 638-643.
- Siegel K and Schrimshaw EW. (2000) Perceiving benefits in adversity: Stress-related growth in women living with HIV/AIDS. *Social Science & Medicine* 51: 1543-1554.

Stanton AL, Danoff-Burg S, Sworowski LA, et al. (2002) Randomized, controlled trial of written emotional expression and benefit finding in breast cancer patients, *Journal of Clinical Oncology* 20:4160-4168.

Stockton H, Joseph S and Hunt N. (2014) Expressive writing and posttraumatic growth: An Internet-based study. *Traumatology: An International Journal* 20: 75.

Tedeschi RG and Calhoun LG. (1996) The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress* 9: 455-471.

Tedeschi RG and Calhoun LG. (2006) Expert companions: Posttraumatic growth in clinical practice. *Handbook of Posttraumatic Growth: Research and Practice*: 291-310.

Tedeschi RG, Tedeschi RG, Park CL, et al. (1998) *Posttraumatic growth: Positive changes in the aftermath of crisis*: Routledge.

Wilkinson D and Thelwall M. (2011) Researching personal information on the public web methods and ethics. *Social Science Computer Review* 29: 387-401.

Willig C. (2013) *Introducing qualitative research in psychology*: McGraw-Hill Education (UK).

Zhai J, Liu X, Wu J, et al. (2010) What does posttraumatic growth mean to Chinese burn patients: a phenomenological study. *Journal of Burn Care & Research* 31: 433-440.