The art, science and politics of creating a mentally healthy society

Number 2

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A time-use approach: high subjective wellbeing, low carbon leisure

Angela Druckman and Birgitta Gatersleben

Abstract

Purpose – The purpose of this paper is to address the question: which leisure activities are relatively low carbon and conducive to high levels of subjective wellbeing? Underlying this question is the premise that to combat climate change, carbon emissions must be radically reduced. Technological change alone will not be sufficient: lifestyles must also change. Whereas mainstream strategies generally address the challenge of reducing carbon emissions through reviewing consumption, approaching it through the lens of how we use our time, in particular, leisure time, may be a promising complementary avenue.

Design/methodology/approach – The paper brings together three areas of research that are hitherto largely unlinked: subjective wellbeing/happiness studies, studies on how we use our time and studies on low-carbon lifestyles.

Findings – The paper shows that low-carbon leisure activities conducive to high subjective wellbeing include social activities such as spending time in the home with family and friends, and physical activities that involve challenge such as partaking in sports. However, depending how they are done, some such activities may induce high carbon emissions, especially through travel. Therefore, appropriate local infrastructure, such as local sports and community centres, is required, along with facilities for active travel. Policymaking developed from a time-use perspective would encourage investment to support this.

Originality/value – Win-win opportunities for spending leisure time engaged in activities conducive to high subjective wellbeing in low carbon ways are identified. This is done by bringing three research topics together in a novel way.

Keywords Leisure, Sustainability, Flow, Carbon emissions, Carbon footprint

Paper type Viewpoint

1. Introduction

Climate change is, arguably, the greatest threat to current western lifestyles, and in 2015, 195 nations adopted the first-ever universal, legally binding global climate agreement to put the world on track to tackle the problem (European Commission, 2016)[1]. To achieve the agreed goal to limit global warming to well below 2°C will require radical reductions in carbon emissions, and while advances in technology undoubtedly have an important part to play, technological change alone will not be sufficient (Capstick et al., 2014; Gough, 2017; Jackson, 2017). Lifestyles will also need to change substantially, particularly those in affluent societies: this is likely to mean that consumption and consumption growth are themselves curtailed. While this may be an enormous challenge for many reasons, it does not necessarily mean that individual wellbeing will be adversely affected. Evidence shows that, after a certain point, there is no strong link between an individual’s carbon emissions and subjective wellbeing (Andersson et al., 2014). This invites the prospect that we could live better by consuming less and emitting less (Jackson, 2005).

An important component of lifestyles is how we use our time: whereas mainstream strategies generally address the challenge of reducing carbon emissions through reviewing consumption, approaching it through the lens of changes in time use may be a promising complementary avenue (Repke and Godskesen, 2007; Wiedenhofer et al., 2018). This is for two key reasons. First, different uses of time generally have different types of consumption associated with them, and it is consumption that gives rise to carbon emissions. Second, the way in which people
spend their time is associated with their subjective wellbeing. Of particular relevance here is
discretionary time, which we refer to here as leisure time, which makes up around 5.7 h/day
of an average UK adult’s time (Druckman et al., 2012). Understanding the relationships
between use of leisure time, subjective wellbeing and carbon emissions can provide new insights
into approaches to developing and promoting sustainable lifestyles, characterised by low
environmental impact and high subjective wellbeing.

This short paper thus addresses the question: which leisure activities are relatively low carbon
and conducive to high levels of subjective wellbeing? It does so by bringing together three areas
of research that are hitherto largely unlinked: subjective wellbeing/happiness studies, studies on
how we use our time and studies on low-carbon lifestyles.

Sections 2 and 3 explore the relationships between consumption and time use, and subjective
wellbeing and time use, respectively. Section 4 brings these themes together and Section 5
concludes with a brief discussion of policy implications and areas for further research.

2. Understanding consumption and time use

Whether it be commuting to work or having a conversation with friends over a cup of tea, most
ways in which we spend time involve some form of consumption, and thus give rise to carbon
emissions (Jalas and Juntunen, 2015).

The interconnection between time use and consumption can be explored through practice theory.
According to practice theory, time and consumption are integral, intertwined inputs through which
practices are carried out (Shove, 2009). Thus, for instance, the practice of showering involves use of
soap, water and a towel, and also time set aside to perform the practice.

One use of practice theory is to shed light on carbon emissions and time use associated with
public infrastructure. For example, it can be used to explore the carbon emissions associated
with building and maintaining the infrastructure required to support the practice of commuting
(cycleways, roads and railways), as well as the carbon emissions arising from the individual-level
consumption involved in the practice (burning of automobile fuel) (Shove, 2009). In particular,
practice theory can be used to explore how carbon emissions are influenced by time-use
patterns adopted within a practice, such as the number of hours over which rush hour is spread
(Shove, 2009). Another use of practice theory is to explore the carbon emissions associated with
cultural and religious events (Shove et al., 2009). For example, Christmas involves the practice of
shopping for gifts, family gatherings and consumption of special foods (Belk and Miller, 2001).

However, while time use and consumption can be viewed as intertwined inputs, they have some
very different characteristics. First, time use has a fundamentally egalitarian property: the time
available to any individual is, in principle at least, heavily constrained. Each individual has only 24 h
per day, however rich or poor they are (Jalas and Juntunen, 2015). This contrasts starkly with the
almost limitless differences in the levels of consumption that individuals are able to carry out, with
the gap between the richest and poorest growing rapidly in recent decades (Piketty, 2014; Sayer,
2015): such inequality is a key cause of mental health disorders and related low subjective
wellbeing (Wilkinson and Pickett, 2009; World Health Organization and Calouste Gulbenkian
Foundation, 2014). In practice of course, despite its basic egalitarian property, inequalities in time
use do arise (Jalas, 2002; Minx and Baiocchi, 2009; Goodin, 2010; Jalas and Juntunen, 2015).

We can, for instance, identify people who are “time poor”, exemplified by single working parents,
who often feel harried while they juggle their responsibilities as lone carer and provider
(Nussbaum, 2011). The relationships between inequalities in income, consumption, time use,
subjective wellbeing and carbon emissions are a fertile area for further research; however, this is
outside the scope of the current paper.

The second difference of note is that while money can buy many different types of goods and
services interchangeably, time has different properties depending on various personal physiological
and social factors (Reisch, 2001). Personal autonomy in setting one’s own pace of life, and the
sequence and timing of events is important (Goodin, 2010). Do events occur at the right time of day,
week or season according to personal and natural rhythms? By ignoring, or attempting to override
the circadian rhythms that govern our bodies, we risk damaging health and subjective wellbeing (Reisch, 2001). For example, in current “hurried” lifestyles, many people are sleep deprived, eat too fast, socialise little, exercise little and drive and sit in traffic too long (Schor, 2010; Davis, 2013). Moving from consideration of physiological to social factors, an important property is synchronization of free time with the time constraints of significant others (Southerton, 2003), for example to be able to carry out duties such as collecting children from school, and enjoy leisure time together. Furthermore, continuity of time – whether time is available in fragmented portions or continuous stretches – is also significant. Reisch (2001) notes that whereas many women’s leisure time is traditionally punctuated by needs of caring for children (collecting from school, providing meals), men’s leisure time is generally available in more continuous stretches, so that they can, for example, play a game of golf.

To conclude, this section has explored the similarities between, and different properties of, consumption and time use. In the next section the literature on how different uses of time (and in particular, leisure time) may be conducive to high subjective wellbeing is reviewed.

3. What type of activities may lead to high subjective wellbeing?

Subject wellbeing is a complex concept that can be defined and measured in many ways (Diener and Suh, 1997; Caan, 2016). It is seen as the subjective component of quality of life and includes several components including positive and negative affect, overall life satisfaction and satisfaction with life domains (Diener et al., 1999; Diener, 2000). It generally refers to a person’s subjective experience of their life overall as well as cognitive evaluations and emotional responses to specific life domains (e.g. work, relationships and leisure; Diener et al., 2003). Subjective wellbeing is associated with a range of factors including good health, having a job, an adequate income and social contact as well as meaningful political engagement (Diener, 2000; Ryan and Deci, 2001; Diener et al., 2003; Csikszentmihalyi and Csikszentmihalyi, 2006; Dolan et al., 2008).

There is also increasing evidence of a link between subjective wellbeing and leisure, although this relationship is complex, depending on context and opportunities, and differs between individuals (Brajša-Zganec et al., 2011). Robinson and Martin (2008), for instance, examined data from the US general social survey data between 1972 and 2006. The study found that happier people are more active, socialise more with relatives and friends, go to church more often, engage in more sex, spend more time reading newspapers and spend less time watching television. Negative relationships with television viewing have also been found by others (Buijzen and Valkenburg, 2003). And there is significant evidence that subjective wellbeing is higher among those who are more physically, socially and cognitively active (Ryan and Deci, 2001; Dolan et al., 2008; Kim et al., 2012).

Based on a review of literature on the link between leisure and quality of life in Asian, Middle Eastern and indigenous contexts, Iwasaki (2007) concluded that although this link is culturally varied, four major pathways can consistently be identified. They propose that leisure consistently contributes to quality of life through the experience of positive emotions, by supporting positive identities and self-esteem, by creating social and cultural connections and through learning and human development. Similarly, Brajša-Zganec et al. (2011) suggest that leisure is important for subjective wellbeing because it can help people meet their goals and needs, helps them build social relationships, experience positive emotions and acquire new skills and knowledge.

Rodríguez et al. (2008) suggest that there are two main theories that help explain why and how leisure may be related to subjective wellbeing: the activity theory and the need theory. The first suggests that greater frequency and intimacy with activities is associated with greater wellbeing (Lemon et al., 1972). The second is associated with Self-Determination Theory, which proposes that wellbeing is achieved through satisfaction of three basic psychological needs: autonomy, competence and relatedness (Ryan and Deci, 2001). Engagement with leisure activities that help satisfy these needs will contribute to greater wellbeing. Their research found the strongest support for the needs fulfilment theory.

Although there is no agreed classification of leisure activities in relation to wellbeing, Stebbins (2006) makes a distinction between casual and serious leisure. Engaging in the first results in
short-term pleasure. The second is challenging and complex but contributes to longer-term wellbeing (Heo et al., 2013). Along similar lines, Csikszentmihalyi (2004) makes a distinction between activities that cost psychic energy (reading a complex book and volunteering) and can help build psychological capital, and those that require little effort and can help restore energy (relaxing in front of the television). More engagement with the former supports longer-term wellbeing through the experience of flow (Csikszentmihalyi and Csikszentmihalyi, 2006; Isham et al., 2018).

Taken together, the literature on leisure and subjective wellbeing suggests that there are certain types of activities that are associated with greater subjective wellbeing. These are activities that involve physical and mental activity (and challenge), social contact through which people can satisfy basic psychological needs, and contribute to personal growth.

4. What types of leisure activities induce high subjective wellbeing and are also low carbon?

In this section, we discuss types of leisure activities that are conducive to high subjective wellbeing while being low carbon. We first introduce the concept of a “carbon footprint”, which are the carbon emissions that an individual is responsible for. An individual’s carbon footprint is composed of emissions due to:

- Household energy use (including emissions from gas burnt for space and hot water heating, and electricity used for lighting, powering household appliances such as washing machines and electronic gadgets such as computers).
- Burning petrol and diesel in private vehicles.
- Energy used along supply chains producing goods and services purchased (i.e. “embedded” emissions). This includes emissions associated with, for example, the production of cars, computers and food at each stage of their lifetimes: from extraction of raw materials, processing, manufacture, distribution, and retail, to end-of-life disposal (European Commission, 2015).

Using this footprinting approach, we can compare which activities are high carbon, and which are relatively low carbon. Figure 1 shows the carbon intensity of various uses of time in terms of greenhouse gas emissions per hour (kgCO2e per hour) (Druckman et al., 2012). Of particular interest to this paper are leisure activities, as these are discretionary; they are grouped on the right-hand side of Figure 1. Leisure activities account for, on average, 5.7 hours per day, and activities involving travel (such as entertainment and culture) are generally more carbon intensive than those that do not (such as spending time with family/friends at home). Similar results are shown by De Lauretis et al. (2017), Jalas and Juntunen (2015), Aall et al. (2011) and Minx and Baiocchi (2009), while Wiedenhofer et al. (2018) adapt Druckman et al.’s (2012) data for their analysis.

Which specific activities should be categorised as leisure is, of course, debatable: shopping (0.8 h/day), food preparation and dishwashing (0.7 h/day), repairs and gardening (0.3 h/day) and pet care (0.1 h/day) can also contain elements of leisure time – and often do. However, they have been excluded from our classification as they are not entirely discretionary for most people. Also, it is worth noting that subjective wellbeing is not derived from leisure activities alone. Indeed work outside the home and housework can both be important contributors to subjective wellbeing (Haworth and Lewis, 2005; Diener et al., 2010), but often do not have the same discretionary nature as leisure activities.

Combining information in Figure 1 with literature on subjective wellbeing gives an indication of which leisure activities can be low carbon and conducive to high subjective wellbeing. For example, subjective wellbeing is supported by activities which involve social contact, such as conversing with friends and family in and around the home. Longer-term subjective wellbeing is, in particular, supported by engaging in sports and other goal-orientated activities that involve physical and mental activity, and hobbies and games which, as with sports and other goal-orientated activities, can involve challenge and social contact. Further examples include reading challenging books and singing in choirs which can induce feelings of flow and competency (Csikszentmihalyi, 1997).
Of course, while many of these activities are ostensibly low carbon, they can also be done in high carbon ways (Isham et al., 2018). In particular, when engaging in serious leisure, ambitions may rise, leading to involvement in, for example, national or international events and thus increased travel (Bedford et al., 2011). This will increase the carbon intensity of such activities, especially if flights are involved (Wynes and Nicholas, 2017).

5. Concluding remarks

This paper has shown that activities such as spending time at home with friends and family, singing in choirs and partaking in sports are examples of low-carbon activities that are generally conducive to high subjective wellbeing. However, depending how they are done, such activities may induce high carbon emissions, especially through travel. Therefore, appropriate local infrastructure is required, such as provision of local sports and community centres, along with systems that facilitate active travel (walking and cycling). To complement this, long-distance travel, especially that involving flights should be discouraged. However, policies addressing aviation are notoriously challenging to implement (Obergassel et al., 2015). Nevertheless, this paper indicates that, on a local scale, policymaking developed from a time-use perspective could support investment in infrastructure that encourages low-carbon leisure activities (Wiedenhofer et al., 2018) that are conducive to high subjective wellbeing. Moreover, there is evidence that engagement with these types of activities is associated with a reduced focus on material goals and greater environmental concern (Gatersleben et al., 2018). This points to the possibility of a virtuous circle through which the choice of leisure activities might indirectly support future pro-environmental policymaking.

While this paper has given some indication of the types of low-carbon activities that are generally conducive to high subjective wellbeing, more research is required to support policymaking. For example, we need to explore ways to overcome the barriers to financial strategies, such as taxes on aviation and personal transportation fuels, and investment in active travel and local community infrastructure. This research will share a common agenda with the sustainable urban planning and sustainable transport communities, and while the findings of this paper will inform and strengthen the case for it, the research itself does not need to take a specifically time-use perspective.
That being said, undertaking more research from the time-use perspective to give a more detailed, fine-grained understanding of the types of activities that should be encouraged would enable more specific recommendations to be made. To complement this, more research is also required to support behaviour change policies. For example: what are individuals’ current perceptions of activities with regard to what makes them happy, and also the environmental impact of specific activities? To what extent are these aligned with the findings of the academic research? Could raising awareness of the relative carbon and theoretical subjective wellbeing associated with activities be useful in encouraging greater uptake of low carbon activities? What other methods could be used to encourage greater uptake of low-carbon activities that are shown by academic research to be conducive to high wellbeing? And how might any successful methods found be transferred from the individual level to bring about societal change?

To support this research agenda, more detailed, regular time-use surveys are required. These should be designed with both assessment of environmental impact and subjective wellbeing in mind. Such surveys need to be of sufficient sample size to enable an understanding about how effects vary across gender, age, socio-economic group, ethnicity and geographical location; they also need to be frequent in order to assess change over time. When coupled with information on the financial impacts concerning choices in leisure activities, this would facilitate a better understanding of how people make decisions that balance happiness, carbon emissions and monetary expenditure. Such understanding will help in developing strategies to steer people towards low-carbon leisure activities that promise high subjective wellbeing. For instance, the data may suggest that parkruns[2] are an example of low-carbon activity than brings about high subjective wellbeing for city dwellers, whereas joining a local choir may be a better low carbon option for bringing about high subjective wellbeing for rural dwellers.

With evidence from this research agenda, the prospects for increasing the uptake of low-carbon leisure activities that are conducive to high subjective wellbeing will be improved, and through these a positive contribution to the advancement of more sustainable lifestyles may be achieved.

Notes
1. Since the agreement, Donald Trump, President of USA, has stated that the USA will withdraw from it. However, this will not be legally possible until November 2020 (Figueroes et al., 2017).
2. Parkruns are organised, free, weekly, timed 5 km running events held in local public parks (Parkrun.org, 2018).

References


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Clinical depression moderates effects of animal-assisted stress prevention program on college students’ emotion

Patricia Pendry, Jaymie L. Vandagriff and Alexa Marie Carr

Abstract

Purpose – The purpose of this paper is to examine whether clinical levels of depression moderated university students’ momentary emotional states (e.g. feeling content, anxious, irritable and depressed) in response to conditions commonly experienced during universal, college-based Animal Visitation Programs (AVPs).

Design/methodology/approach – During a real-life efficacy trial, students (N = 192) were randomly assigned to three common AVP conditions: a hands-on condition in which participants could freely pet cats and dogs in small groups, an observation condition in which participants observed students in the hands-on condition while awaiting one’s turn and a control condition in which participants viewed images of the same animals while refraining from socializing with peers. Using a checklist, students reported their momentary emotional states (e.g. feeling content, anxious, irritable and depressed) before and after the 10-min intervention.

Findings – Multivariate regression analyses showed that clinically depressed students reported significantly higher levels of momentary negative emotion including irritability, depression and anxiety after waiting in line compared to non-depressed students, suggesting that clinical depression may moderate potential stress-relieving effects of universal college-based AVPs depending on implementation practices.

Originality/value – This is the first study to examine the causal impact of a common yet unstudied feature of college-based AVPs aimed at reducing general college student stress. Results support the utility of targeted approaches for students presenting clinical levels of depression.

Keywords College-based animal-assisted activities, Randomized trial, Stress prevention, Student emotion

Introduction

Over the last decade, university students have reported increasingly high levels of academic stress, depressive symptomology, anxiety and suicidal ideation (Hunt and Eisenberg, 2010). This is a serious problem as students who report high levels of depressive symptoms and anxiety tend to have lower GPAs and are more likely to drop out of college (Eisenberg et al., 2009). Moreover, only half of college students who report suicidal ideation are likely to seek treatment (Downs and Eisenberg, 2012).

Not surprisingly, campus-based mental health centers are reporting high demand for their services; data from over 93 institutions show that the growth in on-campus counseling center appointments from 2008 to 2015 (38.4 percent) was more than seven times the growth in institutional enrollment (5.6 percent) for that time period (Center for Collegiate Mental Health, 2016). Many of these appointments reflect a response to crisis situations rather than ongoing services: the proportion of rapid-access hours per client has increased by 28 percent over the last six years, whereas routine hours per client have decreased by 7.6 percent (Center for Collegiate Mental Health, 2017). In fact, despite reporting high levels of stress, overwhelm and mental health symptomology, only 22.3 percent of students reported ever receiving psychological or mental health services from their current university’s counseling or health services (American College Health Association, 2017).

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Given the ubiquity of academic stress in university settings, the reluctance of high-risk students to seek treatment and the burden on campus-based mental health centers, it is important to expand evidence-based stress prevention programs.

Prevalence and evidence on animal-assisted college-based programs

One approach to stress prevention that has been enthusiastically received by administrators and students is the use of Animal Visitation Programs (AVPs). Established in nearly 1,000 US college campuses to date (Crossman and Kazdin, 2015), most AVPs are conducted in collaboration with external organizations to provide the general student population the opportunity to engage in 5–20 min of petting in small group settings. Although the number of randomized controlled trials is limited, there is promising evidence to suggest that participating in college-based AVPs positively affects emotional states (Pendry et al., 2018), lowers perceived stress (Binfet, 2017) and improves mood (Grajfoner et al., 2017) (Table I).

However, while promising as a stress prevention tool, we know little about AVPs’ efficacy to reduce stress in populations experiencing clinical levels of stress-related symptomology. Conceptualized as preventive interventions to promote student well-being, most AVPs are implemented with a universal focus to serve the entire student population, rather than taking a selective or indicated approach to target individuals possessing risk factors to develop a particular disorder. Inherent in their approach, universal interventions are expected to contain a mixture of individuals with varying levels of functioning and well-being (Greenberg and Abenavoli, 2017); in the context of

### Table I

<table>
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<th>Feeling Intable (R² = 0.128)</th>
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<td>0.363</td>
<td>-0.304</td>
<td>0.013*</td>
<td>-1.19</td>
</tr>
<tr>
<td>Hands-on × Clinical depression</td>
<td>0.915</td>
<td>0.540</td>
<td>0.163</td>
<td>0.092</td>
<td></td>
</tr>
<tr>
<td>Observation × Clinical depression</td>
<td>0.366</td>
<td>0.493</td>
<td>0.079</td>
<td>0.459</td>
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</tr>
</tbody>
</table>

Notes: *p < 0.05; **p < 0.01; ***p < 0.001
college-based mental health interventions, this would include individuals possessing high levels of stress-related symptomology as well as students with mild levels of perceived stress. Given prior evidence suggesting that depressed individuals may differentially respond to interventions targeting stress-related symptoms (Sin and Lyubomirsky, 2009; Hofmann et al., 2010), more research is needed to examine whether clinical depression reported by students may moderate treatment effects of programs implemented universally, including college-based AVPs. In addition, researchers have not yet unpacked the relative impacts of real-life program conditions students encounter during large-scale AVP implementation, such as having to wait in line for extended periods of time, socializing with known and unknown peers and limitations in the types of human animal interactions (HAs) allowed by program facilitators. Depending on the quantity and quality of human and animal interactions experienced, participants’ subjective experiences are likely to be influenced by their mood and mental health status. These varying implementation practices not only lead students to be exposed to different aspects of an AVP over the course of their experience, but also pose a challenge to researchers attempting to isolate causal effects of these programs’ components, which remain uninvestigated.

Study rationale

The primary objective of this study was to causally examine whether the presence of clinical depression moderated university students’ momentary emotional states (e.g. feeling content, anxious, irritable and depressed) in response to a 10-min universal, college-based AVP. We focused on moment-to-moment emotion because they are indicators of individual differences in appraisal and arousal, which are known to play a major role in overall health and well-being (Peterson et al., 2005). The second objective was to capture differential effects of an often-overlooked component of AVPs: the experience of waiting in line for an extended period of time while in visible range of animal activities.

We randomly assigned participants to a hands-on condition, during which participants could freely pet and stroke cats and dogs in a small group setting; an observation condition, which constituted observing participants in the hands-on condition while waiting in line for one’s turn and a control condition, during which participants viewed still images of the same animals while refraining from social interaction. The control condition was intended to isolate the effect of viewing visual depictions of the program animals without the component of social interactions with peers or animals. We hypothesized that students with clinical levels of depression would exhibit higher levels of negative emotion and lower levels of positive emotion in response to waiting in line while observing than non-depressed students.

Method

Recruitment, design and procedures

This study was conducted at a research University in the Pacific Northwest of the USA over the course of three semesters. Procedures were conducted in accordance with the ethical standards of the Institutional Research Committee, the 1964 Helsinki declaration, and Institutional Animal Care and Use Committee. The study evaluated an AVP that was regularly implemented by the university during the week before final examinations. Given the universal orientation of the program, we conducted recruitment presentations in general education classes a few days before the program was scheduled to take place. Students completed a screening survey including questions on availability, demographic characteristics and mental health. Students were invited to participate only if they were available during the predetermined program time. The survey featured a treatment condition identifier meaningless to participants, facilitating random assignment to treatment conditions.

Conditions

Participants reported to the study site two days later displaying a label containing their condition identifier so research assistants could direct them to check-in stations specific to each condition. Participants in the hands-on condition (N = 73) were directed to a curtained off program entry area where staff timed students’ entry and exit into the program area, which was located in a
large gym. Upon entry, four to five students engaged with dogs under the supervision of a handler, or with cats individually, for exactly 10 min. Dogs \( (N = 10; N_{\text{female}} = 6) \) were adult, large breed shelter animals. Dogs were seated on blankets and leashed, in close proximity of their handler. Cats \( (N = 12; N_{\text{female}} = 7) \) were housed in large cat condos, which facilitated individual interactions. Students were allowed to freely pet animals and interact with each other.

Participants in the observation condition \( (N = 62) \) were directed to a curtained-off area adjacent to the hands-on condition. Staff managed and timed entry and exit into a roped-off section of the program area where they were told they could observe others engage in HAI while awaiting their turn, but to refrain from physically interacting with the animals.

Participants assigned to the control condition \( (N = 57) \) were escorted to a room where they viewed a 10-min slide presentation containing pictures of the program animals. During the presentation they completed a checklist indicating preferences (i.e. which dog/cat do you like best?) while refraining from social interaction with other students seated in the room. After completion of study components, participants in the observation and control conditions were allowed to interact with animals for 10 min.

**Measures**

**Depressive symptomology.** Depression was measured using the Beck Depression Inventory (BDI; Beck et al., 1996), which consists of 21 items (e.g. I feel sad, I cry all the time) rated on a four-point Likert scale. There is strong support for high reliability \( (\alpha > 0.83) \) with younger adults (Nezu et al., 2000), which was echoed in our sample \( (\alpha = 0.88) \). According to criteria outlined in Beck et al. (1996), an indicator variable for clinical depression was assigned and used for moderation analyses with 8.7 percent of students reporting clinical levels.

**Momentary emotion.** The measurement of participants’ moment-to-moment emotion was taken twice, once at pre-test, immediately before the start of the treatment condition and again at post-test, immediately after the 10-min treatment. Measurement was based on the experience sampling method (ESM; Csikszentmihalyi and Larson, 1987), which provides information about participants’ subjective interpretations of their experiences in naturalistic settings. Capturing individuals’ subjective evaluations of events at a particular moment is valuable for studying emotions such as stress, since it is possible to determine a person’s stress level at a given moment, as well as to identify specific instances when stress increases or decreases in response to specific events (Myin-Germeys et al., 2009). Research examining the quality of ESM data has concluded that these data are reliable and valid when compared with data obtained from other instruments (Mulligan et al., 2005). ESM reports used in the present study were utilized in several prior studies (Papp et al., 2009; Papp et al., 2013), including in AVP settings (Pendry et al., 2018). The 1-min, 25-item survey asked participants to endorse on a four-point scale, ranging from 0 (not at all) to 3 (very much), the extent to which they were feeling various emotions at that moment. An exploratory factor analysis of survey items resulted in four latent constructs, including content (e.g. calm, at peace, joyful, positive, at ease; \( \alpha = 0.89 \)), anxious (e.g. stressed, overwhelmed, worried, anxious, tense; \( \alpha = 0.87 \)), irritable (e.g. frustrated, aggravated, agitated, irritable, pissed off; \( \alpha = 0.88 \)), and depressed (e.g. depressed, sad, discouraged, unhappy, alone; \( \alpha = 0.86 \)).

**Results**

**Power calculations and sample size**

Given that Cohen’s \( d \) effect sizes have ranged from as small as 0.2 to as large as 1.2 in animal-assisted intervention work (see Maujean et al., 2015, for a review), we plotted the necessary sample size to achieve adequate power over a range of Cohen’s \( f^2 \) effect sizes from 0.1 through 0.5, corresponding to Cohen’s \( d \) values ranging from 0.2 through 1.2. Given the three-group structure of our study and our interest in exploring interactions by clinical depression (a 2×3 factorial design) with a single covariate, the total sample size ranged from a low of 100 to a high of 210 to maintain power of 0.80. This indicated that per condition, 33–70 students would be required to have adequate power to detect an effect size as low as 0.2 with power of 0.8.
Group differences at pre-test
Participants (N = 192) were primarily white (N = 63.5 percent), female (N = 156; N = 35), underclassmen (N = 62, N = 48, N = 49, N = 30, N = 3); and M age = 19 years, 11 months. Using a one-way ANOVA with a Bonferroni correction, we found no between-group differences on any screening variable including depression, F(2, 189) = 1.12, p = 0.33. To examine whether mean levels of student momentary emotion at pre-test were similar across treatment conditions, a MANOVA by condition was conducted, which indicated no significant differences by condition at pre-test for feeling content, F(2, 185) = 2.58, p = 0.08; anxious, F(2, 185) = 1.78, p = 0.17; irritable, F(2, 185) = 2.34, p = 0.10; or depressed, F(2, 185) = 1.37, p = 0.26.

Moderation by clinical levels of depression
We next conducted a series of multivariate regression analyses on each post-test emotion factor (e.g. content, irritable, anxious, depressed) to examine whether clinical levels of depression moderated treatment effects. Using indicator variables for each condition, with the control condition serving as the reference category, we modeled contributions of main and interaction effects of clinical levels of depression by treatment condition for each emotion factor.

Results showed a significant interaction (R^2 = 0.128; F(5, 185) = 5.446, p < 0.0001) between clinical depression and treatment group on feeling irritable, suggesting that students experiencing clinical levels of depression felt significantly more irritable (β = 0.220, p = 0.038) than those without clinically relevant symptoms after 10 min of waiting in line while observing others pet animals. Interestingly, students with clinical levels of depressive symptomology did not differ from students without depressive symptomology when assigned to the hands-on group (β = −0.091, p = 0.336). This promising finding suggests that depressed students in the hands-on condition experience similar positive effects of 10 min of interacting with cats and dogs as those without clinical depression. Significant simple slopes for the association between clinical depression and moment-to-moment irritability are represented in Figure 1(a).

Results also showed a significant interaction (R^2 = 0.148; F(5, 185) = 6.436, p < 0.0001) between clinical depression and treatment group on feeling depressed, suggesting that students experiencing depression felt significantly more depressed (β = 0.399, p < 0.0001) than those without clinical symptoms after 10 min of observing others pet animals while waiting in line. Students with clinical depression did not statistically differ from students without clinical depression when assigned to the hands-on group (β = 0.441, p = 0.659), suggesting that 10 min of hands-on petting and interaction with dogs and cats significantly and substantially decreased feelings of depression and sadness, compared to students who did not engage in direct contact with live animals either in response to merely observing others engage in HAI or merely viewing Figure 1

![Figure 1 Moderating effects of clinical depression and condition on momentary emotion](image-url)

Notes: For feeling irritable: Ŷ\text{Observation} = 0.762X + 0.138; Ŷ\text{Hands-on} = −0.115X + 0.165; Ŷ\text{Control} = 0.179X + 0.381. For feeling depressed: Ŷ\text{Observation} = 0.854X + 0.113; Ŷ\text{Hands-on} = 0.105X + 0.165; Ŷ\text{Control} = −0.083X + 0.323. For feeling anxious: Ŷ\text{Observation} = 0.733X + 0.527; Ŷ\text{Hands-on} = 0.329X + 0.521; Ŷ\text{Control} = −0.468X + 0.988

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still images of animals. Significant simple slopes for the association between clinical depression and moment-to-moment depression are represented in Figure 1(b).

Similar findings were noted for feeling anxious ($R^2 = 0.125$; $F(5, 185) = 5.284, p < 0.0001$), suggesting that students experiencing clinical levels of depression felt significantly more anxious ($\beta = 0.326, p = 0.002$) after 10 min of waiting in line while observing others pet animals than those without clinically relevant symptoms, but not when assigned to the hands-on group ($\beta = 0.172, p = 0.071$). This suggests that there were no significant differences in the extent to which depressed students benefitted from human animal exposure compared to their non-depressed peers with regards to reducing feelings of anxiety. Significant simple slopes for the association between clinical depression and momentary anxiety are represented in Figure 1(c).

We did not find interaction effects between clinical depression and treatment group on feeling content, suggesting that students experiencing clinical levels of depression did not feel significantly more or less content in response to waiting in line in the observation ($\beta = 0.079, p = 0.459$) or hands-on group ($\beta = 0.163, p = 0.092$), compared to their peers observing a slide presentation featuring animals. Students experiencing clinical levels of depression were significantly less content ($\beta = -0.304, p = 0.013$) than those not depressed regardless of the intervention condition they completed suggesting a main effect of depression. This result is not unexpected given that anhedonia, or decreased ability to feel pleasure, is a common symptom of depression.

**Discussion**

This study examined whether the presence of clinical levels of depression moderated university students’ momentary emotional states (e.g. feeling content, anxious, irritable and depressed) in response to varying conditions commonly experienced during college-AVPs. We found that 10 min of HAI with dogs and cats reduced students’ negative emotion states, including negative emotions of those experiencing clinical levels of depression. This finding suggests that depressed students can benefit from universally conducted AVPs and may not require targeted interventions. We also found that compared to watching slides of cats and dogs, observing other students pet cats and dogs while waiting in line offered some benefits to participants, except for clinically depressed students, who experienced significantly higher levels of irritability, depression and anxiety compared to those without clinical depression. Given the significant interaction effects for waiting in line while observing others, these findings suggest that it is important to consider the conditions leading up to program participation, particularly for students experiencing clinical levels of depression, to prevent inadvertently increasing negative emotions in already depressed students.

These results are relevant for those implementing AVPs, who must consider variables that may inadvertently influence the experience of program participants, such as logistical challenges presented by discrepancies between defined program capacity (e.g. number of available animals and handlers) and greater-than-expected program uptake (e.g. long lines and overcrowding). To provide effective interventions to those most in need, understanding how to tailor program features is of importance, particularly when participant characteristics may impede positive treatment effects under certain conditions. Whether depressed students would have experienced positive effects of 10 min of hands-on interaction after waiting in line for 10 min could not be determined by our study, as there was no examination of the effects of overlapping or added conditions. As such, while 10 min of HAI resulted in lower negative emotion states for all students when program access was tightly controlled and managed, the role of varying program conditions on eventual benefits for various student populations is a question that needs to be further examined. Future designs could examine this question by examining the effects of varying conditions (e.g. waiting in line for various lengths of time) experienced before engaging in hands-on interaction on student outcomes.

**Strengths**

A strength of this study is that it provides much-needed evidence of programmatic effects influencing momentary emotional experiences associated with psychological disorders related to depression (Doane et al., 2013), which is a prevalent mental health issue on college campuses.
Furthermore, the randomized controlled design allows us to make causal arguments about the differential effects of real-life conditions incurred during animal-assisted programming on students with high levels of stress-related symptomology, about which relatively little is known. Given that the use of large-scale universal animal-assisted programs has considerably increased on college campuses, it is important to understand not only whether these programs are effective for the student population as a whole, but also whether students’ existing mental health issues may moderate treatment effects, and under which conditions this may occur. Possessing this understanding may help administrators make informed decisions about program features to prevent unwittingly increasing stress in some participants rather than reducing it. These results are further enhanced by a large sample drawing from a wide variety of majors, which not only provided ample power to detect the presence of main and interaction effects, but also bolsters confidence in generalizing results to the broader population of college students beyond those previously studied.

Limitations

A limitation of this study is that it is unable to determine whether the 10-min interaction produces a change in a momentary emotion that is substantive enough to also affect state and trait-level characteristics of students’ emotional functioning thought to play a role in the development of psychopathology. Additional limitations in this study can be viewed in terms of its participants and design. The sample was predominantly female, which may be due to a lack of male candidates in the classrooms researchers sampled, or a lack of interest in participation, a factor which must be explored in future studies. Additionally, the design of this study does not inform our understanding of mechanisms underlying program effects. In order to support evidence-based implementation practices, future research is needed to examine the role of dosage in order to determine at what point the benefits of these interactions occur (e.g. 5, 10, 15 min, etc.) and whether exposure has a cumulative effect.

Conclusion

This study demonstrates that depressed students can benefit from universally conducted AVPs and may not require targeted interventions. However, this work also indicates that students with clinical levels of depression may respond negatively to common program conditions experienced during AVPs, such as having to wait in line while observing the intervention and awaiting one’s turn. Future research should examine the effects of various program conditions on populations that vary in risk, as well as explore the role of dosage, essential elements and conditions of AAAs.

References

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Systemic conversations across children and young people’s mental health services: a case study

Tim Clarke and Tonia Mihill

Abstract

Purpose – Improving and transforming children and young people’s (CYP) mental health (MH) services is increasing in importance. Such systems, however, are often delivered across providers and commissioned in different ways which can lead to fragmentation and complexity, ultimately impacting negatively on how young people access services. With increased demand, this means that services are more likely to operate in silos when indeed they should be better integrated. Developing systemic interventions for service leaders and commissioners may support improved integration. The paper aims to discuss this issue.

Design/methodology/approach – Systemic issues across a CYP MH system were assessed and formulated. As a result, using systemic theory, appreciative inquiry and organisational change theories, a “systemic conversation” intervention was developed and delivered to senior leaders and commissioners of this system. This intervention comprised three workshop style sessions with numerous tasks.

Findings – Qualitative feedback and scores in the improvement of important elements that the conversations targeted were collected and examined descriptively. Participants rated their perceived improvement in relationships, transparency, integration, helpfulness and shared vision for future development.

Practical implications – In transforming CYP MH services, this paper considers how the authors can intervene across organisations representing the system to further integrate and improve care for those accessing services.

Originality/value – The intervention described is an original way of intervening with provider representatives from across the system. The paper provides a blueprint of how this might be adopted by others.

Keywords Mental health, CAMHS

Paper type Case study

Purpose

It is acknowledged that there is a need to further improve Children and Young People’s (CYP) Mental Health (MH) services in the UK in line with increasing demand being placed upon services (Care Quality Commission, 2017, 2018). High prevalence of MH difficulties and emotional disorders of CYP in Great Britain (Green et al., 2005; NHS Digital, 2018) and an increased prevalence of MH difficulties in children at aged 14 (Patalay and Fitzsimons, 2017; NHS Digital, 2018) support the need to transform services. Furthermore, with a majority of MH difficulties developing by the age of 24 years old (Kessler et al., 2005) and the lack of resources to meet demand (Care Quality Commission, 2017, 2018) ways to improve quality of CYP MH services is essential. Positively, the importance of improving CYP MH services has been recognised and prioritised by the UK Government and the NHS through recent policy (Department of Health, 2015; Mental Health Taskforce, 2016; Department of Health and Social Care and Department for Education, 2017) and funding (see House of Commons Library, 2018 for summary) with additional funding pledged to NHS commissioned CYP MH services. However, as this funding was not ring-fenced in commissioning budgets it is feared that funding pledged to meet the demand on services is not universally reaching front-line services (British Medical Association, 2018).
It is recognised that CYP MH services are complex systems often provided and commissioned in local areas by a variety of stakeholders. NHS funded CYP MH services are often therefore delivered by a range of organisations including NHS specialist providers, local authority and voluntary sector providers. Having a varied range of providers offering CYP MH services can be beneficial to CYP as they respond differently to a range of expertise and service models suited to their needs. However, it has been noted that such current models of commissioning and procurement increase fragmentation by encouraging competition between providers (Department of Health, 2015; Education Policy Institute, 2016). Additionally, the Care Quality Commission (CQC) in a recent National review of CAMHS (Child and Adolescent MH Services) commissioned by the government concluded that the system as a whole is complex, fragmented and results in significant variation in the quality and accessibility of care offered to CYP with MH difficulties (Care Quality Commission, 2017, 2018). This fragmentation in services and commissioning can lead to gaps in service provision with inflexible eligibility criteria. Furthermore, commissioners and service providers report from their perspectives that systems are in conflict due to financial and systemic pressures resulting in a lack of integration, conflicting emotions, competing agendas and mistrust which can unintentionally culminate in losing sight of the CYP (Clarke et al., 2017).

The local CYP MH system that this case study is based upon covers a large county with rural and urban areas and a population of approximately 1.1m including nearly 300,000 CYP up to the age of 25. MH services are currently configured using a tiered system of tier 1 (Universal), tier 2 (targeted support for mild-moderate MH difficulties), tier 3 (specialist support for moderate-severe difficulties) and tier 4 (in-patient). Tier 1 universal services are provided by the local authority, tier 2 targeted services are provided by a consortium of voluntary sector providers and tier 3 specialist services are provided by a NHS MH trust. The system incorporates a youth MH model for 14–25 year olds (Wilson et al., 2018). The targeted and specialist providers are commissioned by a CAMHS strategic commissioner through local Clinical Commissioning Groups.

Typically of many other CYP MH systems nationally, concerns from providers, commissioners and CYP service users (Collins et al., 2017) that services are not well integrated have been reported and although there have been efforts to enable the system to work better together these are not sustained and ongoing systemic barriers have led to frustration. Factors adding to system complexity such as unclear service criteria, rising demand, contractual disputes, mistrust, lack of accountability and transparency and disagreements in recent transformation initiatives mean that the system is increasingly fragmented at a time where integration is needed most in order to meet the needs of CYP. The aim of the current case study is to report the development of an intervention (systemic conversations) and evaluate the acceptability of this intervention.

**Approach**

**Facilitators**

The two authors of this paper and intervention facilitators represent different providers in the local CYP MH system; tier 2 (TM) and Tier 3 (TC) and completed a CYP Improving Access to Psychological Therapies (CYPIAPT) leadership course together. The opportunity to train together enabled us to receive supervision and teaching around systemic interventions as well as the protected time to design and implement the intervention. The first author (TC) is a research clinical psychologist and CYP MH advisor for the East of England Clinical Network. He has over ten years experience of working locally for CYP MH services and developing previous systemically informed interventions for staff groups (Clarke et al., 2015). The second author (TM) is a therapeutic services manager in the voluntary sector and an accredited counsellor with 11 years of experience working with CYP.

**Assessment and formulation**

We purposively surveyed in excess of 40 members of our respective teams on their perception of the inter-organisational relationship between providers using Likert scales and open ended questions finding that significant improvement and closer working was required. The survey included three core questions. One relating to the numbers of inter-agency referrals that fall...
between services and the reasons for not referring/unsuccessful referrals; the second, an assessment of the current relationship between teams and reasons for this; and third, to provide examples of when inter-organisational working went well and what could be improved. Although examples of good inter-organisational working were identified, they often focussed on the strength of specific individual relationships formed over time. The authors acknowledge that this survey may be confounded by bias as it was their teams that completed the survey. However, the surveys were anonymous and only used to help assess current system working. Additionally, senior managers and commissioners perceived a need for improved systemic working and it was evident that there was tension between organisations where meetings between organisations were often cited as repetitive, unproductive with a marked tendency for organisational posturing and combative conversations. Systemic and organisational change theories were used to help formulate barriers to inter-organisational working and potential solutions. These theories are premised on why systems/organisations need to change and importantly what process are required for successful change. We hypothesised that developing systemic conversations between organisations focussed on improving CYP’s MH services could represent a unique opportunity to address systemic concerns in collaboration. It was also anticipated that the co-facilitators and members of the groups where positive relations had been developed would model ways in which we can more positively work together.

**Intervention development – systemic conversations**

Following our formulation, we developed and prepared a systemically informed management activity task, named a “systemic conversation”. As CYPIAPT leadership course trainees, we used our supervision and training to support our intervention development. We drew upon appreciative inquiry (AI) principles, an approach that engages individuals and organisations in self-determined change (Cooperrider and Whitney, 2005) and systems thinking, with an understanding to enquire openly without set ideas (McCaughan and Palmer, 1994) and organisational change management principles (e.g. Senge, 2006) to further develop the intervention. As organisations (such as ours) are often represented as a recursive system characterised by patterns of feedback loops of groups within the organisation or between organisations that influence or are influenced by the system (McCaughan and Palmer, 1994) we recognised that a systemic intervention was suited. As facilitators with an awareness of this we also prepared for patterns of conflict and collaborations in achieving change.

By working together across the system, and informed by our systemic theory teaching, it allowed us to develop these conversations in a creative and iterative manner, unlike the rigidity of the established system structures. We developed, planned and delivered three “systemic conversations” over nine months. The series of conversations were iterative where the findings and feedback from sessions informed the focus for the following conversations. The facilitators asked attendees at each session what they would like the focus to be for the next session and the facilitators always met to debrief and plan following sessions.

The aims of the intervention was to develop and facilitate a systemically informed intervention with representatives from across the system to build on current examples of good inter-agency working, reduce fragmentation and improve inter-organisational relationships with the hope of collectively generating solutions to improve the quality of CYP MH services and inform a forthcoming system redesign. As core “systemic conversation” components, we stipulated the need for participants to: include senior organisational representatives; have equal representation from across organisations; be active within the sessions; create a safe space to explore conflict and collaboration; be willing to engage in activities that might involve potential conflict; be willing to listen to each other’s views; commit to prioritising these systemic conversations; meet at a neutral venue; model co-operation and shared purpose.

**Participants**

Participants, representing senior management and commissioner representatives from across organisations were purposively selected and invited to participate (n = 11). Participants were selected on the basis of their knowledge of the system and their roles in influencing change and
the need to work across the system. Careful consideration was given to balance and equal representation when sending invites. Consistent attendance was recorded at each systemic conversation session with commissioner attendance at the first and final session. See Table I for further information relating to participant attendance. Participants were consulted with and agreed for us to report on this intervention and their results anonymously. As this case study reflected a systemic intervention with staff, ethical approval was not required.

**Intervention: a systemic conversation**

*Conversation 1*

We began by setting out the rationale (as above) for these meetings and managing expectations. We explained that these “systemic conversations” were aimed at bringing the system closer together to improve CYP MH service provision.

In part 1, we shared the findings of the staff surveys from across organisations, indicating the need for improved integration between tiers. We then allocated groups that contained Tier 2 and Tier 3 senior representatives. In the first exercise representatives from different organisations worked in pairs with an observer to identify a block they experienced in trying to get the whole system working together. The other participant then led a consultation exercise in which their role was to investigate this block rather than solve the problem. As facilitators, we ensured that participants adhered to their roles and the tasks closely. We encouraged participants to meaningfully listen to each other for longer and more carefully to gain a deeper and more nuanced understanding of the other’s perspective and experience as well as introduce new insights and offer observations.

In part 2, the second exercise was based on Al principles. We separated the tiers/organisations in to groups and charged each with identifying from their perspective what their organisation did best for CYP’s MH provision and then what the other organisation/tier did best. This allowed positive reflection across the system and a rare opportunity to reflect together and acknowledge the importance of each other’s roles. When we compared responses we found a surprising congruence and agreement which has the potential to form the basis of a more transparent system, reduce duplication and confusion as well as forming a positive, appreciative working relationship.

*Conversation 2*

In part 1 of the next “systemic conversation”, which took place three months later, we focussed on discussing and developing shared language and shared meanings. This continued the work of laying the foundations for more productive and positive inter-organisational relations. We began by identifying the elements of a good conversation in life generally and reflecting on whether any or all of these could be carried into a work conversation. In pairs, we used famous quotations to stimulate the identification of elements of good conversations and the qualities of such conversations. The conclusion was that they all could and we agreed vital qualities of a helpful professional conversation, which included being open, respectful, curious, passionate, connected, directive, engaging and reciprocal. We then discussed common terms and language within CYP MH services and the group agreed which terms to focus on. These included developing shared meanings across organisations for the terms: “No wrong door”, “Early intervention”, “Single point of contact”, “Integrated pathways”, “shared decision making” and “mild, moderate, severe”.

In part 2, we facilitated a “future, retrospective” activity (adapted from www.funretrospectives.com/category/futurespective) which we tailored to the needs of this group with a focus on

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**Table I** Participant attendance

<table>
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<tr>
<th>Session</th>
<th>Number of voluntary sector/Tier 2 participants Invited</th>
<th>Number of voluntary sector/Tier 2 participants Attended</th>
<th>Number of NHS provider/Tier 3 participants Invited</th>
<th>Number of NHS provider/Tier 3 participants Attended</th>
<th>Commissioning participants Invited</th>
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developing a joint vision for improving the local CYP MH system. We titled this “looking forward to look back” and used the visual analogy (which could be annotated) and metaphor of trying to reach “paradise” by imagining together that we had got to a shared “ideal” CYP MH system that met the needs of CYP (paradise) and reflected together on what the barriers/risks were (mountain), what we had to do to prepare the system to overcome the barriers (catapult) and finally the processes involved in helping the system overcome the barriers (flying person). Initially mixed groups with representatives from tier 2 and tier 3 agreed what the components of the ideal CYP MH system are, demonstrating consensus across organisations. As a whole group, we then reflected on this and imagined that we were all working together to deliver this system, in these “future” roles we then looked back on what the barriers were and how we overcame these. This allowed the group to be free from current pressures, demands and organisational agendas allowing them to focus together as a system of how barriers can be overcome.

Conversation 3

There was consensus that participants wanted to know more about what each organisation did and learn more about the system from each other’s perspectives in the final “systemic conversation”. This conversation was named “What we do & stepping in to each other’s shoes” and was aimed at facilitating participants to feel the system through another lens. In part 1, participants shared clarity of their “purpose” within the system, not just their “role”. We then went on to map the current CYP MH system encouraging participants to use AI principles and be curious about the details of what was offered from the other organisations. We used a CYP MH system framework, THRIVE (Wolpert et al., 2014) which Commissioners are considering implementing, to map out what CYP are offered in the system. We encouraged honest conversations and identification of where there was duplication and importantly synergy. Participants seemed surprised that services have good fit and constructive discussion was observed around mitigation of CYP falling through any service gaps. Participants were gaining a greater shared understanding of the overall CYP system and its complexity from alternative perspectives.

In part 2, we purposively selected pairs (mixed organisations) to work together. Participants were asked to take it in turns to actively listen to their partner and put themselves in the other’s shoes (encouraging empathy) when talking about their function in the system, what they do and most importantly how it “feels” for them to be working within the system. During this task the facilitators, commissioner and a participant that was not paired were given the role to observe and listen to the dyads. Participants commented on how powerful it was to listen to one another, discover shared feelings and how different it was to actively hear/feel the system from a different perspective. Following on from this, the observers convened a reflecting team and with participants listening they shared observations of the task. The reflecting team reflected on how it was to observe the dyads talk about their feelings with one another and have space to share common experiences. The reflecting team noticed how participants shared hope, shared fear, shared pride, shared feelings, shared pain and a felt sense of participants as representatives of the organisations feeling isolated. Importantly, they shared mutual feelings of optimism to work closer together in the future.

To conclude the final “systemic conversation”, we asked each participant to make a systemic pledge of how they could (if they wished) continue to commit to bringing the CYP MH system together. See Figure 1 for a flowchart of the activities and the below list for examples of pledges.

Examples of systemic pledges:

■ to continue to be part of a group that is committed to action across the system;
■ this group could be powerful together and I will continue partnership working;
■ commit to this group as the best solutions for our system lie in this group;
■ develop “oneness” through whatever means;
■ seize opportunities, small bites make a big difference;
■ continue a willingness to engage; and
■ continue to stretch the limits and grow together to achieve a growth that is achievable.
Findings

Due to the reflective nature of the “systemic conversations”, we did not formally evaluate these sessions. We did however ask participants to rate important elements that the conversations targeted and elicited qualitative feedback following the sessions (see Table II for scores and means (M) and Table III for feedback). For those questions where a numerical score was required, participants were asked to rate on a scale of 0 (not improved at all) to 10 (improved greatly).

Discussion

As is evident from the results and our observations, these systemic conversations were received wholly positively. The conversations acted as a forum for change in the midst of a complex CYP MH system that must integrate better together. The systemic conversations seemed to develop and
Table II  Participant scores and means

<table>
<thead>
<tr>
<th>Participant</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questions</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improved relationships</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>7.81</td>
<td></td>
</tr>
<tr>
<td>Improved transparency</td>
<td>7</td>
<td>6</td>
<td>8</td>
<td>7</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>5</td>
<td>6.82</td>
<td></td>
</tr>
<tr>
<td>Improved shared vision for future development</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>7.73</td>
<td></td>
</tr>
<tr>
<td>Promoting integration</td>
<td>8</td>
<td>8</td>
<td>9</td>
<td>7</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Overall helpfulness</td>
<td>n/a</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>10</td>
<td>6</td>
<td>n/a</td>
<td>n/a</td>
<td>9</td>
<td>8</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Table III  Participant feedback

<table>
<thead>
<tr>
<th>Questions</th>
<th>Provide brief comments on your participation in the conversations</th>
<th>Willing to participate in future sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participant</td>
<td>1</td>
<td>This was a refreshingly open and honest way of meeting. I think it can only be a good thing that more of us as human beings, more of our human qualities are welcomed, allowed and enabled to be present in the room, fostering good relationships from which something better may emerge. Very helpful in building relationships, in better understanding different perspectives and common ground e.g. shared commitment to improving services; that we all experience obstacles, difficulties and challenges.</td>
</tr>
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<td></td>
<td>2</td>
<td>I think the commitment was there but the broader CAMHS redesign and the implications for each individual organisation was, in my view, an &quot;elephant in the room.&quot; I think the sessions provided the foundation for improvement and highlighted to me a commitment in principle for improvement. However, the sessions would need to be more frequent and “action-focused” in my view to demonstrate this commitment. They were skilfully facilitated and provided a reflective and optimistic space.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>I felt that the way in which each session was planned and managed, created an extremely good basis from which to work collaboratively. Equally, by being encouraged to draw on positive factors present in relation to both systems and processes, but also behaviour and culture, a helpful and importantly safe environment was apparent, allowing room for useful reflection and positive challenge.</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Developing relationships and awareness with our partner agency, exploring how to improve this relationship and move to a more integrated service was helpful. Useful looking at barriers to do this and having CFYP Commissioner there to observe our dilemmas as a whole service provider rather than separate commissioned services and how they have a part to support these relationship further.</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Conversations were fantastic for building trust, understanding each other’s work and challenges and recognising strengths. It needs to lead to practical changes though and that is a stage beyond reflection. Reflection is necessary but not sufficient. It builds the foundations for positive change.</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Chance to listen and reflect and begin to share others experience of service delivery and joint challenges, comparing cultures was helpful.</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>I was slightly confused at times in relation to the purpose of the event and was not clear at times about my position within the conversations or direction in which they should take.</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>I came to all three events, I was disappointed that others were unable to commit in the same way I did. They were very helpful – personally helped me to build up trust with point one and map and fostered our working relationships. I enjoyed them hugely and highly valued them. It also gave me the opportunity to reflect on my own organisation and its values.</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>It was great to be in a room with such a good, relevant group of people, and not to be expected to be in a facilitating/chairing role. Enabled me to feel more relaxed and therefore open to others’ views, suggestions, etc. A really constructive use of time to make connections with colleagues as individuals, to remember why we all got into this line of business, and that we can only succeed (given the scale of the challenges/unmet need/gaps) if we collaborate and truly integrate our system.</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>The conversation which I joined provided a different sort of interaction; one which was not defensive nor too based within their own organisation. It seemed to facilitate a shared understanding of the different points of view without forcing problem solving conversations. It also brought together individuals who might not normally meet and with differing levels of “power” within their organisations, adding to the richness of the discussions. It was a thoughtful and reflective space and led to increased feelings of optimism; in me at least!</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>The discussions were really welcome and let me build some stronger relationships with key people outside my organisation. The variation between people and at times the inability of commissioners to positively join in or when they did to be kept out of some of the discussions felt disappointing and reflected the ongoing separation of the system when an opportunity was there for greater authenticity.</td>
</tr>
</tbody>
</table>
improve a sense of trust and honesty within the system that had not always been present and this opportunity was prioritised across the system. The conversations used examples of established individual trust and positive relations between some members of the system to model how this could be generalised across the wider system with other participants. For example, the facilitators (TC and TM) who represent different organisations used their rapport, developed through attending a CYPIAPT leadership course together, to model to wider members of the system the benefits of working together.

The conversations also seemed to create a foundation of how organisations and representatives could develop a shared understanding of issues and implement improvements in CYP MH services as a system in a transparent way. Participants were actively engaged in and enjoyed joint problem solving from a position of systemic enquiry (McCaughan and Palmer, 1994) rather than from the position of separate organisation’s agendas. We were able to facilitate a forum without meeting member’s preconceived agendas and construct joint agendas with the view of improving CYP MH rather than entering in to competing or defensive positions. This was evident in the feedback from attendees in the highest scores being around improved relationships, integration and shared vision.

Furthermore, as noted by Cooperrider and Whitney (2005) this built and sustained momentum for change reliant upon positive affect and social bonding through “hope, excitement, inspiration, caring, camaraderie, sense of urgent purpose and sheer joy in creating something meaningful together”. These systemic conversations, often prompted by AI techniques, were characterised by such positive attitudes and promoted the ability to have difficult conversations in a constructive and respectful manner together. We purposefully planned activities that would enable participants to move away from the formality of a meeting or didactic workshop and concentrate on the quality of the exchange. As Senge (2006) describes, these conversations created an opportunity for energised change through being open, reflective and sharing visions together.

Transparency was identified as a key issue throughout and was identified as the element that improved the least. This is something that requires further attention, perhaps as the focus of future systemic conversations. Feedback from attendees suggests that we need to think together, in a transparent way about, for example, how resources are distributed and used across the system. It is anticipated that commissioners needs to be central to this and holding the system as a whole to account in improving transparency e.g. around resource use would be beneficial. Participants have identified this as an important need. We are also aware that the “systemic conversations” were not representative of the whole system but our focus was on enabling senior representatives to play the part required of them in order, according to the aims of this intervention, to facilitate positive change. In future “systemic conversations”, we would like to think about how CYP, parent/carers and other stakeholders may be able to join as members of the reflective team/observers.

Ultimately, the “systemic conversations” themselves evidenced that we can build trust and join together as a whole system representing the building blocks and potential to continue working together. As facilitators, we were pleased by the positive level of engagement from participants which was sustained. There was a sense of integrity between participants and the feedback suggests that now these foundations, relationships and group format have been established that the next steps should involve building on these to action positive change. At the request of the participants, we plan to facilitate a further set of “systemic conversations” but this time aimed at “systemic action planning” to ensure that we improve CYP MH services by having clear, system-wide agreed plans to implement change. Topics suggested include facilitating a plan for a single point of access and also conducting a needs assessment of the CYP that we see across organisations to more efficiently plan services equitably.

**Limitations**

The “systemic conversations” intervention described in this current case study has several limitations. First, the conversations did not include all parts of the system and to be inclusive should have at least consulted with children, young people and their parents/carers as well as...
consider them as participants. Furthermore, the participation in these conversations relied on the voluntary good will of those that attended and was influenced by the positive relationships that the facilitators had with members of the system. This potentially limits the generalisability and transferability of this intervention to other MH systems. If such interventions within the system are to be used more widely than protected time and resources should be allocated for this purpose. This case study acknowledges the importance of intervening in this way but this has not been sustained as it is not within the job roles and remit of the facilitators going forwards.

Conclusions and clinical implications

Service focussed, systems-level interventions, such as the “systemic conversations” discussed above have the potential to improve the quality and experiences of services offered to CYP with MH difficulties. As it is widely recognised that CYP MH services are often fragmented and complex for CYP, their parents/carers and referrers to navigate, we must address systemic issues that may contribute to this. As recognised by participant 2, it is important that systemic conversations explicitly address the implications of individual organisations in any system redesign, something the current intervention should have further addressed. It is anticipated that if services can better integrate and positively work together, with improved commissioning models that recognise system integration while acknowledging the important contributions that different organisations offer, then the offer to CYP with MH difficulties across the system can be continually improved.

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Delivering national public mental health – experience from England

Ian F. Walker, Jude Stansfield, Lily Makurah, Helen Garnham, Claire Robson, Cam Lugton, Nancy Hey and Gregor Henderson

Abstract

Purpose – Mental health is an emerging health policy priority globally. The emphasis on closing the treatment gap in psychiatric services is now being complemented by an increasing focus on prevention and health promotion. The purpose of this paper is to describe the programmes and delivery of public mental health in England led by Public Health England (PHE), an arms-length body of the Department of Health and Social Care.

Design/methodology/approach – This technical paper outlines the general approach PHE has taken in delivering national work in public mental health and describes several key areas of work: children and young people, suicide prevention, workplace and workforce, strategic engagement with stakeholders, data and information and evidence synthesis.

Findings – A description of the various programmes and guidance documents that PHE have produced are described and referenced, which form a substantial body of work in public mental health.

Practical implications – The outputs from PHE may assist in informing the approach to public mental health that other government agencies could consider adopting. The resources described and signposted within this technical paper are publicly available for readers.

Originality/value – England is one of a small group of countries that have a track record in delivering public mental health at a national level. This paper gives a unique and detailed insight into this work.

Keywords Prevention, Public health, Policy, Wellbeing, Public mental health, Suicide prevention, Government, Mental health

Paper type Technical paper

Introduction

Mental health is an increasingly important field in global health policy (Patel and Saxena, 2014; Kleinman et al., 2016). Mental health problems make a substantial contribution to the global burden of disease, especially to years lived with disability, with depression being the largest single cause (Whiteford et al., 2013; WHO, 2017). Many governments across the globe are now measuring the wellbeing of their populations as a barometer of social progress and development (Durand, 2018).

Recent policy priorities in global mental health have focussed on closing the treatment gap: improving the proportion of individuals experiencing a mental health problem who are able to access effective psychiatric treatments locally (Eaton et al., 2011; Patel et al., 2010). This is rightly a policy focus globally, but not alone in importance. For instance, the current global mental health action plan (WHO, 2013) also highlights, as one of its four key objectives, the implementation of strategies for the promotion and prevention of mental health. This objective falls within the field of public mental health (PMH) which is an aspect of public health that takes an upstream approach to mental health and wellbeing and particularly focuses on mental health promotion and the prevention of mental health problems at a population level (Wahlbeck, 2015). The sign of its growing importance is demonstrated in its inclusion within the recently agreed sustainable development goals (Target 3.4: by 2030 reduce by one-third pre-mature mortality
from non-communicable diseases through prevention and treatment, and promote mental health and wellbeing (WHO, 2016). This is accompanied by growing evidence of the effectiveness of interventions at the population and community level to promote wellbeing and prevent mental health problems (Petersen et al., 2016; Patel et al., 2016; Jacka and Reavley, 2014). However, in its monitoring of the global mental health action plan, WHO reports that under half of member countries have two or more functioning programmes in mental health promotion or prevention (WHO, 2015).

Public Health England (PHE) is an executive agency of the Department of Health and Social care (UK Government). Since its inception in 2013, PHE has delivered national policy and programmes to promote mental health and wellbeing, prevent mental health problems, prevent suicide and address the health inequalities experienced by people living with or recovering from a mental health problem.

Given the experience within England and the development of expertise in PMH, this paper aims to describe the approach PHE has taken to deliver policies and programmes and to outline some of the work in key areas of PMH.

The national approach

PHE provides system leadership and advice to government, provides information and expertise to the local public health system and the specialist workforce (Public Health England, 2018). The national PMH programme was developed in 2012–2013, informed by the contemporaneous national policy (HM Government, 2011), World Health Organization policy and guidance (WHO, 2002, 2012) and established theories and frameworks that explain the mental health approach in public health (Barry, 2001). The three overarching goals of PHE’s programme became promotion of mental health and wellbeing across the population, prevention of mental health problems and suicide, and improving the wellbeing of people living with and recovering from mental health problems. Since PHE’s inception there has been a mental-health-in-all-policies approach (WHO, 2013), informed by evidence that mental health is a determinant of overall health and wellbeing (Friedli, 2009) and calls for parity of esteem with physical health (Royal College of Psychiatrists, 2010). This involved embedding, wherever possible, mental health goals and actions into wider public health work.

In order to embed mental health into all public health, it is important to distinguish between mental health promotion and mental illness prevention (Tudor, 1996; Westerhof and Keyes, 2009). The promotion of good mental health and wellbeing in the population is an outcome in its own right and also a determinant of physical health. As such, PMH contributes to prevention of all disorders, not just mental health problems. Terminology has always been a challenge in PMH and developing a coherent narrative for the work was an early priority that is still relevant (Davies, 2014).

Mental health is itself determined by a wide range of inter-related factors at structural, community and individual levels (Government Office for Science, 2008). As such, mental health is prioritised as a cross-cutting programme for PHE, alongside healthy communities and health inequalities. Building connected and empowered communities and reducing inequity are both central to improving the nation’s mental health. An example of the intertwining of these cross-cutting themes is the work to map the causal pathway from social inequalities to health outcomes by recognising the role of psychosocial factors and mental wellbeing (UCL Institute of Health Equity and Public Health England, 2017).

There is strong evidence of the need for public health action to be taken across the life course from preconception through early years and school-age to working age, leading to healthy productive ageing (Lynch and Smith, 2005; Marmot et al., 2010). PHE is therefore taking a life course approach to PMH which identifies key opportunities for minimising risk factors and enhancing protective factors through evidence-based interventions at key life stages. The complexity of mental health means that engagement with a wide range of stakeholders across sectors and government departments is a mechanism for this large-scale change. The voluntary and community sector has been a strong partner, helping the programme to be person and community-centred. The complex system approach is currently informing our work (Rutter et al., 2017).
Whilst mental health outcomes in England are measured through the “Public Health Outcomes Framework” (suicide rates, hospital admissions for self-harm, premature mortality and employment amongst people with mental illness, subjective wellbeing, quality of life of older people, workplace sickness absence, school readiness) these are high level and affected by many mediating factors and interventions. Attributing causality to factors influencing national improvements in suicide rates or improved wellbeing to specific interventions is problematic. However, having short- and medium-term outcomes and targets is necessary and theories of change and logic models have been used. A set of indicators or outcome framework such as developed in Scotland (NHS Health Scotland, 2012) has not been agreed for England which is a limitation to the programme. Further work is needed to develop a shared understanding of a more comprehensive set of PMH outcomes with partners.

PHE’s approach has resulted in many programmes of delivery, guidance documents and enabling products in PMH across a range of topics. The following sections describe some of this work in more detail.

Examples of work PHE has undertaken

**Children, young people and families**

Recent data indicate that one in eight children aged 5–18 years old in England and 1 in 6 of 17–19 year olds have a diagnosable mental health problem (NHS Digital, 2018). There is a significant body of evidence to suggest that inequalities in child development begin prenatally and in the first years of life, with cumulative and long-term impacts on adult outcomes (Marmot et al., 2010). In the UK it is estimated that around 50 per cent of the population experience at least one adverse childhood experience (ACE) (Hughes et al., 2017), with around 12 per cent experiencing four or more ACEs. Poor mental health is a prominent consequence, reaching to the next generation (NHS Health Scotland, 2017). Mental health problems in pregnancy and the first year after birth are experienced by up to 20 per cent of women (Davies, 2014). If untreated maternal mental illness during the perinatal period can adversely affect: infant cognitive, emotional and behavioural outcomes; maternal-infant bonding and quality of parenting (Hogg, 2013). Promoting mental health as an integral part of preconception care and during the perinatal period is important.

Examples of PHE’s work include partnership with NHS and local government to lead the prevention work stream within the “Maternity Transformation Programme”, developing a multi-disciplinary perinatal competency framework with Health Education England (The Tavistock and Portman NHS Foundation Trust, 2018). Additionally, social marketing expertise was used to develop mental health content of the “Start4Life Information Service for Parents” (www.nhs.uk/start4life).

The early years part of the life course is particularly crucial for laying the foundations for healthy development and protecting against adverse experiences through the promotion of early attachment and positive parenting (Public Health England, 2016a). Children with speech, language and communication needs are at higher risk of poorer outcomes, including their social, emotional and mental health (Bishop and Leonard, 2014). PHE has formed a partnership with Department for Education to improve early language skills and assessment, particularly for health visitors to use at 2–2.5 years assessment. In addition, PHE’s focussed efforts to ensure every child is given the best start in life includes assuring local delivery of the five universal health visitor reviews (to all children under 5) as part of the “Healthy Child Programme” (Department of Health, 2009) and leadership of a cross-sector “Best Start in Life” programme.

Evidence supports a multi-level approach to building resilience at an individual level, within families and at an organisational level to help manage adversity (AYPH, 2016). PHE has taken a number of steps to promote resilience including publishing with the Association of Young People’s Health a framework for a public health approach to resilience. This highlighted key evidence (Public Health England, 2016d) and the way data and intelligence is reported so as to highlight the significance of key protective factors to inform local planning (Public Health England, 2017g). PHE has also drawn on evidence about building young people’s resilience to inform the development of “Rise Above” – a peer led digital platform for 11–16 year olds. This uses relevant content in creative ways, tapping into inspirational video from vloggers and YouTubers. The aim is
to get young people talking about the things that matter to them and helping them to develop resilience skills for dealing with diverse life challenges such as cyberbullying, exam stress, body image and self-harm (Rise Above, 2018).

In England school nurses provide an important role in providing a universal non-stigmatised confidential service bridging the interface between schools, families and specialist services. School nurses provide early identification and help to navigate referral systems and pathways. Through its professional leadership role for school nursing, PHE is working to promote a focus on developing resilience and emotional wellbeing as a high impact area (Public Health England, 2014b).

There is good evidence of a reciprocal relationship between health and wellbeing and educational attainment (Bonell et al., 2014) and there is evidence that supports the effectiveness of taking a whole school/college approach in PMH to realise positive outcomes (Langford et al., 2014). PHE has taken action to raise awareness amongst senior leaders in education settings (and civil society organisations who work with them). This focussed on the evidence-based principles for whole school/system approaches to mental health and wellbeing (Children and Young People’s Mental Health Coalition and Public Health England, 2015c) and their measurement (Public Health England, 2016c). PHE has also worked closely with Department of Health and Social Care and the Department for Education mental health policy teams to ensure these functions are implemented in schools through a recent UK Government green paper (Department of Health and Social Care and Department for Education, 2018).

Such a wide scope of potential work in promoting children and young people’s mental health inevitably provides challenges in prioritisation. These include striking the right balance between universal and targeted approaches, local actions and national policy and between the different stages of early development. The role of PHE regional teams and their relationships with local systems is crucial in addressing some of these challenges, to complement what the national team achieves. A further challenge is the appropriate use of evidence. Studies grounded in linear models of cause and effect are problematic in setting realistic expectations concerning the measurable impact of PMH approaches in the context of complex systems (Rutter et al., 2017). This has led PHE to a re-balancing of the place of research evidence alongside service data and intelligence, the voices of children, young people and carers and insights from practice to shape initiatives.

**Suicide prevention**

In England, 13 people kill themselves on average every day. Suicide is the biggest killer in men under 50 years old, young people and new mothers (Department of Health and Social Care, 2017). PHE has worked within the policy framework of the cross-government “National Suicide Prevention Strategy” (HM Government, 2012) to deliver on prevention policies.

Local authorities are well placed to prevent suicide because their work on public health addresses many of the risk factors such as alcohol and drug misuse and spans efforts to address wider determinants of health such as employment and housing (Public Health England, 2016e). PHE therefore undertook system leadership to encourage local authorities to take responsibility for suicide prevention through developing multi agency partnerships, audits and plans. PHE also developed a local suicide prevention profiling tool (Public Health England, 2017b) that helps local areas to identify need and benchmark against similar areas. All local authorities now have plans in place or in final stages of development across England. PHE also supported training the local public health workforce with the development of competencies for suicide prevention and self-harm (HEE, 2018).

PHE has also provided a comprehensive synthesis of the evidence and translated this into accessible guidance on developing prevention plans (Public Health England, 2014a), high risk locations (Public Health England, 2015b) and responses to suicide clusters (Public Health England, 2015a, 2015e). Partnerships with other government agencies has led to the development of guidelines on preventing suicide in the community and custodial settings (NICE, 2018), expand the evidence base on high risk occupational groups (ONS, 2017) and higher education settings (ONS, 2018), the development of a toolkit on preventing suicides in higher education settings (Universities UK, 2018) and guidance about the role employers can have in suicide prevention and in response to a suicide in an employee (BITC, 2017a, 2017b).
Civil society is at the heart of this work, as evidenced by the joint PHE and National Suicide Prevention Alliance work with support after suicide. This includes the co-production of a support booklet called “Help is at Hand” (Public Health England, 2016b), a practical and emotional guide for anyone affected by a suicide, as well as guidance to local public health leaders in how to provide local services that provide support for those bereaved by suicide (Public Health England, 2017f).

As with many areas of PMH, evaluation of suicide prevention approaches can be challenging as the numbers of suicides, particularly in a local authority area are low. Identifying causality between intervention and suicide outcomes is a further challenge. More can be done but currently local areas are being supported with a self-assessment approach to evaluation of suicide prevention through a “sector-led improvement” process (LGA, 2018).

**Prevention concordat for better mental health**

One of the headline prevention methodologies within the recent Five Year Forward View on Mental Health (NHS England, 2016) was to establish a PHE-led “Prevention Concordat for Better Mental Health”. The aim is to deliver a step change in prevention-focussed leadership and practice in every local area across England (Public Health England, 2017d). This cross-sector approach adopts evidence from outside the traditional mental health sectors and includes action on wider determinants. The cumulative effect of integrating PMH prevention and promotion into the daily business and interventions of cross-sectoral organisations provides the greatest potential for sustainable change in reducing health inequalities (Goldie et al., 2016). Recognising this, the prevention concordat scope includes local authorities and non-governmental organisations including faith groups, schools and employers. To support this initiative, PHE developed:

- a stocktake of current prevention plans and mental health joint strategic needs assessments (JSNA) to establish existing activity (Public Health England, 2017e);
- guidance that informs the development of local prevention planning arrangements (Public Health England, 2017d);
- local authority mental health champions masterclasses to grow prevention-focussed political leaders;
- a new mental health JSNA toolkit to make it easier for local areas to assess the local mental health needs of their populations (Public Health England, 2017f); and
- updated guidance on the return on investment of prevention of mental illness interventions (Public Health England, 2017g) to help local areas select and make the economic case for commissioning prevention programmes.

To date the concordat has been endorsed by 60 national organisations who have committed to take action to improve mental health (Public Health England, 2017d).

**Workforce development**

A key challenge for PMH initiatives is making mental health everyone’s business (WHO, 2013). This requires not only engagement of a wide range of sectors but also the development of the workforce with the knowledge and skills to take action. This was an early priority for the team and following consultation with stakeholders, PHE produced a PMH leadership and workforce development framework (Stansfield, 2015; Public Health England, 2015d). It identifies 12 core principles for PMH practice and six ambitions for change covering leadership, public health expertise and the wider frontline workforce. A call to action (Public Health England, 2015f) has helped to gain support across organisations to embed the priorities for action – later developed into 20 high impact changes, 17 of which have work underway or completed. The framework was recognised within the Five Year Forward View for Mental Health (NHS England, 2016) which has led to the resourcing of a new national PMH programme within Health Education England (Health Education England, 2017; NHS England, 2017). Specific action has included delivery of a national train the trainers programme in mental wellbeing.
brief intervention resulting in 300 trainers to date across England, e-learning modules in
community-centred approaches, development of PMH subject guides to inform specialist
public health training and introductory learning for the wider workforce and development of
local authority leadership through a mental health champions programme for elected
representatives.

Limitations of the work include the framework being extremely broad and not focusing on a
specific workforce. Further work is needed to refine the messages and principles to key
audiences. To address these issues work is now underway to review impact with partners and
refresh the priorities into deliverable actions.

Data and information tools

Data has underpinned everything that PHE has done. England is fortunate in the richness
of data sets that inform our work in PMH. To ensure these data sets are as good as
possible, we have established a National Mental Health, Dementia and Neurology Intelligence
Network (NMHDNN) hosted by PHE and working across the care system. This network
of data professionals, analysts and end-users has led to the delivery of a suite of flexible data
profiling tools that provide local authorities, the NHS and other planners and commissioners
with the best information available on mental health. This assists local leaders to understand
need and interpret and address mental health issues in a way that is relevant to them and
helps drive improvements in mental health. Information can be benchmarked against other
local areas, and similar populations for England. The suite available within the “fingertips
platform” (Public Health England, 2017a) include interactive data sets on common mental
health problems, severe mental illness, suicide prevention, co-existing substance misuse
and mental health issues, children and young people’s mental health and wellbeing, perinatal
mental health, JSNA for mental health and wellbeing, and mental health crisis care. The mental
health and wellbeing needs assessment profile has a complimentary knowledge guide that links
to policy and guidance, the evidence base and further sources of data. It begins with a
focus on prevention and PMH with chapters on “understanding place” and “understanding
people”, it then follows a life course approach with chapters on “perinatal mental health”,
“children and young people’s mental health”, “mental health of working age adults” and “mental
health of older people”.

We have developed a robust methodology in developing these “fingertips profiles”. First, we
collate relevant guidance and evidence to inform the key themes or profile domains and assess
available data sets to inform tool content. This is informed by peer-reviewed research and
guidance such as from the National Institute of Health and Care Excellence (NICE) and is
presented to an expert reference group made up of academics, data experts, analysts
and users who interpret this evidence and make expert judgements to guide the profile
purpose and content. Key overall data sources are collated into data catalogues and the purpose
and reason for inclusion of each metric is defined and included in the profile metadata in
the final tool. Each profile is reviewed periodically with the aim of ensuring it is up-to-date
and draws upon all appropriate data sets that enable it to provide a robust local overview of the
relevant care pathway.

The fingertips profiles enable understanding of need and how that need is being met at a local
level. Anecdotal feedback on the mental health profiles from users is generally very positive. They
are well used and mental health accounts for 25 per cent of all fingertips profile use. However,
they have their limitations. Their content is dictated by available data sets not by system
requirements – our network is seeking to address this over time. Because the profiles bring many
data sets together in one place, relating one data set to another can be confusing or sometimes
misleading – for instance metrics cover different time periods (some quarterly, some annual), or
based on different populations (e.g. whole population, survey sample, adults defined as 18+ or
16 – 64) or are presented as a rate, percentage, ratio or count. Different administrative boundaries
at local level also cause some difficulties. Relating data on identified need (local government
geographies) to data on the effectiveness of NHS services (NHS commissioning geography) to
meet that need can be particularly problematic. However, local areas have a good understanding
of their local administrative boundary issues.
Workplace public mental health

The workplace presents a good opportunity to reach people who may have either diagnosed or un-diagnosed mental health problems, including depression, to offer them support. Employee welfare is now widely acknowledged as a key driver of business success (Edmans et al., 2014) and so employers are becoming increasingly aware of the importance of looking after both the mental and physical health of their staff.

In England there has been a lot of activity in this area. Over 700 companies have signed the Time to Change employer pledge to take action to reduce the stigma of mental health at work (www.time-to-change.org.uk/get-involved/get-involved-workplace/pledged-employers). PHE and Business in the Community recently launched a mental health toolkit for employers (BITC, 2016) aimed at businesses of all sizes. This offers decision makers and line managers a roadmap for addressing mental health at work. The toolkit has been downloaded over 10,000 times.

What works centre for wellbeing

As part of the UK Coalition Government (2010–2015) policy to improve public services through evidence-based policy and practice, a network of national “What Works” centres were established in England (HM Government, 2018). With the growing importance of improving wellbeing as an ultimate policy objective (Durand, 2018), PHE was a founding partner of the What Works Centre for Wellbeing (https://whatworkswellbeing.org/) and hosted the development team as they established themselves in 2015. The What Works Centre is a cross sector, cross department partnership to understand what organisations – governments, business, communities – can do to improve wellbeing that is evidence informed and cost effective. Its focus, so far, is on collation and synthesis of the known global evidence, using the same evidence standards as used by NICE, and in the translation and dissemination of that evidence in a way that is relevant and accessible to a wide range of audiences. Where evidence gaps have been identified, the Centre works with a broad range of partners to fill the gaps. Reports have already been published looking at, amongst other topics, housing (What Works Centre for Wellbeing, 2017b), measuring impact on wellbeing (What Works Centre for Wellbeing, 2018), job quality (What Works Centre for Wellbeing, 2017c), unemployment (What Works Centre for Wellbeing, 2017e), sport and dance (What Works Centre for Wellbeing, 2017d) and conceptualising community wellbeing (What Works Centre for Wellbeing, 2017a).

Conclusion

Mental health is an important area of health policy. In many countries and previously in England the policy focus has been on scale up of effective treatment services. Globally, there is now recognition that the emphasis on treatment requires a complementary priority on population mental health and wellbeing, in terms of prevention and promotion. In England, PHE has led on the delivery of this over the last five years and has developed numerous outputs across various related topics. There is much to learn and much to do in taking an upstream approach to mental health. Collaborations with other public health institutes and foreign Governments could enhance the work further and assist in the sharing of learning to enhance global efforts to promote mental health.

References


Further reading


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Association between long-term stressors and mental health distress following the 2013 Moore tornado: a pilot study

Lauren A. Clay and Alex Greer

Abstract

Purpose – Stress has considerable impacts on human health, potentially leading to issues such as fatigue, anxiety and depression. Resource loss, a common outcome of disasters, has been found to contribute to stress among disaster survivors. Prior research focuses heavily on clinical mental health impacts of disaster experience, with less research on the effect of cumulative stress during long-term recovery. To address this gap, the purpose of this paper is to examine the influence of stressors including resource loss and debt on mental health in a sample of households in Moore, Oklahoma, impacted by a tornado in 2013.

Design/methodology/approach – For this pilot study, questionnaires were mailed to households residing along the track of the May 2013 tornado in Moore, OK. Descriptive statistics were calculated to report sample characteristics and disaster experience. Independent associations between disaster losses and demographic characteristics with the outcome mental health were examined with $\chi^2$ and unadjusted logistic regression analysis. Adjusted logistic regression models were fit to examine resource loss and mental health.

Findings – Findings suggest that the tornado had considerable impacts on respondents: 56.24 percent ($n=36$) reported that their homes were destroyed or sustained major damage. Greater resource loss and debt were associated with mental health distress during long-term recovery from the Moore, OK, 2013 tornadoes.

Research limitations/implications – The association between resource loss and mental health point to a need for interventions to mitigate losses such as bolstering social support networks, incentivizing mitigation and reducing financial constraints on households post-disaster.

Originality/value – This study contributes to a better understanding of long-term, accumulated stress post-disaster and the impact on health in a literature heavily focused on clinical outcomes.

Keywords Mental health, Disaster recovery, Stress, Conservation of resources, Stressors, Resource loss

Paper type Research paper

Introduction

On May 20th, 2013, the city of Moore was impacted by an EF5 tornado, killing 24 individuals, including ten children, and injuring 377 others. After the event, a number of organizations offered mental health services to affected residents, with the state of Oklahoma taking a major role in the provision of mental health services through the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS). ODMHSAS mounted a community wide effort to address mental health needs, training 680 clinicians in Psychological First Aid, deploying staff to assist first responders, and running a field services office through June 2015 to provide services (ODMHSAS, 2016).

Previous research on disasters has found that disaster recovery presents a number of potential stressors for survivors (Richardson et al., 2014; Suzuki et al., 2014; Van der Velden et al., 2014; Sampson et al., 2016). These stressors may come in the form of property damage or the loss of a home, transportation, job or social support systems, increased responsibilities and role confusion, injuries or loss of family members or friends, and displacement from home.
and community. Stress may manifest in a number of forms, from temporary stress to more long-term mental health issues such as depression and post-traumatic stress disorder (PTSD) (North and Pfefferbaum, 2013).

One way researchers try to explain how resource loss in disasters affects individuals is through the Conservation of Resources (COR) theory. Central to COR is that individuals strive to acquire and protect valuable resources, defined as valued commodities, or assets that can help one obtain other items of value (Hobfoll, 2001). These resources can come in the form of objects (such as a car, a home or clothes), conditions (such as a marriage or a job), personal characteristics (such as self-esteem or confidence) and energies (such as money or insurance) (Hobfoll and Lilly, 1993). When individuals lose resources, or even when there is a threat of resource loss, they attempt to use resources at their disposal to limit additional losses (Fussell and Lowe, 2014). Acute resource loss, then, has a considerable impact on stress levels, and if not addressed can accumulate in the form of continued resource loss (Hobfoll, 2011). Those that are most vulnerable before a disaster are often least able to both stop resource loss and have the fewest resources available to help them acquire other resources. For example, individuals of a lower socioeconomic status that are displaced by disaster often have the most difficult time returning to work or reestablishing post-disaster housing (in part due to a loss of objects and energies), thereby limiting their ability to restore lost resources. A number of researchers have previously used COR to explore the effect of resource loss after disasters, finding a positive relationship between resource loss and stress (Kaiser et al., 1996; Benight et al., 1999; Sattler et al., 2006; Smith and Freedy, 2000; Cook et al., 2013; Freedy et al., 1994; Arata et al., 2000).

COR is used in the present pilot study because tornadoes destroy considerable resources for households. Tornadoes typically have relatively narrow area of impact, when compared to other meteorological events like hurricanes, but can have substantial impacts on the built infrastructure (McCarthy, 2003). Additionally, while warnings of the potential for severe weather may come a few days before a storm, the average tornado warning lead time is 14 minutes or less, leaving individuals little time to prepare to respond (Zhang et al., 2018). For this study, we specifically examine how losses associated with the 2013 Moore tornado influenced mental health distress during long-term recovery. Disaster research has focused heavily on PTSD, anxiety, and other more long-term, severe mental health issues (Sattler et al., 2006; Smith and Freedy, 2000; Arata et al., 2000; Galea et al., 2005). Few studies, however, examine long-term daily stress or the accumulation of stressors. This study begins to address this shortcoming by examining the association between debt and acute resource loss and mental health distress.

Methods

The target population for the study was households affected by disaster, so we relied on a target sample population residing near the track of the 2013 tornado in Moore, OK. To obtain a sample of households from the target population, we used Geographic Information System software to layer the National Oceanic and Atmospheric Association map of the tornado track and households from the Cleveland County government tax database. To capture some of the most affected households, we drew a polygon around the tornado track to give us a list of all of the addresses in the heavily affected area. Then, using a random number generator, we selected 15 percent of the 5,030 households within the polygon, resulting in a sample size of 750 households in the study sample. Of those 750 households, 71 surveys were returned (9.47 percent). While we knew this sampling frame might endanger our response rate due to difficulties contacting populations affected by disasters, we wanted to capture the most affected households in the area given that COR theory suggests this resource loss may affect their mental health. Following the Tailored Design Method, a postcard, followed by three waves of the questionnaire were mailed to the sample in three-week intervals 33–35 months after disaster exposure (Dillman et al., 2014).

Measures

The survey asked respondents about their demographics characteristics, disaster impacts (financial losses, injuries to themselves and family members, etc.), their experience with aid and
assistance, social support, and about their health. Resource loss was assessed using a 46-item scale based on COR theory and consistent with past studies which report a Cronbach’s α of 0.94 and 0.91 for a 24-item and 12-item instrument, respectively (Hobfoll, 1989; Benight et al., 1999; Freedy et al., 1992). Respondents were asked to rate the extent of loss (0 = no loss at all, 4 = a great degree of loss). This scale asked questions related to their relationships, material possessions, time, personal perceptions, and community involvement. Four resource loss subscales were created and a summary score was computed from the four subscales (range 0-23.6). The sample mean was used as the score cut point for high/low resource loss.

The outcome, mental health, was assessed using a modified version of the SF-12 (slight wording and formatting adjustments to fit within a larger survey), a validated measure of physical and mental health distress (Ware et al., 1996; Gandek et al., 1998). QualityMetric software was used for scoring. The mental health distress score (MCS) was computed and respondents with a score of less than or equal to 42 were categorized as having poor mental health. This score is often used to determine psychological distress in a US context with a sensitivity of 74 percent and a specificity of 81 percent, which is consistent with previous disaster research studies (Ware et al., 1996; Abramson et al., 2008; Clay et al., 2017). Additional measures of disaster exposure and experience included children in the household at the time of the tornado (yes/no), level of home damage as a self-assessed measure using the Federal Emergency Management Agency definitions (FEMA, 2016) (destroyed, major damage, minor damage, affected, not damaged), loss of vehicle, job, or pet (yes/no), whether respondents had property insurance, whether debt was incurred due to recovery expenses (yes/no), how much savings were spent on recovery (all, quite a bit, a moderate amount, a little, none-not necessary, none-had no savings), whether aid was received (yes/no), and the number of times respondents moved after the storm (no moves, 1–2, 3–5).

**Data analysis**

Descriptive statistics were calculated to describe sample characteristics, experience with the disaster, and stressors. A χ² analysis was performed to determine if differences in disaster experience, stressors and resource loss exist between respondents with and without self-reported mental health distress in a sample of households residing near the 2013 tornado. Exploratory logistic regression modeling was used to provide preliminary support for future research studies of findings from bivariate analyses. Statistical analysis was completed using Stata version 13.1 (StataCorp, 2013). IRB approval was obtained from the Institutional Review Board at D’Youville College. Return of the mailed survey by participants was accepted as implied consent to participate in the research.

**Results**

Of the 71 returned surveys, 61 complete surveys were retained for cross-sectional analysis. The sample is predominantly non-Hispanic white (n = 57, 91.9 percent). Females make up 67 percent (n = 40) of the sample and the mean age of respondents is 56 (SD 14.7). Education level varied more with 12 percent of respondents having less than a high school diploma or GED (n = 7), 48 percent having some college or a two-year degree (n = 29), 23 percent having a four-year degree (n = 14) and 15 percent holding a graduate degree (n = 9). Nearly half of respondents report working full time (n = 29) and another 37 percent are retired (n = 22). Over half the sample report being married (n = 38, 63 percent), 15 percent report being divorced (n = 9), and 10 percent are widowed (n = 6). Less than 20 percent of respondents report an annual income below $35,000 a year (n = 11, 18.64 percent). Between 15 percent (n = 9) and 22 percent (n = 13) of the sample report each of the income groups from $35,000–50,000 to $100,000–200,000. Children in the household during the tornado were reported by 61 percent (n = 35) of respondents (see Table I). Given our low response rate, we were concerned about non-response bias, so we compared our sample to the population using the American Community Survey 2011–2015 five-year estimates of demographic characteristics of the area (US Census, 2016). In general, the sample is a bit older (56 compared to 32 mean age), includes more people that identify as white (91.9 percent compared to 87 percent), and has more females
These differences, however, are to be expected. Asking for the head of household to respond often results in an older population and, in a study of response rates to different forms of surveys, Sax et al. (2003) found that women responded more than men did to all forms of survey (paper, web, etc.).

<table>
<thead>
<tr>
<th>Table I</th>
<th>Sample demographic characteristics by mental health distress outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Good mental health</td>
</tr>
<tr>
<td>Mental health</td>
<td>44 (72.1)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>White/Caucasian</td>
<td>38 (69.1)</td>
</tr>
<tr>
<td>African American/Black</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Native American/Aleutian/Native Alaskan</td>
<td>2 (100.0)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (100.0)</td>
</tr>
<tr>
<td>Multirace</td>
<td>2 (100.0)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2 (100.0)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>15 (79.0)</td>
</tr>
<tr>
<td>Female</td>
<td>28 (71.8)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>25–34 years</td>
<td>6 (75.0)</td>
</tr>
<tr>
<td>35–44 years</td>
<td>4 (100.0)</td>
</tr>
<tr>
<td>45–54 years</td>
<td>8 (67.1)</td>
</tr>
<tr>
<td>55–64 years</td>
<td>11 (78.6)</td>
</tr>
<tr>
<td>65–74 years</td>
<td>6 (60.0)</td>
</tr>
<tr>
<td>75+ years</td>
<td>7 (100.0)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Some high school</td>
<td>1 (100.0)</td>
</tr>
<tr>
<td>High school graduate, GED</td>
<td>4 (80.0)</td>
</tr>
<tr>
<td>Some college</td>
<td>14 (73.7)</td>
</tr>
<tr>
<td>College graduate 2-year degree</td>
<td>7 (70.0)</td>
</tr>
<tr>
<td>College graduate 4-year degree</td>
<td>9 (69.2)</td>
</tr>
<tr>
<td>Some graduate studies</td>
<td>1 (100.0)</td>
</tr>
<tr>
<td>Graduate degree</td>
<td>7 (77.8)</td>
</tr>
<tr>
<td>Employment</td>
<td></td>
</tr>
<tr>
<td>Full time, 35+ hours per week</td>
<td>23 (79.3)</td>
</tr>
<tr>
<td>Part-time 20-35 hours per week</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Occasional, less than 20 hours per week</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Disabled</td>
<td>1 (33.3)</td>
</tr>
<tr>
<td>Student</td>
<td>1 (100.0)</td>
</tr>
<tr>
<td>Retired</td>
<td>16 (76.2)</td>
</tr>
<tr>
<td>Homemaker</td>
<td>2 (66.7)</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>28 (75.7)</td>
</tr>
<tr>
<td>Living with someone as though married</td>
<td>2 (100.0)</td>
</tr>
<tr>
<td>Single, never married</td>
<td>3 (60.0)</td>
</tr>
<tr>
<td>Divorced</td>
<td>7 (77.8)</td>
</tr>
<tr>
<td>Widowed</td>
<td>3 (60.0)</td>
</tr>
<tr>
<td>Income in 2015</td>
<td></td>
</tr>
<tr>
<td>&lt;= $10,000</td>
<td>1 (50.0)</td>
</tr>
<tr>
<td>$10,000–19,999</td>
<td>2 (86.7)</td>
</tr>
<tr>
<td>$20,000–34,999</td>
<td>1 (20.0)</td>
</tr>
<tr>
<td>$35,000–49,999</td>
<td>9 (69.2)</td>
</tr>
<tr>
<td>$50,000–74,999</td>
<td>7 (77.8)</td>
</tr>
<tr>
<td>$75,000–99,999</td>
<td>8 (88.9)</td>
</tr>
<tr>
<td>$100,000–200,000</td>
<td>11 (91.7)</td>
</tr>
<tr>
<td>&gt; $200,000</td>
<td>1 (100.0)</td>
</tr>
<tr>
<td>Home ownership</td>
<td></td>
</tr>
<tr>
<td>Own</td>
<td>43 (71.7)</td>
</tr>
<tr>
<td>Rent</td>
<td>1 (100.0)</td>
</tr>
</tbody>
</table>
χ² analysis of sample demographic characteristics and the outcome mental health showed no statistically significant differences in the outcome mental health for different demographic groups. Respondents report a high level of loss from the disaster. More than half of study participants reported that their homes sustained major damage or were destroyed (n = 36, 56.3 percent). Another 37.5 percent (n = 24) report minor damage or being affected by the tornado and nearly one-third of the sample report losing a vehicle (n = 21, 32.3 percent). Loss of a job, a pet, or injury to someone in the household was much less prevalent among study participants (4.8, 7.7 and 12.3 percent, respectively). All but one respondent indicated having homeowner’s insurance (98.4 percent), however 30 percent (n = 18) of participants reported taking on debt due to recovery expenses. The mean damage estimate was $127,562 and the mean of estimated damage covered was $110,107. To make up the shortfall, almost 40 percent of respondents reported using a moderate amount to all of their savings on recovery-related expenses (n = 23, 39.0 percent).

Nearly 60 percent of the sample report receiving aid or monetary assistance from other sources (n = 36, 59.0 percent), the mean assistance reported was $11,872. The mean number of moves reported by households was 1.78 (SD 1.31) with almost 30 percent of respondents (n = 17, 28.8 percent) moving between three and five times during the recovery period assessed. When asked about losses across four categories of resources, 43 percent (n = 21) of respondents reported high resource loss from the May 2013 tornado (see Table II).

Over one quarter of respondents indicated poor mental health (n = 17, 27.9 percent) on the SF-12. χ² and Fisher’s exact analysis of disaster exposure measures with the outcome mental health showed that debt (p < 0.01) and resource loss (p < 0.001) were independently associated with mental health. Within the individual resource loss domains personal characteristics, energies, and conditions were also statistically significantly associated with poor mental health (see model 1, Table III).

Unadjusted logistic regression was computed for debt, resource loss summary score, and each domain of resource loss (Table III, model 1) and adjusted logistic regression models were fit for resource loss (summary measure) and debt with the outcome mental health (Table III, model 2) and for individual resource loss domains independently associated with mental health and debt (Table III, model 3). In model 1, high resource loss was a risk factor for poor mental health. For each one unit increase in resource loss summary score, respondents are three percent more likely to report poor mental health (OR 1.03, 95% CI 1.01, 1.06) and respondents that reported taking on debt due to the tornadoes were greater than five times more likely to report poor mental health (OR 5.67, 95% CI 1.60, 20.13). We then examined the association between each domain included in the resource loss summary score and the outcome poor mental health. Personal characteristics, energies and conditions losses were all statistically significantly associated with mental health during long-term recovery from the 2013 tornadoes while no association was observed for material losses and mental health outcomes. For each one point increase in loss related to personal characteristics, respondents were 9 percent more likely to report poor mental health (OR 1.09, 95% CI 1.03, 1.16), for each one point increase in energies loss, respondents were 8 percent more likely to report poor mental health (OR 1.08, 95% CI 1.01, 1.14), and for each one point increase in conditions loss, respondents were 14 percent more likely to report poor mental health (OR 1.14, 95% CI 1.02, 1.27) (see Table III).

Next, resource loss (summary score) and debt were examined in an adjusted logistic regression model. Model 2 demonstrated that for each one-point increase in resource loss score, respondents had more than 13 times greater odds of reporting poor mental health (AOR 13.51, 95% CI 1.34, 136.60). Wide confidence intervals are observed due to the small sample size. Debt was not associated with the outcome mental health in the adjusted model (Table III, model 2).

Finally, we examined the resource loss sub-domains that were independently associated with the outcome mental health distress in an adjusted logistic model with took on debt (Table III, model 3). Personal characteristic losses were statistically significantly associated with poor mental health, while debt is explained away in this sample of households impacted by the 2013 tornadoes in Moore, OK. Respondents reporting personal characteristics losses are ten percent more likely to report poor mental health than respondents not reporting personal characteristic losses (AOR 1.10, 95% CI 1.00, 1.22).
In this pilot study, we used the COR theory to explore the differences in disaster losses by mental health status among heavily impacted individuals. While our small sample size limited our ability to test COR theory fully, much of what we found dovetails with existing literature, with a few exceptions.

### Table II

**Disaster experience, stressors, and mental health of the sample by mental health outcome, significance from χ² analysis reported**

<table>
<thead>
<tr>
<th>Mental health outcome</th>
<th>Above threshold (good)</th>
<th>Below threshold (bad)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource loss (summary score)</td>
<td>Mean (SD)</td>
<td>27.3 (26.7)</td>
</tr>
<tr>
<td>Personal characteristics Loss</td>
<td>10.5 (10.7)</td>
<td>8.2 (1.5)</td>
</tr>
<tr>
<td>Energies/time Loss</td>
<td>9.0 (10.4)</td>
<td>6.9 (1.5)</td>
</tr>
<tr>
<td>Objects/material Loss</td>
<td>6.8 (7.3)</td>
<td>7.5 (1.2)</td>
</tr>
<tr>
<td>Conditions/relationship Loss</td>
<td>4.5 (7.8)</td>
<td>2.8 (0.7)</td>
</tr>
<tr>
<td>Mental Health Distress</td>
<td>Frequency (%)</td>
<td>17 (27.9)</td>
</tr>
<tr>
<td>High resource loss (categorical)***</td>
<td>Frequency (%)</td>
<td>16 (25.0)</td>
</tr>
<tr>
<td>Home impact</td>
<td>Frequency (%)</td>
<td>20 (31.3)</td>
</tr>
<tr>
<td>Minor damage</td>
<td>Frequency (%)</td>
<td>6 (9.4)</td>
</tr>
<tr>
<td>Affected</td>
<td>Frequency (%)</td>
<td>18 (28.1)</td>
</tr>
<tr>
<td>Not damaged</td>
<td>Frequency (%)</td>
<td>4 (6.3)</td>
</tr>
<tr>
<td>Lost vehicle</td>
<td>Frequency (%)</td>
<td>21 (32.3)</td>
</tr>
<tr>
<td>Lost job</td>
<td>Frequency (%)</td>
<td>3 (4.8)</td>
</tr>
<tr>
<td>Lost pet</td>
<td>Frequency (%)</td>
<td>5 (7.7)</td>
</tr>
<tr>
<td>Someone in household experienced injury</td>
<td>Frequency (%)</td>
<td>6 (9.2)</td>
</tr>
<tr>
<td>Home insured</td>
<td>Frequency (%)</td>
<td>60 (98.4)</td>
</tr>
<tr>
<td>Took on debt due to recovery expenses**</td>
<td>Frequency (%)</td>
<td>19 (30.0)</td>
</tr>
<tr>
<td>Savings spent on recovery</td>
<td>Frequency (%)</td>
<td>9 (15.3)</td>
</tr>
<tr>
<td>Received aid</td>
<td>Frequency (%)</td>
<td>36 (59.0)</td>
</tr>
<tr>
<td>Number of moves</td>
<td>Frequency (%)</td>
<td>12 (20.3)</td>
</tr>
<tr>
<td>1–2 moves</td>
<td>Frequency (%)</td>
<td>30 (50.9)</td>
</tr>
<tr>
<td>3–6 moves</td>
<td>Frequency (%)</td>
<td>17 (28.8)</td>
</tr>
</tbody>
</table>

**Notes:** **p < 0.01; ***p < 0.001

### Table III

**Association between stressors and mental health**

<table>
<thead>
<tr>
<th></th>
<th>Model 1 (unadjusted)</th>
<th>Model 2 (adjusted)</th>
<th>Model 3 (adjusted)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR 95% CI</td>
<td>OR 95% CI</td>
<td>OR 95% CI</td>
</tr>
<tr>
<td>Took on debt</td>
<td>5.67**</td>
<td>1.60, 20.13</td>
<td>2.1</td>
</tr>
<tr>
<td>Resource loss summary score</td>
<td>1.03*</td>
<td>1.01, 1.06</td>
<td>13.51*</td>
</tr>
<tr>
<td>Individual resource loss domains</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Personal characteristics loss</td>
<td>1.09**</td>
<td>1.03, 1.16</td>
<td>1.10*</td>
</tr>
<tr>
<td>Energies/time loss</td>
<td>1.08*</td>
<td>1.01, 1.14</td>
<td>0.96</td>
</tr>
<tr>
<td>Objects/material loss</td>
<td>0.96</td>
<td>0.88, 1.04</td>
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</tr>
<tr>
<td>Conditions/relationship loss</td>
<td>1.14*</td>
<td>1.02, 1.27</td>
<td>1.11</td>
</tr>
</tbody>
</table>

**Notes:** **p < 0.05; ***p < 0.01

### Discussion

In this pilot study, we used the COR theory to explore the differences in disaster losses by mental health status among heavily impacted individuals. While our small sample size limited our ability to test COR theory fully, much of what we found dovetails with existing literature, with a few exceptions.
We found a high level of resource loss in the sample and variables associated with resources including debt and resource loss reported after the tornado differed among respondents with and without mental health distress (Table III). When examining the sub-domains of COR individually, we found that personal characteristics, energies and conditions losses were all significantly different for individuals with poor mental health compared to their healthier counterparts.

Our findings regarding energies are consistent with disaster and stress literature (Arata et al., 2000; Monnier et al., 2002; Ritchie, 2012), suggesting that energies prevent object losses or allow for the replacement of lost objects quickly, thereby potentially protecting against developing mental health distress. Losses in conditions, such as family stability, personal health, or medical insurance were also significantly different based on mental health status. This is also consistent with previous findings that suggest an individual’s networks (such as family or close friends) provide support (in the form of objects or energies) after disasters that halt losses and lessen the chances of developing mental health distress (Bonanno et al., 2007; Litz et al., 2006; Neria et al., 2008). Data collection on a larger sample of disaster-affected households is needed for more advanced modeling and exploration of individual domains of resource loss and to allow for controlling for potential confounders. Finally, longitudinal data collection is needed to investigate trajectories of recovery and stress over the emergency management cycle.

The lack of a relationship between objects and mental health, while a bit surprising, is consistent with the literature that privileges relationships, networks and trust as the key drivers of recovery efforts (Aldrich, 2010; Aldrich and Meyer, 2015; Cox and Perry, 2011; Hawkins and Maurer, 2009). As suggested by COR theory, individuals that do not have a deficit of other resources (such as energy) can use those resources to either prevent their objects from being taken away or gain new objects. There is, however, some nuance to this finding. We also measured resource constraint in form of debt, asking respondents if they took on any debt related to their recovery from the tornado. We found debt to be statistically significantly different for respondents with and without mental health distress (Table III), suggesting that if households have considerable financial constraints they may not be able to access energies to halt losses, leading to resource loss spirals. Given that many researchers argue that disasters exacerbate pre-event vulnerabilities (Finch et al., 2010; Bruneau et al., 2003; Flanagan et al., 2011), future research should examine whether debt was incurred before the tornado or exacerbated by the storm, and the influence on mental health outcomes.

It is important to keep in mind the limitations to this pilot study when considering the findings presented. First, we recruited participants from a disaster-affected sampling frame, systematically excluding anyone that relocated from the area. Follow-up research should capture perspectives of families that relocated following disaster exposure. Second, this study had a small sample size and low response rate, possibly due in part to the nonprofit classification of our mailers that resulted in a lack of notice if a mailer was undeliverable and using a mail survey in a disaster affected community. That said, survey methodologists note that it is not uncommon to achieve response rates of less than 10 percent using a mail survey and in 2017 Gallup reported an average response rate of seven percent (Dillman et al., 2014; Marken, 2018). Further, response rate is not a reliable indicator of representativeness (Czajka and Beyler, 2016). Population demographics were reported to look for indicators of this issue. The small sample size limited the power and modeling capability, particularly in relation to null results, however the detailed questions included in the mail survey provides a rich set of data on each participant to explore experiences with stress during long-term recovery that might not be possible with other data collection methods. Finally, data were collected as part of a cross-sectional, retrospective study. Given that, we were not able to determine causation between exposures and outcomes.

Despite these common study design limitations, the present study uses COR theory to empirically examine differences in stressors and resource loss by respondent reported mental health status during long-term disaster recovery and offers directions for a larger scale study of long term stress, resource loss and mental health following disasters. While this sample was small, a bit older, and more female than the population of Moore, Oklahoma, limiting generalizability, our analysis revealed that demographic characteristics were not statistically
significantly associated with the outcome mental health in this sample, so differences from the population are less important in considering the findings.

In this study, we explored the relationship between factors that have been found in past research to protect against and contribute to the development of poor mental health, relying on the COR theory. The goal of this pilot study was to serve as the foundation for a future larger study and guide the selection of participants, theoretical frameworks employed and events sampled. This study shows that there is the need for future studies of heavily affected populations after disasters to better understand how long term stress manifests in the wake of events. It also provides avenues forward for subsequent studies. Of note, results suggest that future studies should include less affected survivors to both increase the sample size, enabling a fuller exploration of COR theory, and consider how long term stressors created by the event emanate from the impact zone to surrounding communities. This could also be employed in the wake of different disaster types that incur qualitatively different disaster impacts (droughts, for example) to explore how those changes influence long term stress.

In general, given that resource-related factors including debt and resource loss were statistically significantly different for respondents with and without mental health distress, there are opportunities to intervene to limit resource loss in a post-disaster setting. Incentivizing mitigation measures and improving building codes are a cost-effective way to reduce losses and prevent stress from accumulating. Small measures, such as reinforcing asphalt shingles with additional nails or reinforcing garage doors to prevent collapse could reduce exposure in the case of disaster, potentially contributing to better mental health outcomes.

The importance of conditions brings to light the importance of fostering relationships in a post-disaster setting. Examples of such efforts were observed following the 2010 Christchurch earthquake. Gap Filler, supported by the Gap Filler Trust, initiated a project to transform empty plots of land around the city into spaces where people could come together and support each other during recovery. Gaps were filled with art installations, temporary gardens, a “Dance-o-Mat” where anyone could plug in a phone or iPod and have an impromptu dance party, and much more (Gap Filler, n.d.). Likewise, energies and debt are important considerations that can be addressed via intervention. For instance, by reducing financial constraints and providing energies (time and money, for example) for households as early as possible, aid workers can potentially address the issues that cause mental health exacerbation, addressing it before the issue ever forms. This requires us to expand what we consider mental health services and look more at addressing the development of stressors instead of just treating mental health conditions that manifest. Xenia, Ohio, is a great example of this, where in the wake of a tornado in 1974, they expanded their definition of mental health services, offering people help finding employment and free childcare, thereby reducing financial constraints (Dynes and Quarantelli, 1975; Clay et al., 2018).

References


StataCorp (2013), Stata Statistical Software, 13 ed., StataCorp LP, College Station, TX.


Further reading


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Do Australian media apply recommendations when covering a suicide prevention campaign?

Renate Thienel, Marc Bryant, Gavin Hazel, Jaelea Skehan and Ross Tynan

Abstract

Purpose – Media reporting and portrayals of mental illness and suicide can play an important role in shaping and reinforcing community attitudes and perceptions. Depending on the content, a report about suicide can have either a negative (Werther-) or a positive (Papageno-) effect. Evidence-informed recommendations for the reporting of suicide in Australia are provided under the Mindframe initiative. The purpose of this paper is to assess the application of these recommendations in broadcasts associated with one of the largest national campaigns to promote suicide prevention, the R U OK? Day, a yearly campaign of the Australian suicide prevention charity R U OK?.

Design/methodology/approach – The sample consisted of 112 (32 TV, 80 radio) Australian broadcasts discussing the R U OK? Day suicide prevention campaign during the month preceding the 2015 campaign and on the national R U OK? Day itself. Broadcasts were coded for medium (TV or radio), content (suicide focus, mental illness focus or both) and consistency with Mindframe recommendations.

Findings – Over 97 per cent of broadcasts used language consistent with Mindframe recommendations. None of the broadcasts used images that negatively portrayed mental illness or suicide; there were no instances of using mental illness to describe a person’s behaviour; and no sensationalizing or glamorising terminology was used in the broadcasts. However, less than 40 per cent of the broadcasts included help-seeking information (e.g. helplines) and some of the broadcasts used negative or outdated terminology (e.g. “commit” suicide; “suffering” from mental illness).

Originality/value – The present study is the first to examine consistency with reporting recommendations around a national suicide prevention campaign (R U OK? Day). The results can steer improvements in current reporting and inform strategies to optimise future reporting.

Keywords Suicide, Prevention, Media recommendation

Introduction

Suicide is a global public health concern, with an estimated 800,000 suicide deaths each year (WHO, 2017). In Australia, data from the Australian Bureau of Statistics indicate that 2,866 people died by suicide in 2016 (Australian Bureau of Statistics, 2017). As risk factors associated with suicide are diverse, suicide prevention approaches (e.g. Lifespan in Australia, www.lifespan.org.au/ or SUPRANET in Europe Gilissen et al., 2017) suggest an integrated systems approach (WHO, 2014). One of the recommended strategies is to ensure accurate and sensitive portrayal of suicide in the media (WHO, 2014), as evidence has shown a clear link between the reporting of suicide and subsequent suicidal behaviour (for review see Pirkis and Blood, 2001). This has led to the development of reporting recommendations in more than 30 countries, including Australia (Pirkis et al., 2006, pp. 82-7). The present study is the first to examine whether media reporting associated with a national suicide prevention campaign (R U OK? Day) adheres to national reporting recommendations on suicide and mental illness.
The links between media reporting and suicide

Evidence has shown that how the media portrays suicide and mental illness can have a significant impact on vulnerable audiences. Depending on the way suicide is reported, this impact can be either helpful or harmful. A compelling body of evidence has shown a contagion-like relationship between some media reporting of suicide and subsequent suicidal behaviour (Hawton and Williams, 2005; Pirkis and Blood, 2001; Stack, 2005). Previous research has shown that the risk of subsequent suicides increases when reports contain specific details on methods and/or location, sensationalise suicide, portray suicide as a solution (Sisask and Varnik, 2012), focuses on celebrity deaths by suicide (Cheng et al., 2007), is prominent and repeated, or glamorises the death (Edwards-Stewart et al., 2011). This contagion effect of the media has often been referred to as the “Werther effect” (Phillips, 1974, pp. 340-54), due to an increase in suicidal behaviour after the publication of Goethe’s novel “The sorrows of the young Werther” (Goethe, 1774), using a similar method of suicide as the protagonist. More recent studies demonstrated an interaction between personal suicidal ideation and how people coped with the content of movies, with viewers scoring higher on suicidal ideation, using the films about suicide more to develop ideas on how to go through life and address problems (Till et al., 2013), which is consistent with previous research, indicating that individuals with a history of suicide attempts or suicidal ideation are particularly vulnerable to engaging in suicidal behaviour following exposure to a suicide story in the media (Cheng et al., 2007) and are also more likely to report exposure to movies involving the protagonist’s suicide (Stack et al., 2014).

There is emerging evidence that the media can also exert protective effects when reports focus on personal stories of overcoming suicidal thinking, often referred to as the “Papageno effect” (Niederkrotenthaler et al., 2010), accrediting Mozart’s opera “The magic flute” (1791), in which a young man overcomes his suicidal thoughts. Benefits are observed, when reporting frames suicide as a tragic waste and avoidable loss, focusing on the devastating impact on others (Martin and Koo, 1997) and when contact details for support services are added (Stack, 2005).

Recommendations on how to report suicide safely

The World Health Organization and many other organisations across the globe have developed individual reporting recommendations (Pirkis et al., 2006; see www.iasp.info/media_guidelines.php). Most recommendations stress the importance of ensuring that the content is accurate and balanced and does not include specific details that may increase risk. In Australia, evidence-informed recommendations for media are provided under the Mindframe initiative (Everymind, 2014; Pirkis et al., 2006), with reporting recommendations and supporting resources available at www.mindframe-media.info. The resources have been developed under guidance from people with lived experience and experts in the field and cover recommendations not only for the reporting of suicide but also for guiding accurate and sensitive portrayal of mental illness as the media plays an important role in shaping and reinforcing community attitudes, perceptions and, importantly, stigma that inhibits help-seeking (Polacsek et al., 2018). The recommendations include adding help-seeking information to stories (e.g. helplines) as reports of suicide and mental illness can prompt help-seeking (Burgess et al., 2009; Pirkis et al., 2006); use of appropriate language when reporting suicide and mental illness, such as avoiding the term “committed” suicide, as the word may associate suicide with crime or sin (Silverman, 2006; Sisask and Varnik, 2012) or stigmatising language that suggest a lack of quality of life (e.g. “victim” of, or “suffering” from mental illness) or reinforce stigma (e.g. “psycho”, “deranged”), thereby increasing barriers to help-seeking for people with mental illness (Polacsek et al., 2018) and avoiding explicit descriptions or images of methods or location used in a suicide as these details have been linked to increases in both the use of that method or location and overall suicide rates (Niederkrotenthaler et al., 2010). Recommendations also suggest sensitive reporting of celebrity stories as several studies (Fink et al., 2018; Hegel et al., 2013) and a meta-analysis (Niederkrotenthaler et al., 2012) have shown that some reports on celebrity suicides are associated with increases in subsequent suicide rates, as coverage can glamorise and normalise suicide, potentially prompting imitation and/or reducing help-seeking (Cheng et al., 2007). On the contrary, if positively framed, stories about celebrities living with a mental illness can be a powerful tool in breaking down stigma and encouraging help-seeking (Nairn and Coverdale, 2005).
**Effectiveness of media recommendations**

The application of media recommendations has shown to reduce the suicide rate following recommendation implementation (Bohanna and Wang, 2012; Pirkis et al., 2009). In Vienna, railway suicides were reduced by 75 per cent, after the introduction of media recommendations (Etzersdorfer and Sonneck, 1998), with the observed reduction localised to areas where compliant newspapers reached more than 67 per cent of the population (Niederkrotenthaler and Sonneck, 2007).

In Australia, national media monitoring studies have been used to assess the consistency with recommendations in Australian media (e.g. newspaper, television and radio). In two seminal publications, Pirkis et al. showed evidence that both the quantity and the quality of reporting were significantly increased in 2007 (Pirkis et al., 2008) when compared to baseline measures in 2001 (Pirkis et al., 2001).

**Suicide prevention campaigns and the media**

Systems approaches addressing suicide recommend the application of media recommendations, as well as the involvement of the media in supporting community campaigns that promote literacy and help-seeking (WHO, 2014). In a recent study on public service announcements as part of suicide prevention campaigns, Flianou et al. (2017) concluded that further evaluation is needed on their impact on people with varying degrees of suicide risk and the consistency with current recommendations. Incomprehensibly national suicide prevention campaigns, as exemplary public announcements that reach a broad audience but particularly resonate with vulnerable people, have been understudied to date.

This study monitors the quality of the media coverage of one of the largest annual suicide prevention campaigns in Australia – the R U OK? Day campaign, a national day dedicated to encourage everyone to connect to other people by asking the question “R U OK?” and having a meaningful conversation with someone who may be at risk of suicide, as it could save their lives (https://www.ruok.org.au/). Positive, sensitive and safe messaging is particularly important in wide-scale community campaigns such as the R U OK? Day as they target the whole community, including potentially vulnerable audiences.

**Aims of the research**

Our study examines whether national Australian broadcasts (TV and radio) around the R U OK? Day campaign are consistent with Mindframe recommendations for reporting suicide and mental illness. Factors that are associated with the quality of reporting, including broadcast medium, length of the report and whether an R U OK? employee is featured, are evaluated in order to identify strengths and areas of inconsistency with current reporting recommendations, in order to inform strategies to optimise future reporting and the campaign overall.

**Methods**

**Sampling protocol**

Media items where sourced from “isentia” (a media intelligence and data technology company) including national broadcasting items (TV and radio) between August and September 2015. To ensure a representative cross-section, we employed a quota sampling approach for item selection, with selection stratified across Australian states, medium (TV and radio) and broadcasting dates. Broadcasting channels included free to air national and local channels, across commercial and state-funded channels.

**Broadcast items**

The sample included 112 items, consisting of 32 TV items (avg. length 110 s; SD = 35) and 80 radio items (avg. length 286 s; SD = 234), aired between August and September 2015.
**Coding protocol**

Items were coded according to the type of medium (“TV” or “Radio”), the focus of content (“mental health exclusive”, “suicide exclusive”, “both-mental health and suicide” or “neither”) and the consistency with Mindframe recommendations, based on a nine-dimensional quality scale, used previously (Pirkis et al., 2001, 2008). As the guidelines have been updated since then, the dimensions were updated and extended to include important protective factors as identified by Niederkrotenthaler et al. (2010) and align with the Risk of Imitative Suicide Scale as developed and validated by Nutt et al. (2015). The quality scale measured the promotion of help-seeking, appropriateness of suicide and mental health language, images, statistics, celebrity status, overcoming suicide and mental illness, methods and location (Table I).

**Overall quality scale**

Overall quality was assessed using the 13 items from the quality scale that could be binarised, providing an overall quality score (Table I). Broadcasts that were consistent with reporting recommendations were given a score of 1 for each consistent dimension, giving a total possible quality score ranging from 0 to 13, with higher scores indicating higher quality, i.e. consistency with recommendations.

**Raters**

Items were coded by three independent raters, participating in regular meetings to discuss coding criteria. To ensure consistency in rating across coders, 26 of the 112 items (23 per cent) were rated by all three coders, to determine the level of inter-rater agreement (inclusion criteria Cohen’s $\kappa$ coefficient, $K \geq 0.60$).

**Analysis**

Data analysis was performed using Statistical Package for the Social Sciences (SPSS Version 23). Descriptive analysis was used to assess consistency with Mindframe recommendations, with $\chi^2$ analysis used where appropriate. The $\alpha$ criterion was set at $p < 0.05$ to indicate a statistically significant association. $\Phi$ statistics as a measure of association of nominal data was performed in cases where the $\chi^2$ statistics indicated significant findings. Relationships between factors and the binarised overall quality score were determined using logistic regression. As all broadcasts scored highly on the quality scale (i.e. no scores below 9/13), we classified scores below 12 as “suboptimal quality”, with scores of 12 or above considered “good quality”. Factors were added independently to determine their association with the primary outcome measure of quality, with only variables with sufficient inter-rater agreement ($K \geq 0.60$) included.

**Results**

**Descriptive information**

A breakdown of the 112 broadcast items by medium and content type shows that the majority of television broadcasts focused on mental illness specifically (59.4 per cent), whereas radio broadcasts tended to report across mental illness (17.5 per cent), suicide (35.0 per cent) and both (46.3 per cent) ($\chi^2(3) = 20.651, p < 0.001; \Phi = 0.429, p < 0.001$).

**Quality ratings**

**Help-seeking**

Were helplines included? Only 43 of the 112 broadcasts contained helpline service details, which was 38.39 per cent of all broadcast items. Of these, 17 broadcasts had the recommended minimum of two helplines or more. The type of helpline was lifeline which was the most commonly
provided service (40 items, 98 per cent), with other support services being provided less frequently (19 items, 46 per cent).

**Promotion of professional and non-professional help-seeking.** Unlike the low rates of inclusion of professional helplines, non-professional help-seeking (friend, family, colleagues, etc.), as anticipated, was promoted in almost all reports, with 100 broadcasts (89 per cent) encouraging non-professional support (see Figure 1).

<table>
<thead>
<tr>
<th>Table I Quality dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dimension</strong></td>
</tr>
<tr>
<td>Help-seeking</td>
</tr>
<tr>
<td>Help services included?</td>
</tr>
<tr>
<td>Number of services</td>
</tr>
<tr>
<td>Suicide language</td>
</tr>
<tr>
<td>Suicide presented as desirable outcome</td>
</tr>
<tr>
<td>Use of the word “committed”</td>
</tr>
<tr>
<td>Glamourisation</td>
</tr>
<tr>
<td>Mental illness language</td>
</tr>
<tr>
<td>Sensationalisation</td>
</tr>
<tr>
<td>Negative terminology</td>
</tr>
<tr>
<td>Labelling</td>
</tr>
<tr>
<td>Description of behaviour that implies mental illness or is inaccurate</td>
</tr>
<tr>
<td>Colloquialisms</td>
</tr>
<tr>
<td>Negative stereotype</td>
</tr>
<tr>
<td>Images (TV only)</td>
</tr>
<tr>
<td>Statistics</td>
</tr>
<tr>
<td>Correct information/statistics presented</td>
</tr>
<tr>
<td>Celebrity</td>
</tr>
<tr>
<td>Reference to celebrity deaths by suicide/mental illness</td>
</tr>
<tr>
<td>Overcoming suicide/mental illness</td>
</tr>
<tr>
<td>Personal stories overcoming suicide ideation/mental illness</td>
</tr>
<tr>
<td>Personal experience</td>
</tr>
<tr>
<td>Bereaved (suicide only)</td>
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<tr>
<td>Ambassador of R U OK</td>
</tr>
<tr>
<td>Seek professional help</td>
</tr>
<tr>
<td>Seek non-professional help</td>
</tr>
<tr>
<td>Methods</td>
</tr>
<tr>
<td>Explicit method mentioned (suicide only)</td>
</tr>
<tr>
<td>Location</td>
</tr>
<tr>
<td>Specific location mentioned (suicide only)</td>
</tr>
</tbody>
</table>

**Notes:** Coverage of celebrity mental health and suicide may be of public interest, however, extra caution should be applied when reporting on celebrity death by suicide, as coverage can glamourize and normalise suicide, which can prompt imitation by vulnerable people. *Variables with sufficiently high inter-rater agreement (Cohen’s $\kappa$ coefficient, $\kappa \geq 0.6$); context specific.
Table II  Scoring criteria for quality scale

<table>
<thead>
<tr>
<th>Dimension</th>
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<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Help-seeking</td>
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<tr>
<td>Help services included?</td>
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<tr>
<td>Suicide language</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicide presented as desirable outcome</td>
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<td>0</td>
</tr>
<tr>
<td>Use of the word “committed”</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Glamourisation</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Sensationalisation</td>
<td>1</td>
<td>0</td>
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<tr>
<td>Mental illness Language</td>
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<tr>
<td>Sensationalisation</td>
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<td>Negative terminology</td>
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<tr>
<td>Labelling</td>
<td>1</td>
<td>0</td>
</tr>
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<tr>
<td>Colloquialism</td>
<td>1</td>
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<tr>
<td>Negative stereotype</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Methods</td>
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<td></td>
</tr>
<tr>
<td>Explicit suicide method mentioned</td>
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<td>0</td>
</tr>
<tr>
<td>Location</td>
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<td></td>
</tr>
<tr>
<td>Specific location of suicide mentioned</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 1  Promotion of help-seeking

Suicide language
(a) Language not presenting suicide as a desirable outcome: most of the reports (97.3 per cent) used language that was consistent with Mindframe recommendations, with only 2.3 per cent of reports using phrases that suggest suicide is a desirable outcome (e.g. “successful suicide”); (b) avoiding stigmatising language: only 3.6 per cent of reports used the outdated terminology by using “committed” suicide; (c) avoiding sensationalist terminology: 4.5 per cent of items used sensationalist terminology, by suggesting that suicide rates were “alarming”, “spiking” or an “epidemic”.

Mental illness language and images
(a) Avoiding language that stigmatises mental illness: all reports (100 per cent) associated with the R U OK? Day campaign used preferred language to describe a person’s experience of mental illness such as “living with” or “has a diagnosis of” a mental illness. (b) Avoiding negative terminology: negative terminology was observed in 13.4 per cent of items. In all cases, the term “suffering” from mental illness was observed and was significantly more frequent in televised broadcasts than radio broadcasts ($\chi^2(1) = 12.316, \ p = 0.001; \ \Phi = -0.332, \ p < 0.001$; see Figure 2).
(c) Avoiding labelling: no reports used labels when describing an individual experiencing mental illness and instead used preferred terms such as “has a diagnosis of” mental illness where appropriate. (d) Avoiding colloquialisms: a colloquialism, such as “shrinks” or “mental institution”, was used in one case. (e) Avoiding negative stereotypes: four TV broadcasts (3.6 per cent) showed images of individuals in a head clutch pose, when referring to mental illness.

Images
None of the TV broadcast items used images that might increase risk of suicide or perpetuate stereotypes of mental illness, such as a person in a head clutch position, dishevelled looking person, grieving family, graves or memorials that glorify the death.

Celebrity
Celebrity death by suicide was discussed in only one broadcast (0.9 per cent), whereas 27 items (24 per cent) discussed celebrity mental health. Most of these reports focused on a particular celebrity football player, who publicly disclosed problems with his mental health during the week of R U OK? Day. Television broadcasts were significantly more likely to feature discussions of celebrity mental illness compared to radio broadcasts ($\chi^2(2) = 25.033, p < 0.001; \Phi = 0.475, p < 0.001$; see Figure 3). Negative terminology was significantly more likely in reports that featured discussions on celebrity mental illness, when compared to those that did not ($\chi^2(1) = 11.788, p = 0.001$).
Statistics
Statistics relating to either suicide or mental illness were presented in almost half of all broadcasts (46 per cent), with only two instances (3.5 per cent) of incorrect statistics.

Overcoming suicide/mental illness
Personal stories involving individuals who have overcome suicidal ideation or mental illness were reported in 43 broadcasts (38 per cent), with reference to personal stories significantly more likely in TV broadcasts ($\chi^2(1) = 17.455, p < 0.001; \Phi = -0.395, p < 0.001$; see Figure 4).

Suicide method/location
Three broadcasts (3 per cent) contained explicit details of the suicide method and one regarding the location (1 per cent).

Ambassadors for R U OK?
Approximately, half of the broadcasts (59 items) featured an ambassador for R U OK?. Most of these involved an employee of R U OK? (44 items), with all others including celebrity ambassadors.

Overall quality
As shown in Figure 5, the overall quality scores were high, with radio broadcasts tending to score higher on the quality scale (mean = 12.15, SD = 0.74) than TV items (mean = 11.79, SD = 0.70), with 31 per cent of radio broadcasts scoring 100 per cent on the quality scale.

Factors associated with quality reporting
Our regression analyses showed a number of factors associated with higher quality reporting. Radio broadcasts were significantly more likely to score higher on the quality scale, whereas broadcasts that involved discussion of a celebrity’s mental illness or suicide were significantly more likely to score lower. The data also showed that quality of reporting was significantly higher when a broadcast featured an R U OK? employee. The length of broadcast and the location of broadcast were not associated with broadcast quality (see Table III).

Discussion
To the best of our knowledge, this is the first study assessing the quality of the media coverage of one of the largest national suicide prevention campaigns in Australia, the R U OK?

Figure 4 Personal story overcoming mental illness or suicide
Day campaign. Our study addresses this important gap, as sensitive reporting is particularly important in mental health and suicide campaigns because the audience likely includes vulnerable people. Overall, broadcast items associated with the R U OK? Day campaign were mostly consistent with Mindframe recommendations. None of the broadcast

<table>
<thead>
<tr>
<th>Table III</th>
<th>Factors associated with high-quality reporting</th>
</tr>
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<tbody>
<tr>
<td><strong>Factor</strong></td>
<td><strong>Subgroup n (%)</strong></td>
</tr>
<tr>
<td>Broadcast type</td>
<td></td>
</tr>
<tr>
<td>TV</td>
<td>32 (28.6%)</td>
</tr>
<tr>
<td>Radio</td>
<td>80 (71.4%)</td>
</tr>
<tr>
<td>Broadcast length</td>
<td></td>
</tr>
<tr>
<td>Less than 1 min</td>
<td>26 (23.2%)</td>
</tr>
<tr>
<td>1–2 min</td>
<td>20 (17.9%)</td>
</tr>
<tr>
<td>2–3 min</td>
<td>18 (16.1%)</td>
</tr>
<tr>
<td>More than 3 min</td>
<td>48 (42.9%)</td>
</tr>
<tr>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>Western Australia</td>
<td>14 (12.5%)</td>
</tr>
<tr>
<td>New South Wales</td>
<td>24 (21.4%)</td>
</tr>
<tr>
<td>South Australia</td>
<td>16 (14.3%)</td>
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<tr>
<td>Northern Territory</td>
<td>7 (6.3%)</td>
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<tr>
<td>Tasmania</td>
<td>7 (6.3%)</td>
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<tr>
<td>Queensland</td>
<td>7 (6.3%)</td>
</tr>
<tr>
<td>Victoria</td>
<td>13 (11.6%)</td>
</tr>
<tr>
<td>ACT</td>
<td>7 (6.3%)</td>
</tr>
<tr>
<td>National</td>
<td>17 (15.2%)</td>
</tr>
<tr>
<td>Statistics</td>
<td></td>
</tr>
<tr>
<td>Incorrect statistics reported</td>
<td>2 (1.9%)</td>
</tr>
<tr>
<td>Correct statistics reported</td>
<td>50 (46.7%)</td>
</tr>
<tr>
<td>No statistics reported</td>
<td>55 (51.4%)</td>
</tr>
<tr>
<td>Reference to celebrity mental illness or death by suicide</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>84 (75.0%)</td>
</tr>
<tr>
<td>Yes</td>
<td>28 (25.0%)</td>
</tr>
<tr>
<td>R U OK? employee interviewed</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>76 (67.9%)</td>
</tr>
<tr>
<td>Yes</td>
<td>36 (32.1%)</td>
</tr>
</tbody>
</table>

Notes: *Unable to calculate OR as 100 per cent correct; bunable to calculate OR as 0 per cent correct.

*p < 0.05
items included images that negatively portrayed mental illness or suicide; used mental illness to describe a person’s behaviour; or used terminology that may sensationalise mental illness or glamourise suicide. However, there were a few instances where the discussion of suicide used language that should be avoided, such as the use of the term “committed” when talking about suicide, or presenting suicide as a desirable outcome (e.g. “successful” suicide).

The results also highlight some areas where improvements could be made, such as the addition of helplines for immediate crisis support and avoiding the use of negative terminology when referring to mental illness. The majority of instances where broadcasting items used the negative terminology “suffered from mental illness” involved a focus on an Australian celebrity football player, following his public disclosure of mental illness. This type of language can be problematic as it focuses on deficits/diagnosis rather than strengths. The preferred terminology would be “being treated for” or “living with” a mental illness because the latter wording can carry a sense of hope and possibility instead of being associated with a sense of pessimism and low expectations, both of which can influence personal outcomes. This is consistent with the guidelines developed by the Australian Mental Health Coordinating Council in 2013 “Recovery Oriented Language Guide” (Mental Health Coordinating Council, 2018), based on Rapp and Goscha’s “Strength Model” (Rapp and Goscha, 2006), emphasising to use language that focuses on solutions rather than problems/prognosis/limits.

The overall quality scale showed that broadcasts associated with the R U OK? Day campaign were generally consistent with Mindframe recommendations, with all broadcasts receiving scores of 70 per cent consistent or higher, with a number of reports scoring 100 per cent consistency. Due to a lack of studies evaluating suicide prevention campaigns, we cannot directly compare our data; however, when measured against studies into the general adherence to media recommendations, this is very encouraging, as the overall quality is higher than the overall quality score in Pirkis et al.’s media monitoring study, who could demonstrate that the overall quality, using a similar score increased from 57 per cent in 2000/2001 to 75 per cent in 2006/2007 for suicide-related items and from 75 to 80 per cent for mental health-related items after the introduction of the previous version of the Mindframe guidelines (Pirkis et al., 2006). Furthermore, international studies into the general adherence show mixed results, with high adherence in countries such as Austria, Slovenia and Switzerland (Etzersdorfer and Sonneck, 1998; Michel et al., 2000; Niederkrotenthaler and Sonneck, 2007; Roskar et al., 2017), and lower adherence in the USA and Asia (Fu et al., 2011; Jamieson et al., 2003; Tatum et al., 2010). The analysis did show that the quality of reporting was higher in radio broadcasts and items that featured an interview with R U OK? employees, who received ongoing communication support by Mindframe. The quality was lower in reports that discussed a celebrity experience of mental illness or suicide. The fact that interviews with non-R U OK? employees presented lower reporting quality could indicate that further Mindframe training focusing on staff involved in broadcasting, particularly TV broadcasters, could be beneficial.

Overall, these results provide evidence to suggest that media reports associated with the R U OK? Day campaign were largely consistent with Mindframe guidelines, which may reflect ongoing communication support of Mindframe throughout the campaign. To test this hypothesis, future research could compare the quality of reporting to a suicide prevention campaign that is not supported by Mindframe and add a control sample of general news items targeting some of the limitations of the current study such as small sample and no control group. Another limitation was the necessary restriction to traditional media; therefore, future research should include media like magazines and internet/social media.

Conclusion

Although the reporting was mostly consistent with Mindframe recommendations, the current data showed that reporting quality could be improved by promoting professional help-seeking behaviour by adding helplines on all reports and avoiding the use of negative terminology when referring to mental illness. These reporting inconsistencies could be addressed by R U OK?,
and strategies should be developed to ensure further optimisation. Future research could evaluate the effectiveness of implementation of such strategies in upcoming – including international – media campaigns.

References


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When language is maladaptive: recommendations for discussing self-injury

Penelope Hasking, Stephen P. Lewis and Mark E. Boyes

Abstract

Purpose – The purpose of this paper is to call on researchers and clinicians to carefully consider the terminology used when discussing non-suicidal self-injury (NSSI), and specifically the use of the term “maladaptive” coping.

Design/methodology/approach – Drawing on literature regarding stigma, language and self-injury to support the argument that the term maladaptive is inappropriate to describe self-injury.

Findings – Use of the term maladaptive conflates short-term effectiveness with long-term outcomes and ignores context in which the behaviour occurs.

Social implications – Use of the term maladaptive to describe self-injury can invalidate the person with a history of NSSI, impacting stigma and potentially help-seeking. An alternate framing focussed on specific coping strategies is offered.

Originality/value – Language is a powerful medium of communication that has significant influence in how society shapes ideas around mental health. In proposing a change in the way the authors’ talk about self-injury there is potential to significantly improve the wellbeing of people with lived experience of self-injury.

Keywords Coping, NSSI, Self-injury, Maladaptive

Paper type Viewpoint

Recently, attention has been drawn to the need to be mindful of the language used when talking about people who self-injure, and ensure we adopt a de-stigmatizing and empathic approach (Hasking and Boyes, 2018; Lewis, 2017). Similarly, we believe the language we use to describe the behaviour itself is important. Defined as the intentional damage to one’s body tissue without intent to die, non-suicidal self-injury (NSSI), is a common and serious concern (International Society for the Study of Self-Injury, 2018). Rates of NSSI in non-clinical samples are about 18 per cent among adolescents, 13 per cent among young adults and 5 per cent among adults over 25 years of age (Swannell et al., 2014). More recent data suggest up to 18 per cent of adolescents self-injured in the last 12 months (Monto et al., 2018), NSSI is associated with numerous mental health difficulties (e.g. distress, anxiety, depressive symptoms; Klonsky, 2011; Lewis and Heath, 2015), may result in residual scarring (Lewis, 2016; Lewis and Mehrabkhani, 2016), and a growing line of research highlights that NSSI confers risk for subsequent suicidal thoughts and behaviours (Kiekens et al., 2018).

Although individuals may engage in NSSI for many reasons, the most commonly reported function of the behaviour is to obtain relief from difficult, unwanted, or intense emotional experiences (Klonsky, 2007; Taylor et al., 2018). For this reason, it is perhaps unsurprising that NSSI has been conceptualized as a coping strategy (e.g. Brook and Willoughby, 2016; Chapman et al., 2006). However, while recognizing NSSI as a form of coping is warranted, defaulting to a position in which NSSI is conceptualized as a “maladaptive” form of coping presents several concerns.

In this commentary we call on researchers and clinicians to carefully consider the terminology used to talk about NSSI. Of note, we advise people to avoid terminology that may increase the, already significant, stigma experienced by people who self-injure (Lloyd et al., 2018; Mitten et al., 2016; Rosenrot and Lewis, 2018). Language used to describe a behaviour confers values to that
behaviour; language that is stigmatising can assign negative value to the behaviour (e.g. that it is “bad”). This labelling then shapes social understandings, social norms, and determines which behaviours are socially acceptable. We argue that labelling NSSI as maladaptive is one way in which language can assign negative value to NSSI. One consequence of this is that people who engage in the behaviour internalize this stigma, taking on the attributes of the stigmatised behaviour (i.e. that they as a person are “bad”; Corrigan et al., 2006). This has been demonstrated with other behaviours (e.g. substance use), and has been related to reduced treatment seeking (e.g. da Silveira et al., 2018). While in no way suggesting NSSI is a desirable coping strategy, we urge researchers and clinicians to reconsider use of the term maladaptive. Instead we suggest focussing on the specific coping strategies a person employs, with consideration given to both their short and long-term outcomes.

Self-injury as coping

According to the seminal work by Lazarus and Folkman (1984, p. 141) coping refers to “constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person”. Yet, there is still little consensus regarding the dimensions or categories into which specific coping strategies can, or should, be grouped. For example, researchers have variously grouped strategies as problem-focused vs emotion-focused (sometimes adding an avoidant dimension), primary vs secondary control strategies, and engagement vs disengagement coping (Parker and Endler, 1992). Commensurate with this tendency to group strategies into broad categories, there is also a tendency to categorize strategies as either adaptive or maladaptive. Adaptive strategies are traditionally associated with resolution of the problem and positive outcomes; maladaptive strategies are associated with inadequate resolution and/or adverse outcomes (Zeidner and Saklofske, 1996). Given that NSSI does not directly address the underlying source of distress, and is associated with adverse outcomes such as scarring, stigma, risk of ongoing psychopathology, and suicidal thoughts and behaviours (Kiekens et al., 2018; Lewis, 2016), NSSI is often labelled as maladaptive (e.g. Ren et al., 2018; Sornberger et al., 2013).

However, automatically classifying NSSI as a maladaptive strategy is problematic for a number of reasons. Fundamentally, the term maladaptive is value-laden, and it can come across as judgemental, and stigmatizing. This may exacerbate the stigma that many who self-injure experience (e.g. Lewis and Michal, 2016; Lewis et al., 2017). In experimental settings, applying noun labels (e.g. depressed, bipolar) to people with mental disorders is associated with stigmatizing attitudes, and negative traits such as embarrassing and attention-seeking (Cuttler and Ryckman, 2019). Similar sentiments have been raised about terms such as self-injurer in the context of NSSI (Lewis, 2017). We suggest negative connotations may also be made when placing a value label on a behaviour. Suggesting NSSI is maladaptive may inherently tell the person that the coping strategy they have been using is “bad” or “wrong”. This labelled can lead to internalized stigma, and could invalidate the experience of the person who is self-injuring. Such framing is also in violation of guidelines that emphasize the importance of validation and conveying that NSSI serves a purpose for the individual who engages in it (e.g. Hasking et al., 2016; Klonsky and Lewis, 2014). Additionally, use of the term maladaptive is inappropriate because it can: conflate adaptiveness with effectiveness; fail to consider context of the behaviour; and neglect to consider alternative options.

First, the term maladaptive conflates the effectiveness of the coping strategy in addressing current distress with whether the strategy is adaptive in the long term. Self-report and ecological momentary assessment studies confirm NSSI can be effective in regulating emotional states (Hasking et al., 2017; Rodriguez-Blanco et al., 2018). That is not to diminish both the short term (e.g. tissue damage) and long term (e.g. suicidal thoughts and behaviours) negative consequences of NSSI (Kiekens et al., 2018; Klonsky, 2007). However, calling all instances of NSSI maladaptive fails to consider the function of the behaviour, and both the immediate and longer-term effects of the behaviour.

Second, the context in which behaviour occurs must be considered. For example, although generally considered maladaptive, strategies such as denial can be helpful when the source of stress is unclear, when there is a lack of knowledge about stress modification, or when the person can do little to eliminate the stress (Folkman and Moskowitz, 2004). Similarly, expressive
suppression, a form of emotion regulation typically associated with negative outcomes, may be beneficial for people who self-injure (Svaldi et al., 2012). Labelling NSSI as maladaptive, where other strategies are not accessible or known, could confer a sense of futility to the person who self-injures – that any attempt they make to manage distress could be conceived negatively. This could be particularly important in a clinical context where therapists are working with clients to adopt alternative coping strategies. This is especially true when new strategies may not yet be as immediately effective in regulating emotion as NSSI (van Goethem et al., 2015).

Third, consideration must be given to the available alternatives. For example, while the primary reason people engage in NSSI is to regulate affect, some report using NSSI as a means of alleviating suicidal thoughts and urges (Klonsky et al., 2015). In this case, NSSI might be considered a better response than acting on these suicidal urges. We suggest that rather than any individual coping strategy being labelled as adaptive or maladaptive, consideration should be given to both the context, and the enduring pattern of coping an individual employs.

What is the alternative?

Following the above, we argue that references to NSSI as a maladaptive coping strategy, or in other ways that adopt a value-laden framing (e.g. healthy vs unhealthy; normal vs abnormal), are unhelpful. In addition to conflating effectiveness with adaptiveness, labelling NSSI as maladaptive has implications for the person engaging in the behaviour. Specifically, individuals who self-injure cannot be expected to cease NSSI just because it is considered maladaptive, unless other strategies are at their disposal. Further, as noted above, such framings can be pejorative and counterproductive when fostering incentives to learn alternate ways of coping.

Accordingly, we argue that focus of discussion should be on the nature of short (e.g. relief from distress; tissue damage) vs long-term outcomes (e.g. scarring, social isolation, suicidal thoughts) associated with NSSI. Thus, NSSI should be viewed more broadly, with attention to what it may do for individuals in the moment, alongside the outcomes it may yield in the future. This more contextualized approach allows for an open understanding of NSSI from the vantage point of people with lived experience, and avoids unnecessarily simplifying and pathologising the behaviour. It also allows for more open conversations about the outcomes of NSSI and about alternatives in treatment settings.

Moving forward, information regarding appropriate framing of NSSI can be incorporated into clinical psychology, nursing, and other health professional training programs. Although our arguments are grounded in existing work regarding language, stigma, and the need for validation (Cuttler and Ryckman, 2019; Hasking and Boyes, 2018; Klonsky and Lewis, 2014), clinical and empirical work which tests the effects of different framings on therapeutic alliance, stigma, intended help-seeking, and therapeutic outcomes would also be valuable.

Conclusion

Just as language is important in describing people who self-injure (Hasking and Boyes, 2018; Lewis, 2017), so too is the language used to describe the behaviour. Based on the considerations above, we advocate avoiding the term maladaptive coping, and instead recommend focussing discussion on use of coping strategies that effectively meet both the short and long-term needs of the individual. We recognize that this suggestion may counter common practice, but we challenge researchers and clinicians to be mindful of the language they use, and cognizant of the possibility for negative effects on people with lived experience of NSSI.

References


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