



Nottingham Trent
University

NTU School of Social Sciences

Psychology: Analytical Thinking 2024

1. The Challenge

Challenge Title:

Exploring impact of engagement with (sled) dogs on mental health & wellbeing.

Possible Solutions:

1. Volunteering: What does the psychological literature say about the value of regularly volunteering at animal shelters?
2. One off activities: What does the psychological literature say about the benefits of doing one-off activities, such as Sleddog adventures?
3. Regular sport: What does the psychological literature say about the value of engaging in regular, social sport?

2. Solutions

Volunteering

Mynydd Sleddog Adventures was first opened in 2020 as Wales first provider of sleddog experiences and husky rides. Their main customer base is are tourists of all ages looking for an adventurous activity but they also work within communities to provide alternative education and therapy. With this client base, it is important to establish the benefits of the program for mental and physical health in all aspects of its operation. This extends further than potential customers to the community at wide as well as the dogs involved. With this in mind, this paper looks to investigate the specific impact of engagement with sled dogs to assist the company in the development of their programs.

Volunteering alone has been proven to increase life satisfaction, self-esteem, health and morality (Ramos, 2015) as well as reduce the likelihood of young people engaging in problem behaviours- including drugs and school truancy (Wilson, 2000). There are many benefits to volunteering however with the addition of animals it can be used to support and be able to access a wider range and spectrum of people. Through the lens of therapeutic interventions (Burgoyne, et al 2014; Dell et al 2011), for example, animals have been proven to be extremely beneficial for improving mental health (Klontz, Biven and Leinart 2007; Yorke, Adams, and Cody, 2008). This has been successful in a range of ways including reducing pain for children in a pediatric setting (Braun, Stangler, Narveson, and Pettingell (2015), and supporting neurodiverse people in everyday life (Grigore, 2014). They have also worked as a catalyst for those who have suffered strokes to improve both their verbal and non-verbal communication skills (LaFrance, 2007), students and those suffering from stress (Ward-Griffin, 2018), and have also helped to decrease the heart rates of older people who suffer from high initial systolic blood pressure and increased heart rates (Handin, 2018). This shows the capability that volunteering with animals (Dogs) can have on a wide range of people,

how it can support multiple different disorders and conditions, as well as what long-term effects it can have on a person's outcomes and behaviours.

Animals such as dogs have a well-established positive impact on individuals mental and physical health, and this extends to a community level. The presence of animals in a community improves social capital, the connection between people, through increasing the sense of community identity and belonging (Arkow, 2015). One way this is achieved is through the 'social lubricant' effect of dogs, giving common interests and opportunities for people to interact with one and other. Bulsara et al (2007) observed that there was a 'ripple' effect from owning pets in that the broader community, not only pet owners, benefit from the presence of animals in a neighbourhood. This was attributed to a several statistics such as 40.5% of pet owners befriending other people in their suburb through their pets. Although the dogs at Mynydd Sleddog Adventures are not strictly 'pets', their presence may still contribute to the sense of community which has been suggested to improve life expectancy (Spinney, 2014) and provide a 'social lubricant' in ways of common interest.

Another way in which the community benefits from Mynydd Sleddog Adventures is through the tourism it provides. The official website includes links to other local activity centres as well as accommodation. Saarinen (2019) mentions that in order to benefit from tourism, the community must be involved in the industry, so promoting local business, the facility contributes to the area an economic and social level. Alongside this, Mynydd Sleddog Adventures starting trailing sessions in 2022 with the local specialist mental health unit, (*****), which provides specialist care to those with mental health disorders in the criminal justice system. They also are commissioned to deliver alternative education and development programmes for young people in the community. Flynn et al (2020) found young people showed significant increase in social skills when provided with Animal Assisted Therapy which can translate in this scenario to better community engagement.

Volunteers at Mynydd Sleddog Adventures offers significant benefits for the well-being of the dogs, as evidenced by research and practical insights. Thomas (2021) highlights three key reasons supporting the importance of volunteering at dog shelters, which align with the findings of Wells (2020). Firstly, volunteers provide essential socialisation for the dogs, alleviating stress and anxiety associated with shelter environments. Regular interaction with humans helps dogs develop positive behaviours, such as improved social skills and decreased fearfulness, making them more adaptable and appealing to potential adopters (Thomas, 2021). Additionally, Wells (2020) emphasises the positive impact of environmental enrichment on the behaviour of shelter dogs. This enrichment includes activities often facilitated by volunteers, such as walking, playing, and grooming, which contribute to the physical and mental well-being of the dogs. By engaging in these activities, volunteers not only provide necessary exercise and stimulation but also create opportunities for positive human-animal interactions, fostering bonds that can enhance the dogs' overall welfare. Therefore, the combined insights from Thomas (2021) and Wells (2020) underscore the crucial role of volunteers in improving the quality of life for shelter dogs through socialisation, enrichment, and compassionate care.

In conclusion, Mynydd Sleddog Adventures offers many benefits that are supported by research. These include physical health benefits across all ages such as reducing pain for children in a pediatric setting to reducing the heart rates of elderly people who suffer from having elevated heart rates. In addition, their mental health benefits are well established and there is specific benefits for supporting neurodiverse people in their everyday lives. The community identity they facilitate also

benefits mental health by catalysing connections and engagement. Throughout all of their hard work, the dogs involved are developing positive behaviours and provided with essential socialisation which helps to alleviate stress and anxiety that can often be associated with shelter environments. All this evidence supports the claim that Mynydd Sleddog Adventures provides a positive impact on all involved and is a great addition to the options for mental health care in Wales.

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One Off Activities

In recent years, the exploration of recreational activities and their impact on individual well-being and mental health has gained significant traction. While extensive research has delved into the benefits of regular physical exercise and long-term leisure pursuits, there remains a conspicuous gap concerning the advantages of one-off activities. Notably, activities like Sleddog adventures, characterized by their unique and infrequent nature, have been largely overlooked by researchers. Despite their potential to provide novel experiences and rejuvenate individuals' physical and psychological well-being, the scarcity of empirical evidence impedes a comprehensive understanding of their true impact. By synthesizing existing literature on recreational activities, psychological well-being, and adventure tourism, this paper aims to bridge this gap by investigating the potential benefits associated with engaging in one-off activities, with a specific focus on Sleddog adventures.

Outdoor activities offer a myriad of benefits across various dimensions of well-being, as supported by empirical evidence. Engaging in activities such as hiking, cycling, and swimming contributes to physical fitness, reducing the risk of chronic diseases such as obesity and diabetes (Thompson Coon et al., 2011). Furthermore, exposure to natural environments has been shown to alleviate stress, improve mood, and enhance cognitive function (Barton et al., 2010; Bratman et al., 2015). These activities also foster social connections, strengthen interpersonal relationships, and promote emotional well-being (Pretty et al., 2009; Williams & Harvey, 2001). Additionally, participation in outdoor pursuits cultivates environmental awareness and encourages sustainable behaviors, thereby contributing to the preservation of natural resources (Lumber et al., 2017; Mayer & Frantz, 2004).

It is well known that engaging in various activities can evoke different emotions. Physical activities like exercise release endorphins, inducing feelings of euphoria and reducing stress (Boecker et al., 2008, Dina et al., 2011). Social interactions may evoke happiness, belongingness, or occasionally anxiety (Lieberman, 2013). Nature-based activities foster relaxation and awe (Berman et al., 2012). Mindfulness practices promote emotional balance and calmness (Tang et al., 2007). Additionally, participating in physical activity provides a distraction from daily worries and negative thoughts, allowing individuals to focus on the present moment and experience a sense of accomplishment (Fox, 2007). These findings suggest that activities play a significant role in shaping emotional experiences.

Research has shown that interacting with animals can significantly improve physical and mental health, as well as enhance various aspects of daily life. Engaging with animals have been found to reduce stress levels and promote relaxation, leading to decreased cortisol levels and increased feelings of calmness (Odendaal et al., 2003; Wood et al., 2018; Vancil A., 2020). Additionally, studies have demonstrated that animals can reduce loneliness, increase feelings of social support, and boost mood (Krause-Parello et al., 2019). Moreover, individuals who have pets tend to have healthier hearts, make fewer visits to the doctor, get more exercise, and experience lower levels of depression (Kassem et al., 2023).

Engaging in activities such as petting, playing, or spending time with animals can evoke positive emotions such as joy, happiness, and comfort (Beetz et al., 2012). Activities involving animals can also facilitate social connection and bonding, fostering a sense of community and belongingness (Wood et al., 2015). Moreover, caring for animals through activities like volunteering or animal-assisted therapy can enhance empathy and compassion towards both animals and humans, promoting prosocial behaviours (Hauge et al., 2019).

In a study conducted by Nepps et al. (2014), the effectiveness of animal-assisted activity and stress management programs in improving mental health was examined. The study involved 218 hospitalised patients on the mental health unit of a community hospital. Participants engaged in hour-long sessions of both animal-assisted activity and traditional stress management. Following each activity, participants completed self-report questionnaires. The results revealed a significant decrease in depression, anxiety, pain, and pulse after the animal-assisted activity, compared to those who completed the more traditional stress management group. These findings suggest that one-off interactions with animals can have a substantial positive impact on mental health.

Zoos are an area of interest when discussing one off animal interactions. Myers et al (2004) explore the effect seeing animals at a zoo has on a visitor's feelings, the animals visited were snakes, Okapi and Gorillas. Participants reported having a positive emotional reaction when visiting all three animals (happy, satisfied, positive). They also reported being more focused, excited, involved and relaxed in the presence of all three. Most notably all animals produced an equal level of relaxation in the participants even though snakes are considered to produce a negative reaction due to evolutionary processes (Ben-Zé ev 2001).

The positive impact of animal interaction on the mental health and well-being of humans has been widely researched, with a strong association often being found. In particular, the research carried out has demonstrated this effect on the mental health of pet owners when the animals are domestic, observing activities in which the animal and owner participate simultaneously, such as dog walking. A study into the positive outcomes of dog walking (Westgarth et al, 2017), reported that dog walkers reported feelings of happiness as a result of regular dog walking, with the dog's needs often found to be aligned with their owners. Westgarth (2017) explained how human health behaviour can be strongly motivated through these dog walking interactions. A review of research into animal assisted activities (AAA) (Barker & Wolen, 2011), explored many studies into the relationship between animal assisted activities and their benefits, finding collective evidence of improved mood and social behaviour (particularly in those with psychiatric disorders). A variety of different samples are included within this review, with both clinical and non-clinical samples displaying benefits of pet ownership and animal assisted activities. More specifically, an observational study included in this review further demonstrates an association between pet

ownership and benefits to mood, finding that the depressive moods of single adults can be reduced through the ownership of a pet (explicitly a cat). These benefits of the guaranteed, consistent companionship and exercise do not appear to extend to one off activities at the level at which they do to regular animal interactions and activities.

Attention and activity of the animals was a key influencer on the emotional response that was triggered. When the animal was paying attention to the participants they reported higher levels across all previously mentioned variables, and most prominently reported a larger sense of connection to the animal they were visiting. Additionally, when the animal was active participants experienced a more profound feeling of love, caring and amusement. This suggests that even just seeing an animal can engage a positive emotional reaction and have cognitive effects on focus and involvement. Furthermore, when engaging with the animals these emotions increased further, producing the largest emotional reaction.

Overall, one off activities with animals especially can be found to increase emotional and physical well-being. Mynydd, therefore, is likely to be helpful to the people who visit and interact with the activities, even if only once or twice.

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Regular Sport

To provide evidence that being involved in outdoor activities, sleddog sports activities has profound benefits on mental and physical wellbeing not only for humans, communities and public services but also for the dogs that are involved. Being able to show positive evidence will assist us to apply for grant funding to develop and support delivery of our programmes, with a focus on improving physical and mental wellbeing for humans and our canine companions.

Engaging in frequent social sports has many benefits like building an individual's sense of belonging and self-confidence around others and bettering one's physical health with frequent exercise. Focusing on the psychological benefits of social sport, sports-based programmes have been found to have positive effects for those with mental health disorders (Llewellyn et al. 2022). As it is linked to improved mood, and it aids reducing symptoms in those who suffer from depression. In order to target symptoms of hard times like stress and low moods, Mynydd sleddog adventures was established in order to engage with young people who are from the streets of local estates to provide a safe haven for them which enables the ability for them to alleviate any stress they may be having about any events taking place in their life. Furthermore, the social sports have a sense of competitiveness and teamwork which creates an intense environment for the athlete to grow, therefore adopting mental resilience to grow as a better athlete and deal with setbacks and losses efficiently in a way where they learn from their mistakes. The use of social sports as a tool to improve discipline and resilience to help with everyday life events where toughness can make the difference to make an individual's life a success or failure and having multiple losses or gains (Bejan-Muresan, 2018). Furthermore

Sleddog activities have shown promise as alternative therapy and can be integrated into social prescribing programs. This can be observed within the "Mental Health through Sport" conceptual model highlights the therapeutic benefits of engaging in physical activities, including those involving animals (Kamioka et al., 2014). Research indicates that animal-assisted interventions, such as sleddog activities, offer various improved physical, mental health (O'Haire, 2013), and emotional benefits similar to those provided by traditional forms of therapy and regular sporting activity's (Nimer & Lundahl, 2007). These benefits include reduced stress, anxiety, and blood pressure while promoting relaxation and mood enhancement (O'Haire, 2013). Furthermore, engagement with animals fosters social interaction, empathy, and communication skills, which are crucial for individuals struggling with mental health issues (Souter & Miller, 2007). A qualitative study on social prescribing for individuals with mental health problems identified barriers and enablers experienced by general practitioners (Brooks et al., 2018). While the study primarily focused on conventional non-medical interventions, the principles can be extended to include sleddog activities. Barriers such as lack of awareness, resources, and training could hinder the implementation of sleddog activities as part of social prescribing programs. However, with proper education, infrastructure, and collaboration with sleddog organizations, these barriers can be overcome. Existing evidence on the benefits of animal-assisted therapy suggests that sleddog activities hold promise as a complementary approach to traditional mental health interventions and can fulfil the benefits that regular outdoors sport can provide. By expanding the scope of social prescribing to include innovative modalities like sleddog activities, healthcare systems can offer more personalized and holistic care to individuals across diverse demographics. Social sport and

exposure to animals evidently has numerous emotional, social and physical impacts which can be incredibly beneficial, especially when paired with, or used as a form of therapy. Animal therapy particularly with dogs, has in the past received lots of attention due to its significant benefits, of which have been shown to improve health and wellbeing in numerous cases (eg Crease & Joiner, 2017; Hammond, 2014; Walsh et al., 1995). However, Sleddog activities, such as the 'Mynydd sleddog adventures' have received less attention but may arguably offer further benefits and positive impacts for not only the humans taking part but also the dogs. Sleddog activities, unlike regular PAT dog therapies offer not only positive benefits to the person's mental/ emotional health but they also combine the benefits of sport, social sport as well as the exposure to animals. By taking part, the individual involved gains the positive exposures of animals, gets to compete in a sport and also gains social benefits by working with others, and as a team (Hejna, 2014), as well as interacting with the dogs themselves. There are also numerous benefits for the dogs involved. Some research on sleddogging has suggested a controversy around the use of dogs, however as suggested by the information provided by the Mynydd adventures website have confirmed that this is far from the truth. The animals' welfare is always at heart of the activities and often they are described as 'respected partners and companions' (St. Ours, 2020), which is evident as it is clear the dogs are all well-loved and taken excellent care of. The animals on the Mynydd website are described as 'howling with excitement as they are raring to go' and there is no evidence to suggest the dogs do not enjoy the activity.

Participating in social sports, particularly sleddog adventures, offers profound benefits for diverse groups, including neurodivergent individuals, socially isolated people, and those with mental health challenges. The psychological advantages, like improved mood and stress reduction, make these activities valuable tools for individuals facing mental health disorders. Sleddog adventures, specifically tailored for young people from local estates, create a safe space for stress relief and positive engagement. The competitive and teamwork aspects foster essential skills like mental resilience and discipline for navigating everyday challenges. Additionally, integrating sleddog activities into social prescribing aligns with the "Mental Health through Sport" model, emphasizing the therapeutic advantages of physical activities with animals. For individuals contending with social anxiety or trauma, engaging in sleddog activities provides therapeutic benefits through interactions with animals, creating a non-judgmental and supportive environment. This inclusive approach not only addresses the needs of those seeking social engagement but also offers therapeutic benefits to individuals finding solace, companionship, and emotional support through their connection with animals, presenting a versatile and holistic intervention for promoting mental health across diverse demographics.

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