Chapter 20

Waterloo Uncovered: From Discoveries in Conflict Archaeology to Military Veteran Collaboration and Recovery on One of the World's Most Famous Battlefields

Mark Evans, Stuart Eve, Tony Pollard and David Ulke

Keywords: veteran, archaeology, recovery, transition, collaboration

Abstract

Waterloo Uncovered is a ground-breaking conflict archaeology project, on the Waterloo battlefield in Belgium. Established in 2015 (the battle's bicentenary year) to learn more about the battle that shaped modern Europe, it supports Serving Personnel and Veterans (SPV) in their well-being, recovery (from mental and physical injury), education, vocation and transition into civilian life. This project brings together professional archaeologists, students, SPV and volunteers, in a mutually beneficial collaboration. It has five founding partner organisations: SPW (Service Public de Wallonie), The Centre for Battlefield Archaeology (University of Glasgow), L - P: Archaeology, ORBit team, Department of Soil Management (Ghent University), University College Roosevelt (Utrecht University). The charity is also dedicated to educating the general public about its findings; these are changing the way we understand both the Battle of Waterloo, and how we support our armed forces. This paper discusses the project so far, and our future research goals.

Introduction

Archaeology is emerging as an exciting and promising tool in supporting the recovery of serving military personnel and veterans (SPV) who have experienced physical and/or psychological trauma (Finnegan 2016; Osgood and Andrews 2015; Ulke 2018). Equally, SPV have numerous skills applicable to archaeology, and they can be great assets for public engagement. In this paper, we present findings from our project, Waterloo Uncovered. This combines world-class archaeology on the site of one of the greatest battles in European history, with SPV support, education and transition into civilian life. SPV support is at the forefront of the project's mission, together with expanding our knowledge of the battle. A commitment to professional standards of archaeology underpins this charitable project, alongside multinational collaboration and public engagement. In this paper we will focus on how we select and support SPV participants, the outcomes we have recorded so far, and the potential wider benefits and future direction of this project.

It bears explanation that 'SPV' is standard military terminology; both project co-ordinators and the serving and veteran military personnel themselves, use the term to identify this community. For the purposes of this paper, Serving Personnel (SP) are defined as and including those currently employed by the Army, Navy and Air Force, in a regular (full--time), reservist (part--time), or training capacity (including the Officers Training Corps (OTC) and Cadet Force. Veterans (V) are defined as those who have served in the British Armed Forces for at least one day (which would include as little as a single day in training).

'Waterloo Uncovered'

Waterloo can, with some justification, lay claim to being the single most significant day of fighting in European history. Other battles were longer, fought over larger areas, or involved more combatants. However, few can be said to have settled a war in a single afternoon, and to have produced, in their conclusion, the peace that characterised the continent for so long after 1815. It may be one of the best-documented battles in history, but in 200 years there has been very limited archaeology carried out on the site. In that time, wear-and-tear, and illicit metal detecting and looting, have depleted the available archaeological evidence. Our project began on the bicentenary of this battle and, despite these depletions, has made significant archaeological discoveries (the details of which will be presented in forthcoming publications).

Fittingly, the project was founded by two SPV with archaeology backgrounds and a significant link to the Battle of Waterloo. Waterloo Uncovered founders Mark Evans and Charlie Foinette studied archaeology together at The Institute of Archaeology, University College London. Completing their MAs in Museum Studies and Public Archaeology respectively, they both changed tack and joined the British Army as officers in the Coldstream Guards; a regiment that made an important contribution to, and suffered significant losses at, the Battle of Waterloo. Early in their military careers, they both spotted the potential for archaeology to benefit the military, not only by uncovering new and important finds about regiments and battles, but as a means of educating serving personnel about their military history. Both saw the potential in archaeology for meaningfully engagement with soldiers; its physical, outdoor process and direct involvement could improve on book- and lecture-based learning and build on the soldiers' skillsets. For injured veterans, other physical, outdoor programmes that built confidence, skills and social connections, were showing positive outcomes; archaeology offered an obvious parallel. This programme, therefore, combines support for SPV recovery and transition into civilian life, with public archaeology, giving a structure where non-professional archaeologists make a meaningful contribution to the field. Waterloo Uncovered additionally has five founding partner organisations: SPW (Service Public de Wallonie), The Centre for Battlefield Archaeology (University of Glasgow), L - P: Archaeology, ORBit team, Department of Soil Management (Ghent University), University College Roosevelt (Utrecht University). The mutual benefits of this socially-engaged, community-based archaeology, will be discussed in more detail below.

In the UK, both SPV support and archaeology have unmet needs, to which Waterloo Uncovered contributes. The Ministry of Defence recently reported that among the military personnel that served between 1991–2014, approximately 66,000 will need physical or mental health support. For these, the greatest need is for mental health provision (MOD 2017). Support is available from clinical, welfare and psychological programmes. However, the need continues to outweigh provision, and a significant number of veterans experience varying degrees of difficulty in adjusting to civilian life and recovery from their injuries (Duvall and Kaplan 2014). Veteran populations have historically had negative perceptions about mental health treatment (Caddick et al. 2015; Hoge et al. 2004). For example, compared to other civilians, veterans with Post-Traumatic Stress Disorder (PTSD) are less likely to engage in help-seeking behaviour (Murphy et al. 2015). Meanwhile, the All Party Parliamentary Group on Archaeology concluded that despite considerable and growing public interest in archaeology, funding and staffing for archaeology projects are still falling short of needs. This leaves professional archaeologists overworked, whilst commendable community archaeology projects lack proper liaison with professional groups (Aitchison 2017; APPAG 2004). The last decade or so has seen the appearance of a number of diverse community archaeology projects, including those that involve SPV; the most notable of these is Operation Nightingale (Finnegan 2016). At its inception in 2014, Waterloo Uncovered looked to some of these initiatives for guidance on best practice in the integration of SPVs into archaeological projects. Since then, it has developed, and continues to refine, its own holistic approach (Ulke 2018). This approach has benefited greatly from encouraging partnerships and collaborations with leading practitioners from fields such

as veteran care, clinical psychology, professional archaeology and the world of academia. Underpinning all of this, though, is the integration of community (most notably SPV), professional and student archaeology, In achieving this, Waterloo Uncovered aims to achieve benefit for (and from) all its participants; our evaluations suggest that volunteers and staff gain as much as the SPV from the experience.

Mutual Benefits

For SPV participants, some of the factors promoting well-being through archaeology align with those inherent to other successful SPV support projects. These include outdoor activity, social interaction and learning new skills (Duvall and Kaplan 2014, MOD 2012). Additional benefits from archaeology include its 'meditative' quality (complete concentration on detailed practical tasks to the exclusion or more disruptive thoughts), and the fact that the work is purposeful, contributing to a tangible and lasting outcome. Both are common features of projects that are successful in supporting mental and physical recovery (Carless *et al.* 2013, Finnegan 2016, Ulke 2018).

Beyond this, there are features of our archaeology project, we believe, that may have unique mutual benefits for SPV and archaeologists alike. Firstly, we and other assisted-archaeology projects have seen how the military skillset overlaps with the skills needed for professional archaeology (Finnegan 2016, Osgood and Andrews 2015). Both groups are hardened to (and even enjoy) outdoor work in varying weather conditions. They develop skills in mapping, scanning and surveying the ground, are proficient in teamwork and team leadership, are accustomed to meticulous reporting and are experienced in group living. This makes SPV involvement a genuine asset on the excavation (a term here which is taken to encompass a wide variety of field activities); they contribute effectively from the outset, with moderate additional training, due to their existing skillset and hardiness. Indeed, exposure to the 'camaraderie' of a dig can in itself be the benefit that SPV seek, as the environment and interaction is reminiscent of military living.

Secondly, archaeology provides a connection to heritage, history and identity for the SPV, in the same way that heritage contributes meaning to people's lives across the UK (MORI 2000). For some of the participants, Waterloo Uncovered provides a direct link between soldiers who have served or are still serving, to the contribution of their own regiment at the Battle of Waterloo. For others, the archaeology links them more broadly to past soldiers. Again, this link is also an asset to battlefield archaeologists. Waterloo Uncovered recognises that SPV have crucial insight into the human experience of being in battle. They have an inherent understanding of how this affects decision-making, and that this can add considerable value to archaeologists' interpretation of conflict sites. Additionally, despite changes in modern warfare, SPV have applicable knowledge involving the ballistics of fired weapons, military tactics and their application, the terrain of a battlefield and how to exploit it, and military injuries and losses. As such, SPV are perhaps uniquely placed to provide meaningful insights into the interpretation of new and existing knowledge about the Battle of Waterloo.

Methods

As our programme and the research within it is ongoing, we will detail our programme structure for all our participants (SPV, archaeologists, students and volunteers), together with the common research framework and data collection on well-being for all our cohort. Omitted are our methods for archaeology conducted on the programme. A more comprehensive account of our methods is available at http://www.waterloouncovered.com/learn/project-review-volume-1/, and a discussion of archaeological methodologies adopted and the results of this research, will appear elsewhere).

The Waterloo Uncovered team

Around a quarter to one-third of the Waterloo Uncovered excavation team are recruited as "beneficiaries", whom we refer to as SPV. The remainder of the programme team consists of staff members, volunteers (including welfare officers, archaeological and research directors, archaeological supervisors, technical specialists, etc.) and students. Notably, a number of these team members are also serving or ex-military, so around half the team are actually SPV. Since our programme started, past beneficiaries have returned as volunteers or staff. In this report, although we acknowledge that this additional military background may be an important factor in the Waterloo Uncovered programme, we refer only to "beneficiaries" as SPV.

Participant selection

When we recruit SPV, archaeologists, students and volunteers for the Waterloo Uncovered programme, we consider it important to have a diverse group; in gender, nationality, ethnicity, military background and, type and degree of injury. Our process for recruiting non-SPV involves an interview and briefing about the nature of the project and a general discussion of the benefits and challenges of taking part. Optionally, students, volunteers and archaeologists are given the opportunity to take mental health first aid courses.

SPV selection follows an established protocol. Each year, we estimate how many SPV we can support on the excavation, and recruit until we have an excess of applicants to allow for withdrawals and (rarely) exclusions. SPV recruitment begins in February when we review application forms. To recruit veterans, we work with other organisations including Combat Stress, Help for Heroes, Walking With The Wounded etc., to identify individuals who would most benefit from taking part. Injured serving personnel are recommended to us by Personnel Recovery Units or by their units. Additionally, throughout the project, a proportion of SPV have 'selfreferred', i.e. applied to us directly rather than through an organisation. These self-referred SPV are important to us; the issues they face, such as social isolation, are not necessarily addressed by other organisations. A recent report published by Forces in Mind (Rafferty et al. 2017), interviewed 62 military veterans about barriers to accessing support. A key finding was that, as well there being recognised stigma for military and ex-military needing support (for detailed discussion of stigma, see Caddick et al. 2015, Sharp et al. 2015), veterans often feel that they are not entitled to, or eligible for, support programmes (Rafferty et al. 2017: 23). For example, SPV can feel that they have already had 'their portion' of care but are somehow not yet 'fixed', as opposed to viewing their recovery as a transition towards self-regulation (Rafferty et al. 2017: 9). We recognise that approaching Waterloo Uncovered, whether as a first point of contact or as a referral from another organisation, sometimes requires SPV to overcome significant barriers.

In March, applicants undergo a 30–40 minute interview. During this, a staff member and welfare officer verify the SPV's background, discuss their motivations and aims for their time on their excavation, and how best to manage their welfare. We aim to be as inclusive as we can; we have a 'can-do' attitude towards supporting people with injuries. Exclusion criteria apply only when there is a serious risk of harm for the participant in taking part, a significant risk to others from the participant, or if the SPV's specialist care requirement exceeds available resources (although we are happy to host carers on the dig). Aiming to have the most diverse team possible, we select participants from a wide range of ages, genders, background and injuries. Selection is complete by April, and we take care to inform unsuccessful candidates in an appropriate and considered fashion. They are encouraged and provided with information to apply to other (UK-based) archaeological excavations that cater for SPV. Where appropriate, they are offered contact details and encouraged to contact other charities and services that might be able to address their needs. Some of the unsuccessful applicants are also given the

option of a place on the Waterloo Uncovered reserve list and, if selected candidates withdraw, these reserve applicants are invited in their place.

The Waterloo Uncovered programme

For the SPV, the programme begins once they accept the invitation. We aim to build our relationship with each SPV through regular email and phone contact. For some of our applicants, attending a project like this is physically and/or mentally challenging, so we spend three months making individual preparations and building trust and confidence in our participants. Negative experiences or preconceptions can block a veteran's decision to engage or continue with support programmes (Rafferty *et al.* 2017). We aim to keep communication open so that candidates can voice concerns about coming on the programme, and, where possible, we manage stress and anxiety to keep them engaged. We collaborate with case workers, clinical teams and more general support networks (including family) where necessary.

Our two-week excavations have so far centred on Hougoumont Farm; a key site on the battlefield of Waterloo in Belgium. UK-based SPV, staff, students, archaeologists and volunteers travel together from London, meeting other international participants on arrival. To cater for the full range of medical needs on the team, everyone is housed at a 3* hotel near the excavation site that offers self-contained catering and has proved extremely accommodating to the varying needs of our groups. To support group cohesion and social interaction, we aim to house team members in twin rooms with exceptions only for special requirements.

Days on the excavation have consistent structure and routine. Socialization is encouraged, with morning briefings and evening debriefings, shared mealtimes and evening activities. Although our approach to support is holistic, our plan for each SPV is founded on a detailed risk assessment for physical and mental health (using a Casualty, Evacuation/Repatriation Plan) and a duty welfare and administrative team is available around the clock.

The first two days of the programme are dedicated to orientation and training. We introduce SPV to the principles of archaeology and the events of the Battle of Waterloo, with a day of briefings and a battlefield tour. On the second day, SPV are trained in site safety and basic archaeology skills in small teams of five or six, in a 'round-robin' system commonly used in the military. This initial orientation is a chance for team leaders, SPV and the welfare team to see how best to include and support all participants. The working groups, supervised by an archaeologist, remain the same throughout the dig and, from day three until the end. The groups work at a flexible pace, tailored to the injuries and limitations of each team-member. We provide the SPV alternatives to trench archaeology that include surveying, finds processing and photography — and there is opportunity to alternate between these four. All our SPV are given the option of having their progress in archaeology validated in an accredited 'skills passport'. The skills passport is backed by major employers and the Chartered Institute for Archaeologists (BAJR 2019) and supports a transition towards professional archaeology for those who want it, by documenting formal experience and training. In addition to archaeology, the programme offers optional creative activities to all team members, such as art, photography, model painting and creative writing. Purposeful and creative activities such as these have a known stress-relieving effect and can enhance health and well-being (Gutman and Schindler 2007).

At the conclusion of the dig, the UK elements return to London together before dispersing, and Waterloo Uncovered continues email and phone contact with SPV for roughly two more months. During this time, we perform a handover to their referral organisations, support network or caregivers. We also supply all our SPV with information on other welfare services that they may find useful, and guidance on how to continue

developing any interest in heritage and archaeology. After the two month point, Waterloo Uncovered remains available to those wanting information or advice regarding archaeology and heritage, and regularly invites SPV to take part in public engagement and events organised by the charity (in early 2019 this included a residential conflict archaeology and heritage weekend in Scotland, hosted by the University of Glasgow — a project partner — and Northlight Heritage). We also facilitate ongoing social contact through social media and reunion events, maintaining an 'alumni' network that many participants find helpful.

Assessment

We assess the effect of the programme on both 'non-military' (archaeologists, students, volunteers and staff) and SPV. To track well-being, SPV complete self-reporting questionnaires on the first and last day of the excavation, plus three months post-excavation. Within the questionnaire, we include the Warwick-Edinburgh Mental Well-being Scale (WEMWBS; Warwick Medical School 2016) and ICEpop CAPability measure for Adults (ICECAP-A; Al-Janabi *et al.* 2012) to obtain quantitative scores and track changes in well-being. We also rely on qualitative feedback from the participants in a debrief interview in the last few days of the dig and a feedback survey sent after their return home. Since 2017, we have also held focus groups and collected qualitative feedback from the archaeologists, students, volunteers and staff. For everyone who takes part in the Waterloo Uncovered programme, the questionnaires assess the impact of taking part in the excavation on well-being, motivation and education.

Outcomes

Participation, age, rank, nationality and gender

We have aimed to host a diverse range of people, with as little hierarchy as possible and in a structure that encourages social mixing. Since its start in 2015, 77 SPV beneficiaries have come through the Waterloo Uncovered programme. Another 106 participants have taken part as archaeologists, staff, volunteers and students. SPV ages ranged from 18–78, while other participants' ages ranged from 17–68. The gender split across the excavations was 28% female: 72% male. Notably, this gender split was more uneven among SPV, with a 13% female: 87% male split; however this still exceeds the most recent figures for gender representation in the Armed Forces. In 2018, 10% of the Armed Forces were female, and this number has been far lower historically and is reflected in veteran populations — for example, in 1990, less than 6% of the Armed Forces were women (Dempsey 2018). During the programme, SPV were treated equally, regardless of previous or serving rank in the military. The mix of SPV on the programme represented 21.7% commissioned officers and 78.3% non-commissioned officers. Overall, our participants over three years represented 14 nationalities; SPV hosted so far have been 87% British, 9% Dutch and the remainder from USA, South Africa and Switzerland.

SPV well-being

We have seen our participants' well-being improve during and after the Waterloo Uncovered programme. Good well-being, according to the UK mental health charity Mind allows you to do the following:

- feel relatively confident in yourself and have positive self-esteem
- feel and express a range of emotions
- build and maintain good relationships with others
- feel engaged with the world around you
- live and work productively
- cope with the stresses of daily life
- adapt and manage in times of change and uncertainty

We have seen a number of the above parameters improve for our SPV beneficiaries. Over the last three years, we have been collecting quantitative data on well-being using the WEMWBS and ICECAP-A scoring systems. Both are showing a trend towards improvement in scores in paired comparisons before and after the excavation part of the programme (Ulke 2018). We are now aiming to accumulate enough data for a well-powered large-scale paired analysis.

Qualitative feedback from SPV has identified a number of factors that contribute to their improved recovery. It is worth noting that not all factors were beneficial to all people, while some showed more improvement than others (Ulke 2018). Our feedback supports the recommendation that the type of SPV support needed, depends on the individual (British Legion 2018).

However, interaction with other SPV, with a diverse group of civilians, and engagement with archaeology, were often cited as beneficial, as the following testimonial extracts demonstrate:

'Really, what made my experience on the project was not only learning about the battle and how it was fought compared to modern warfare, but uncovering the truth, whilst remembering all those who fought for something greater than themselves. The project also brought new life to me as it was somewhere where other soldiers and veterans could be together; we all have that same like-minded mentality and humour. I have since made amazing friends and seen how the project has helped others in ways that could not be put into words.'

'My whole social network other than family, are all military, even my wife. Meeting the archaeologists and students was an unexpected benefit to me.'

'The overall programme was a great experience and has increased my confidence in myself and other areas. I really enjoyed the interaction with the non-service personnel which I found a great help in my case. (We were all part of the same team). Meeting people of different nationalities and cultures was a good experience as well. I learnt that that there can be a life after the service (if you look for it)'

SPV transition, life skills and vocation

While some of our SPV may have had a pre-existing interest in archaeology, it is our observation that taking part in the Waterloo Uncovered programme provides a significant proportion of our cohort with new skills, interests and sometimes a full new career path. Of the 77 SPV we have hosted so far, six have gone on to study archaeology at university (three undergraduate degrees and three Masters degrees). A further 15 SPV have continued onto other heritage of archaeology projects; for example, volunteering in a museum, metal detecting, or joining other programmes such as Breaking Ground Heritage or Operation Nightingale. Our public engagement programme to disseminate findings from the archaeological dig has benefited from the involvement of ten SPV and we have had 12 people return as staff or volunteers for the Waterloo Uncovered team. One SPV described his transition in the following way:

'I learnt a lot about myself, I felt like I had truly found myself and a purpose again. I now know I have a keen interest in archaeology and I will be carrying it on. I haven't felt this happy in a long time and everyone comments on how happy I look when I'm digging therefore, it's really helped me learn who I am, who I want to be and what I want to do. Following the dig I've done another dig with OP WALBEA and

I'm doing another dig with Op Nightingale. Next year I'm hoping to return and do more archaeology with both of these projects.'

Archaeologist feedback

Over the last three years, archaeologists and students have reported that they too had a positive experience of taking part in the programme. A common theme has been the benefit of coming into contact with people from different backgrounds and life experiences, despite the challenges of having differing humour or political views. In 2017, we began recording this feedback in focus groups. In a discussion with 12 returning staff and students, although some had previous interaction with SPV, there was unanimous agreement that taking part in the programme changed their perspective and encouraged them to share a new respect for military veterans with friends, family and colleagues (Haverkate, preliminary data). For example, one focus group member remarked that prior to the programme, they could not understand why anyone would join the army and that they had a 'very naive understanding of the military'. After the programme, this changed to 'an understanding of [sic] they are people who are attempting to do something so much braver than I could ever attempt'. There was an observation that academics studying military history have a reluctance to engage with veterans, but that our programme helped change that outlook for the participating academic staff and students.

Social mixing progressed in our programme but was by no means complete. In the focus groups and in feedback, archaeologists have commented on the distinct military culture but welcome its integration into archaeology:

'As an archaeologist the opportunity to excavate and produce archaeological results at the site of one of the most important events of the 19th century is a privilege. To do this with military personnel, who have infinitely more combat experience than I shall ever acquire, and to provide them with some respite, recovery and change adds to that satisfaction. In many ways I remain an outsider, a lifetime archaeologist among a group of professional military personnel, people who share experience, humour and camaraderie. It is truly humbling to think that something that has been so important to me, archaeology, can also provide some help to those who need it.'

Discussion

Waterloo Uncovered is changing our understanding of the history of the battle and, at the same time, transforming the lives of many people involved in the project. A central tenet is collaboration and sharing of information, including open-source research materials and public engagement. It is a model for conflict archaeology and social change that will continue to develop; a model that we feel could contribute effectively to research on well-being, archaeology practice, recovery and military history.

In its own right, Waterloo Uncovered does not have any specific recovery or clinical output. However, the holistic nature of the process, from application to completion of a trip, provides an environment, challenge and experience that can be used to support the recovery pathway for SPV. Both goal-setting (Doig *et al.* 2009), and a participatory structure like ours (Nutbeam 2000) have proven associations with better health outcomes. By including participants in the programme from the outset and conducting extensive interviews beforehand, the SPV engage in meaningful participant-centred goal-setting, that reflect how they would like to be involved and what they would like to gain from the experience. The programme structure also has parallels with graded return to work and progressive goal attainment practices, which have shown to significantly improve recovery and workplace participation (NICE 2009, Appendix C). In particular, it introduces structure and timekeeping (for

travel, the working day and the application itself). It exposes SPV to a flexible workplace environment, provides the opportunity to progressively repeat experiences that may have previously caused anxiety (e.g. travel, eating in public, socialising), allows SPV with disabilities to practice mobility in a non-familiar, non-clinical environment, and builds confidence through challenging and purposeful activity. Our tracking of SPV recovery and transition trajectories is still on-going, and thus it remains to be determined whether participation in Waterloo Uncovered has significant effects on health outcomes and work participation.

Social connectedness has a long-standing positive association with emotional, physical and psychological wellbeing. More recently, it has been recognised that well-being interventions, such as ours, need to provide meaningful social roles outside the formal mental health system. For long-term mental health recovery, individuals need to believe that their social contribution is valued, and they also need to broaden their connections in order to enhance the diversity of their social group (Webber and Fendt-Newlin 2017). Our programme is characterised by group work, group socialising, shared accommodation and, contrary to the military culture that SPV may be used to, a flattened hierarchy. A key outcome is the interaction of civilians, military and veteran communities as they collaborate to gain deeper understanding of one of the most important battles in the history of Europe. This interaction fosters an improved integration of veterans into civilian life, both in their transition and in their acceptance and recognition by other civilians. This integration is, we believe, a significant factor in the improvement of well-being that we have observed. SPV come from the civilian population and returning to it is part of their life cycle. However, veteran and military communities can often become isolated from the rest of the civilian population through their choice of subsequent profession, their social circle and their belief system (Finnegan 2016, Murphy et al. 2016). Despite a common value system, serving personnel and veterans also have limited interaction (Hatch et al. 2013, British Legion 2018) and even veterans socially interact within their peer group, branch and rank, as opposed to across the full veteran population. Although fragmented, all these groups share a distinct military and veteran culture, with which members of our staff, our founders and welfare officers are familiar. Whilst our programme is not clinical, participants have commented on how their well-being is improved by feeling at ease and being amongst understanding peers. As the project has evolved, including SPV as returning staff and volunteers has also seen us benefit from their lived experience of injury and recovery, affecting the ways in which we support participants (WHO 2017). Overall, our findings support the proposal that cultural sensitivity —in this case to SPV values and identity — in the provision of welfare support, promotes better well-being outcomes (Heaslip 2015).

We have seen that the ultimate benefit of our programme comes from shifting perspectives and social mixing, from which we have measured benefit to both civilians and SPV. An extensive survey conducted by the British Legion (2018) found that, in addition to injury, Armed Forces culture is a contributor to the risk of social isolation and loneliness faced by veterans. Within this culture, there was a perception that civilians misunderstand or even show disdain for SPV (Demers 2011) and, simultaneously, veterans were reluctant to transition back to civilian life for fear of losing their identity (British Legion 2018). We saw noticeable improvements in self-esteem and positive views on civilian life after SPV were included in a mixed-gender, multinational group that combined civilians, military personnel and veterans, during both work and leisure. Previous studies have also reported that reduced social integration and loss of old military friendships among veterans carries an increased risk for PTSD and other mental health conditions (Hatch *et al.* 2013). Here we show, perhaps unsurprisingly, that the reverse — social integration and reconnecting with other SPV — has a positive effect on well-being. The British Legion (2018) recently identified as an important gap in evidence: the 'effectiveness of interventions with the [Armed Forces], including those that specifically target military identity'. Because Waterloo Uncovered deals with the full breadth of military identity — historical identity

through archaeology and SPV identities — we are uniquely placed to fill this gap in evidence, and thus to develop best practice models for SPV recovery and full transition into civilian life. Further research is needed and some of our future direction is outlined below.

Future Direction

Waterloo Uncovered initially aimed to support a few veterans and perform some exploratory archaeology, but it has since evolved into a much larger project. We now aim to use archaeology as a lens through which to view the Battle of Waterloo and understand the impact of war on people. We want to benefit all participants on our programme — SPV, archaeologists, volunteers and students — and to gain deeper insight into the benefits of collaboration and discovery.

Our project models several forward-looking recommendations for both archaeology and health support (Heaslip 2005, Thomas 2004, WHO 2017). By including SPV in our battlefield excavation, we work with a distinct social group that has a meaningful connection and interest in conflict history, and engage them in dialogue rather than didactic teaching. Further still, we give them tools to continue their exploration of their own heritage (Thomas 2004). We have not encountered any insurmountable challenges in training or supervision by performing archaeology in this way, so it serves as an ongoing proof-of-concept that community archaeology can combine with social engagement. From 2019, we plan to expand our archaeology beyond the Hougoumont Farm site and to increase our inclusion of international veterans. Additionally, we aim to use the lived experience of our SPV to inform both how we support their welfare (WHO 2017) and the ways in which we collaborate on conflict archaeology. By recording well-being scores and vocational outcomes for our SPV beneficiaries, we also have an increasing dataset with which to research the impact of our programme on SPV transition and recovery. For further study, we aim to introduce an Impact of Events Scale assessment to our SPV questionnaire and to expand and continue our qualitative analysis. Currently, we are in the process of developing a research framework that will allow us to make the best use of our data and to collaborate with other research groups.

Bibliography

Aitchison, K. 2017 *Archaeological Market Survey 2016–17* available at: https://www.archaeologists.net/sites/default/files/Archaeological%20Market%20Survey%202016-17%20101117.pdf (Accessed 17 January 2019)

Al-Janabi, H., Flynn, T.N. and Coast, J. 2012 Development of a self-report measure of capability well-being for adults: The ICECAP-A. *Quality of Life Research* 21(1),167–176.

APPAG 2004 Revised Summary of Issues from Submissions available at: http://www.appag.org.uk/report/summary_issues.html (Accessed 17 January 2019)

BAJR 2019 BAJR Learning: Education and Courses available at: http://www.bajr.org/BAJREducation/ (Accessed 17 October 2019)

- British Legion 2018 Loneliness and Social Isolation in the Armed Forces Community available at: https://www.britishlegion.org.uk/get-involved/campaign/loneliness-and-social-isolation/ (Accessed 17 January 2019)
- Caddick, N., Smith, B. and Phoenix, C. 2015 Male combat veterans' narratives of PTSD, masculinity, and health. *Sociology of Health and Illness* 37(1), 97–111.
- Carless, D., Peacock, S., McKenna, J. and Cooke, C. 2013 Psychosocial outcomes of an inclusive adapted sport and adventurous training course for military personnel. *Disability and Rehabilitation* 35(24), 2081–2088.
- Demers, A. 2011 When veterans return: The role of community in reintegration. *Journal of Loss and Trauma* 16(2), 160–179.
- Dempsey, N. 2018 *UK Defence Personnel Statistics. House of Commons Library Briefing Paper Number CPB7930* available at: http://researchbriefings.files.parliament.uk/documents/CBP-7930/CBP-7930.pdf (Accessed 17 January 2019)
- Doig E., Fleming, J., Cornwell, P.L. and Kuipers, P. 2009 Qualitative exploration of a client-centred, goal-directed approach to community-based occupational therapy for adults with traumatic brain injury. *The American Journal of Occupational Therapy* 63(5), 559–568.
- Duvall, J. and Kaplan, R.J. 2014 Enhancing the well-being of veterans using extended group-based nature recreation experiences. *Journal of Rehabilitation Research and Development* 51(5), 685–696.
- Finnegan, A. 2016 The biopsychosocial benefits and shortfalls for armed forces veterans engaged in archaeological activities. *Nurse Education Today* 47, 15–22.
- Gutman, S.A. and Schindler, V.P. 2012 The neurological basis of occupation. *Occupational Therapy International* 14 (2), 71–85.
- Hatch, S.L., Harvey, S.B., Dandeker, C., Burdett, H., Greenberg, N., Fear, N.T. and Wessely, S. 2013 Life in and after the Armed Forces: Social networks and mental health in the UK military. *Sociology of Health and Illness* 35(7), 1045–1064.
- Heaslip, V. 2015 Experiences of vulnerability from a gypsy/travelling perspective: A phenomenological study. Unpublished PhD thesis. Faculty of Health and Social Sciences. Bournemouth University.
- Hoge C.W., Castro, C.A., Messer, S.C., McGurk, D., Cotting, D.I. and Koffman, R.L. 2004 Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *The New England Journal of Medicine* 351(1), 13–22.
- Mind 2013 *How to Improve your Mental Wellbeing* available at: https://www.mind.org.uk/information-support/tips-for-everyday-living/wellbeing/ (Accessed 17 January 2019)

- MOD 2012 The Battle Back Programme: Sport and Training for Wounded, Injured and Sick Personnel from Across the Armed Forces available at: https://www.gov.uk/guidance/the-battle-back-programme (Accessed 17 January 2019)
- MOD 2017 Defence People Mental Health and Wellbeing Strategy 2017–2022 available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/689978/20170713-MHW Strategy SCREEN.pdf (Accessed 17 January 2019)
- MORI 2000 What Does 'Heritage' Mean to You? available at: https://www.ipsos.com/ipsos-mori/en-uk/what-does-heritage-mean-you (Accessed 17 January 2019)
- Murphy, D., Hodgman, G., Carson, C., Spencer-Harper, L., Hinton, M., Wessely, S. and Busuttil, W. 2015 Mental health and functional impairment outcomes following a 6-week intensive treatment programme for UK military veterans with post-traumatic stress disorder (PTSD): A naturalistic study to explore dropout and health outcomes at follow-up. *BMJ Open* 5(3). Available at: http://dx.doi.org/10.1136/bmjopen-2014-007051 (Accessed 17 January 2019)
- Murphy, D., Spencer-Harper, L., Carson, C., Palmer, E., Hill, K., Sorfleet, N., Wessely, S. and Busuttil, W. 2016 Long-term responses to treatment in UK veterans with military-related PTSD: An observational study. *BMJ Open* 6(9). Available at: http://dx.doi.org/10.1136/bmjopen-2016-011667 (Accessed 17 January 2019)
- NICE 2009 Workplace Health: Long-term Sickness Absence and Incapacity to Work. Public Health Guideline [PH19] available at: https://www.nice.org.uk/guidance/ph19 (Accessed 17 January 2019)
- Nutbeam, D., 2000 Health promotion effectiveness the questions to be answered. In. IUHPE A report for the European Commission by the International Union for Health Promotion and Education. The Evidence of Health Promotion Effectiveness: Shaping Public Health in a New Europe, Part 2 (second edition). 1–11. Available from:
 - https://www.iuhpe.org/images/PUBLICATIONS/THEMATIC/EFFECTIVENESS/HPE_Evidence-2_EN.pdf. (Accessed 17 January 2019).
- Osgood, R. and Andrews, P. 2015 Excavating Barrow Clump: Soldier archaeologists and warrior graves. *Current Archaeology* 306, 28–35.
- Polusny, M.A., Erbes, C.R., Thuras, P., Moran, A., Lamberty, G.J., Collins, R.C., Rodman, J.L. and Lim, K.O. 2015 Mindfulness-based stress reduction for Posttraumatic Stress Disorder among veterans: A randomized clinical trial. *Journal of the American Medical Association* 314(5), 456–465.
- Rafferty, L., Stevelink, S., Greenberg, N. and Wessely, S. 2017 *Stigma and Barriers to Care in Service Leavers with Mental Health Problems* available at: https://www.kcl.ac.uk/kcmhr/publications/Reports/index.aspx (Accessed 17 January 2019)
- Sharp, M-L., Fear, N.T. Rona, R.J., Wessely, S., Greenberg, N., Jones, N. and Goodwin, L. 2015 Stigma as a barrier to seeking health care among military personnel with mental health problems. *Epidemiologic Reviews* 37(1), 144–162.

- Thomas, R.M, 2004 Archaeology and authority in the twenty-first Century. In. N. Merriman (ed) *Public Archaeology*. London: Routledge, 191–201.
- Ulke, D. 2018 The Legacy of Mars: The Impact of Participation in Archaeology on the Mental Well-being of Military Personnel and Veterans. Unpublished Masters dissertation, University of Leicester.
- Warwick Medical School 2016 WEMWBS User Guide available at: https://warwick.ac.uk/fac/med/research/platform/wemwbs/researchers/userguide/ (Accessed 17 January 2019)
- WHO 2017 Promoting Recovery in Mental Health and Related Services WHO QualityRights Training to Act, Unite and Empower for Mental Health (Pilot Version) available at: http://www.who.int/iris/handle/10665/254811 (Accessed 17 January 2019)

