

Evaluation Report

YEAR 3 OF NATIONAL LOTTERY FUNDING

SURF ACTION 'CENTRE OF EXCELLENCE'

30/05/15 – 29/05/16



AN EVALUATION OF THE THIRD YEAR OF SURF ACTION'S FIVE
YEAR 'CENTRE OF EXCELLENCE' PROJECT PART FUNDED BY THE
'BIG LOTTERY FUND'

Surf Action

Surf Action is the trading name of Combat Surfers, a Cobseo registered military charity (Charity Number: 1140191) with the primary objective to support the Military Covenant by promoting and protecting the physical and psychological wellbeing of serving and former serving members of the Armed Forces and the Blue-Light Emergency Services and their families who are living with physical and/or psychological difficulties as a result of their service and to assist them into making the transition into civilian life.



Surf Action promotes good mental health through personal development, education and employment and empowers its service users to lead healthy, fulfilled and independent lives and to become valued and active members of their community. Core to achieving this is the use of the blue gym concept and involving our service users and their families in surfing, kayaking, paddle-boarding, and other high intensity water-sports in the magnificent coastal environment around us with the resulting recognised physical and psychological health

benefits. National Lottery funding was awarded to allow this provision to be extended, improved and enhanced over a 5-year period, the third year of which is now complete.

YEAR 3 IN BRIEF:

Surf Action has made solid progress in the third year of the project. The ongoing surf clinics remain the primary focus of activity and contact with veterans and their families and we have seen good attendance from both serving personnel, veterans and their families. The Newquay clinic has evolved into the primary clinic and is now running on Saturdays as this maximises the opportunity for those who are working during the week to also benefit. In the early summer we started two beach based projects over 8 consecutive weekends from Newquay and Praa Sands for the children of serving personnel and veterans with the aim of improving integration within the local community and encouraging parents to spend quality time with their children by acting as volunteers. These proved to be so popular that another 4 courses were added.

At the Veterans' Centre at Long Rock we have encouraged organisations whose activities compliment those of Surf Action to make use of the office facilities as a focal point for veterans and their families. In addition the Probation Service now sees their west Cornwall clients at the centre and this enables us to meet and support veterans who are involved in the criminal justice system. Surf Action has continued to successfully encourage veterans in need of professional psychological support to access the NHS Veterans Referral Pathway via their GP towards dedicated veteran mental health services such as Combat Stress. We continue to support them and their families through the benefits of physical activity in the wonderful beach environment.

Throughout the year the charity continued to build strong relationships with national & local military charities and this is already resulting in new opportunities.

Surf Action has continued to build upon its strong relationships with university institutions and as a result has been invited to become a partner on the 'Veterans in Transition' research project and to join the Stakeholder Project Steering Group. The project is being run by the University of Massachusetts Boston, University of Exeter (Strategy and Security Institute) and Anglia Ruskin University (Veterans and Families Research Institute). This followed a meeting between Surf Action & Dr Thomas T. Kane, the Director of 'The William Joiner Institute for the study of War and Social Consequences' at the University of Massachusetts Boston. This research should enhance the understanding of veterans' and

veterans' family's experiences and needs within the wider UK public and, thus, have the potential to improve the provision of government and third-sector support to veterans and their families. Surf Action is very proud to be recognised by such prestigious institutions and looks forward to having a significant input. We are also working on a project with the Faculty of Education at the University of Waikato in New Zealand.

The benefit of having facilitated the carrying out and publishing of verified PhD academic research about our Ocean Therapy course has been crucial in the recognition of it by Devon & Cornwall Police as a resource which their officers can access via their Occupational Therapy department. We look forward to this relationship developing in year 4. Surf Action is the only organisation providing evidence-based ocean therapy to support the mental health and wellbeing of serving military, veterans and their families in the UK.

The long term advantage of strong relationships with the military have continued to be realised with repeat visits from several regiments for adventurous training which also encompasses discussions about mental health and PTSD.

Surf Action has also continued to develop its educational route pathways through which the service users can achieve their specific needs. It has also continued to refine its 'Integrated Joined-Up Recovery Programme'.

Surf Action defines 'Recovery' as living well in spite of any difficulties we may have to face. We view recovery as a journey, a movement from the place a person is in to places that are better to be in, learning and making use of new skills and understandings along the way. The joined-up recovery model is a multi-dimensional (holistic) approach to improving ones mental health which takes into account an individuals' needs, environment, social network, relationships, diet, physical wellbeing and so forth. Surf Action recognises that recovery:

- Does not necessarily mean getting back to where you were before
- Happens in 'fits and starts' and, like life, has many ups and downs
- Is profoundly influenced by people's expectations and attitudes
- Requires a well organised system of support from family, friends or professionals
- Requires services to embrace new and innovative ways of working.

SURF ACTION JOINED-UP RECOVERY MODEL

A HOLISTIC, MULTI-DIMENSIONAL INTEGRATED RECOVERY PATHWAY LEADING
TO A FULFILLING AND INDEPENDENT LIFE

QUALITATIVELY EVALUATED AND PUBLISHED (2015) BY DR NICK CADDICK OF THE 'PETER
HARRISON CENTRE FOR DISABILITY SPORT' AT LOUGHBOROUGH UNIVERSITY

Comprehensive Client Needs Analysis

- Including a physical, psychological and emotional needs audit (Griffin & Tyrrell)
- Signposting where beneficial during initial engagement



8 Week Evidence Based Ocean Therapy Course

- Weekly high intensity physical activity in the coastal environment
- Based on the published work of Carly Rogers MA OTR/L, an Occupational Therapist based at the University of Southern California and a director of the Jimmy Miller Memorial Foundation. Ocean Therapy is being delivered to both veterans and serving personnel in the USA in order to boost physiological, psychological and emotional wellbeing and resilience.



Empowerment and Education

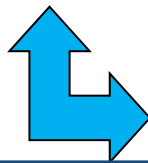
Building on the benefits of the Ocean Therapy we deliver programmes to develop:

- Improved motivation, self-belief, self-discovery and social development
- Improved family situations, relationships and peer friendships
- Re-engagement with society through volunteering or part-time/full-time work
- Stronger connections between the military and civilian communities
- Improved social integration and inclusion through strong community cohesion
- Independence not dependence



Into Work, Part-Time Work or Volunteering

Some veterans are still in the recovery stage from their injuries, whether they are physical and/or psychological, and are not ready for full-time work but they may be capable of doing part-time work or volunteering. Similarly, some are on specific benefits and limited in the number of hours of work or volunteering which they can do.



The Ocean Therapy remains accessible throughout the Integrated Pathway.

Wellbeing is monitored and reported on throughout via a Wheel of Life Emotional Needs Audit (Griffin and Tyrrell) and the Universities of Warwick and Edinburgh Mental Well-Being Scale.

Educational and Motivational Courses

Those who are not ready for part-time work or volunteering are encouraged to attend some of our vocational and non-vocational life-skills courses at the Surf Action Veterans Centre. This helps build their self-esteem and team skills, boosts their practical knowledge base, gets them back into a good routine and is good for their psychological wellbeing. This should all help in their recovery and move them in to a position where full or part-time work or volunteering is practicable.

The in-house courses offered include:

- Trauma and the brain
- Your rights as a consumer
- Electrical safety in the home
- Fire safety in the home
- First aid
- Health and safety
- Manual handling
- Money and debt
- Photography
- Business Skills
- Boost your IT skills
- Housing – Your rights as a landlord/tenant
- Brush-up on your GCSE mathematics
- Surf skills leading to a RLSS qualification



YEAR 3 PROJECT GOALS

(REPORTING ON 40 VETERANS)

- Improving veterans' psychological and physical wellbeing allowing them to engage more with the community by removing feelings and habits of isolation as measured by regular assessment using a recognised evaluation tool.
- Increasing veterans' self-confidence and self-esteem and strengthening their family relationships by providing continuous support for veterans and their families wishing to escape the daily barriers as measured by regular assessment using a recognised evaluation tool.
- Improving veterans and their family's relationships as measured by regular assessment using a recognised evaluation tool.
- Improving veterans and their families' health and wellbeing by increasing their coping skills and knowledge of coping strategies.

- Improving the employment prospects of veterans and ex-service personnel by strengthening their knowledge of transferable skills needed in the civilian work place whilst also educating employers.

METHODOLOGY

As part of its integrated recovery programme Surf Action engaged its year 3 service users in structured 8 week cycles based around the Surf Clinics to aid their psychological and physical wellbeing. Improvements in these vital aspects of their lives were then used as a catalyst to engage them in the other services offered by the charity in order for them to move forward and achieve the best they could be allowing for their individual circumstances. Their families were also encouraged to participate and specific projects were run for them.

- A comprehensive case history of each veteran was taken at initial engagement. Wives/partners were encouraged to attend these meetings
- A physical, psychological and social needs audit was carried out on each veteran and their family
- Veterans and their families were signposted to partner organisations and charities to best satisfy the requirements of their needs analysis which could not be addressed by Surf Action
- Specific individual psychological support was provided through GP referral or self-referral to the veterans' mental health charity 'Combat Stress', the network of therapists provided by 'PTSD Resolution', a charity which specialises in working with ex-service personnel and local NHS provision such as Outlook Southwest.
- A 'Wheel of Life' evaluation tool (based on the recognised 'Emotional Needs Audit' developed by J. Griffin & I. Tyrrell and adapted for use with veterans by Surf Action) was used to monitor the progress of each veteran at regular intervals. The qualitative areas of life considered were:
 - A living environment that feels safe and secure
 - At least one close friendship or relationship

- Good family relationships
- Engagement with the wider community
- A sense of control over one's life
- Privacy and personal space
- Outlook on one's future
- To give and receive healthy attention and to feel valued
- Someone to turn to for support when one needs it
- A sense that life has meaning and purpose
- Time for hobbies and fun
- A good quality of sleep
- Feelings of isolation
- Debt and financial management
- Engagement in Employment, education, training or volunteering
- Housing situation
- Distressing images/memories
- Feelings of anxiety, tension and nervousness
- Feelings of stress
- Feelings of depression
- A healthy diet and lifestyle
- Feelings of anger
- Alcohol intake
- Self-confidence and esteem

Veterans were asked to rate each of the 24 areas on a scale from 1 (very poor) to 10 (excellent) and this was used to generate the quantitative data to complement the qualitative data. **Any score of 3 or below was indicative of a considerable stressor in the veteran's life.** For the purposes of formal assessment only veterans/service users who had completed 4 wheels at regular intervals over 3-8 months as they engaged with the charity were included in the audit as it represented the best quality evidential data trail. Sometimes veterans tended to put N/A on the wheel in an area that they did not think was applicable to them, e.g. non-drinkers in the alcohol consumption area, and when this was found the N/A was recorded as a 10 as it was not a stressor of any sort in their life. It should be noted that the doubling etc. of an individual's audit score cannot reasonably be interpreted as a doubling in their wellbeing. It is however a significant indication of an improvement in their wellbeing.

For family members and children, a simpler scale was used. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS) was funded by the Scottish Government National Programme for Improving Mental Health and Well-being, commissioned by NHS Health Scotland, developed by the University of Warwick and the University of Edinburgh, and is jointly owned by NHS Health Scotland. It is a positively worded 14 area scale measuring emotional and psychological wellbeing. This scale is particularly suited for use with children (7 areas). To help the children Surf Action produced WEMWS forms with emoticons on with easy to read facial expressions.

- Weekly support and social interaction was provided by veteran engagement at the numerous surf clinics and associated activities run by Surf Action and by regular telephone contact with the Surf Action Welfare Officer.
- Specific family activities were provided throughout the year to facilitate extra opportunities for veteran, family and community engagement.
- Several 'PTSD awareness' sessions were provided by Surf Action to allow veterans and their partners to best understand the nature of PTSD and the various coping strategies which may be of help to sufferers.
- Surf Action continued to go out into the community and to meet with and present to a very wide range of organisations and employers. Veterans were encouraged to volunteer and to participate in this.
- Relevant data was collected, analysed and stored by Surf Action (ICO registered number Z3463898).

The 8 week Ocean Therapy Course remains at the core of Surf Action's service delivery. It uses the concept of the 'Blue Gym' and offers the opportunity to those who engage to experience the outdoor classroom environment and an exhilarating physical, emotional and social experience which can act as the foundation for improvement in health and wellbeing.

- Taking exercise, especially vigorous exercise like surfing, in good natural light has long been known to be beneficial. When we exercise, hormones called ENDORPHINS are released by the PITUITARY GLAND, creating a sense of well-being.

- Exercise also increases the flow of oxygen throughout the body, stimulates the nervous system and affects levels of brain chemicals such as SEROTONIN which in turn relieve tension, induce calm and make it easier to handle anxiety and stress. SEROTONIN is a neurotransmitter linked to feelings of well-being and levels of it are artificially raised by some anti-depressants. Indeed research suggests that the benefits of regular exercise can be very powerful and comparable to those of an anti-depressant for mild to moderate depression.
- MELATONIN is a hormone closely associated with regulating our sleep. In prescribed form it is used as a sleeping aid. When dusk falls, SEROTONIN naturally converts into MELATONIN, allowing us to drop off to sleep more easily. If we have built up a good supply of SEROTONIN during daylight hours by taking vigorous exercise such as surfing, this conversion can take place more efficiently.
- PTSD is all about the fight/flight response and high states of emotional arousal. When our body prepares for fight or flight or is in a high state of emotional arousal it is preparing for vigorous physical activity and a whole host of stress-related hormones like ADRENALIN and CORTISOL are produced. The constant high arousal that is a symptom of PTSD and the unpleasant symptoms of extreme anxiety and panic attacks are caused when hormones such as ADRENALIN and CORTISOL are not used up by fighting or fleeing. Vigorous physical activity like surfing uses up the ADRENALIN and CORTISOL thus allowing the system to calm down.
- Surfing is a very social activity and laughter boosts the immune system by decreasing stress hormones and speeding up the rate of flow through the lymphatic system by up to a factor of 15 thus increasing immune cell production and infection fighting antibodies. Like strenuous exercise, laughter triggers the release of endorphins, the body's natural feel-good chemicals. The endorphins can also temporarily relieve pain.

Surfing is not a cure but it is a focus, a passion and an activity that requires determination, perseverance and above all the aspiration to succeed. Surf Action has continued to refine its delivery and to stay abreast of new research papers relevant to it and to incorporate new information when applicable.

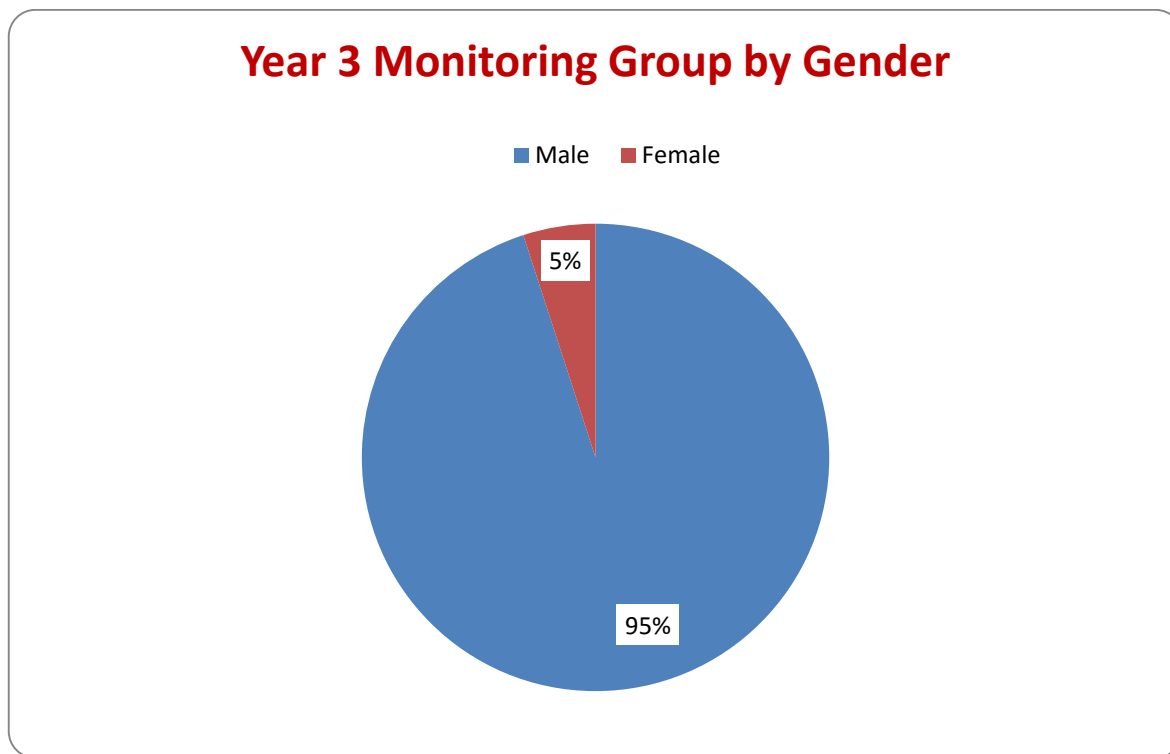
YEAR 3 VETERANS' PROFILE

ETHNIC BACKGROUND

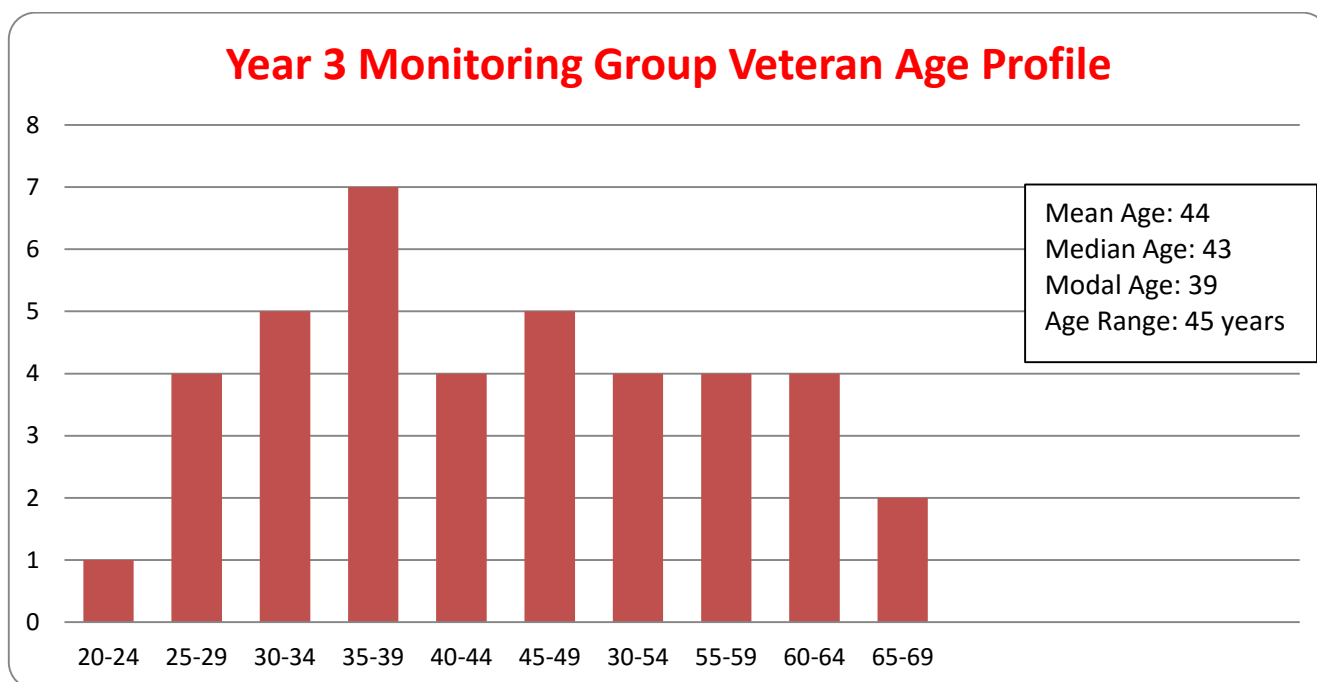
Largely due to the ethnic make-up of Cornwall, all the veterans were white. This is consistent with the demographic of the county as a whole, in which 98.7% of the population define themselves as White (ONS, 2008).

GENDER

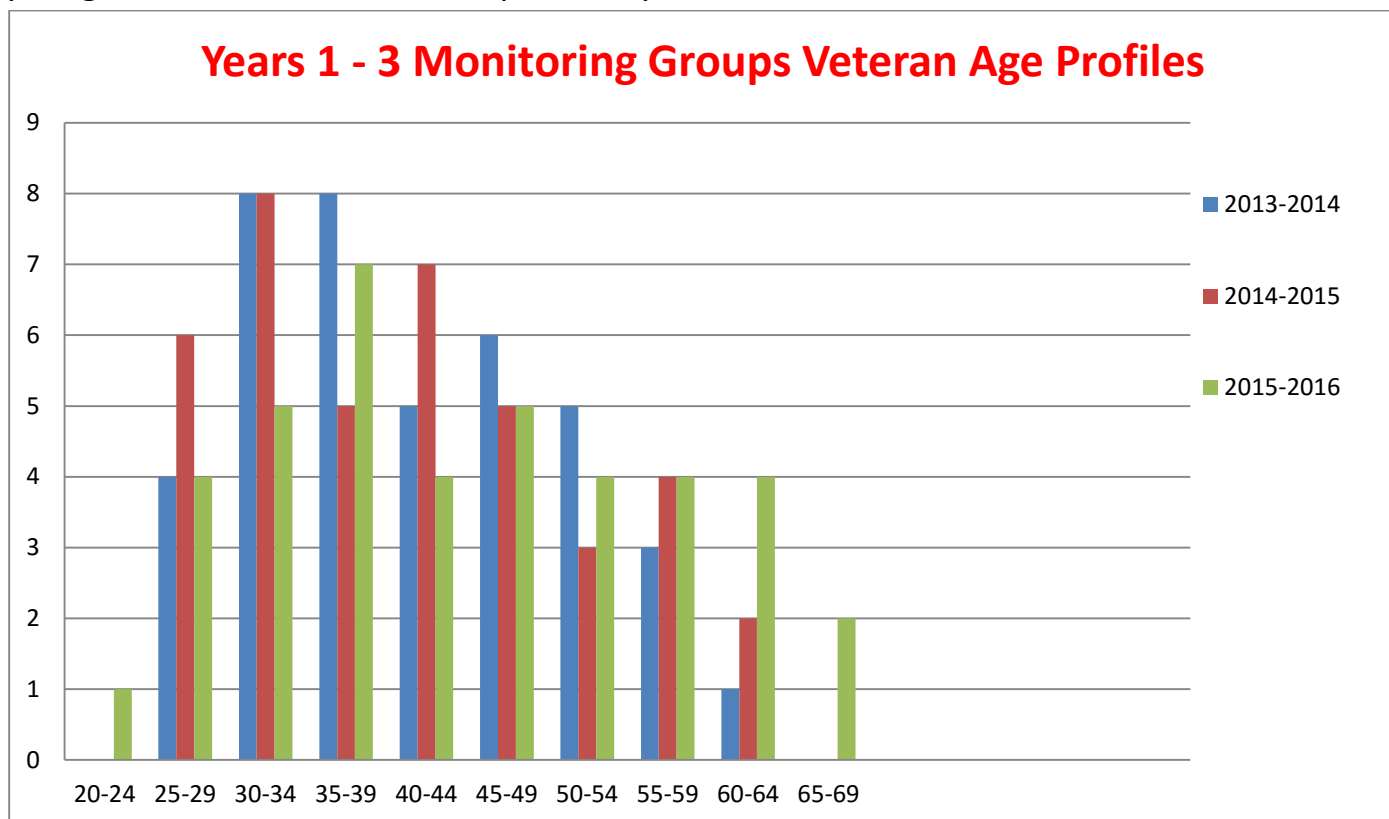
Most of the year 3 veterans were male. This is consistent with the large number of veterans who had experienced legacy conflicts such as the Falklands, Gulf, NI and Bosnia which pre-dated female front-line service.



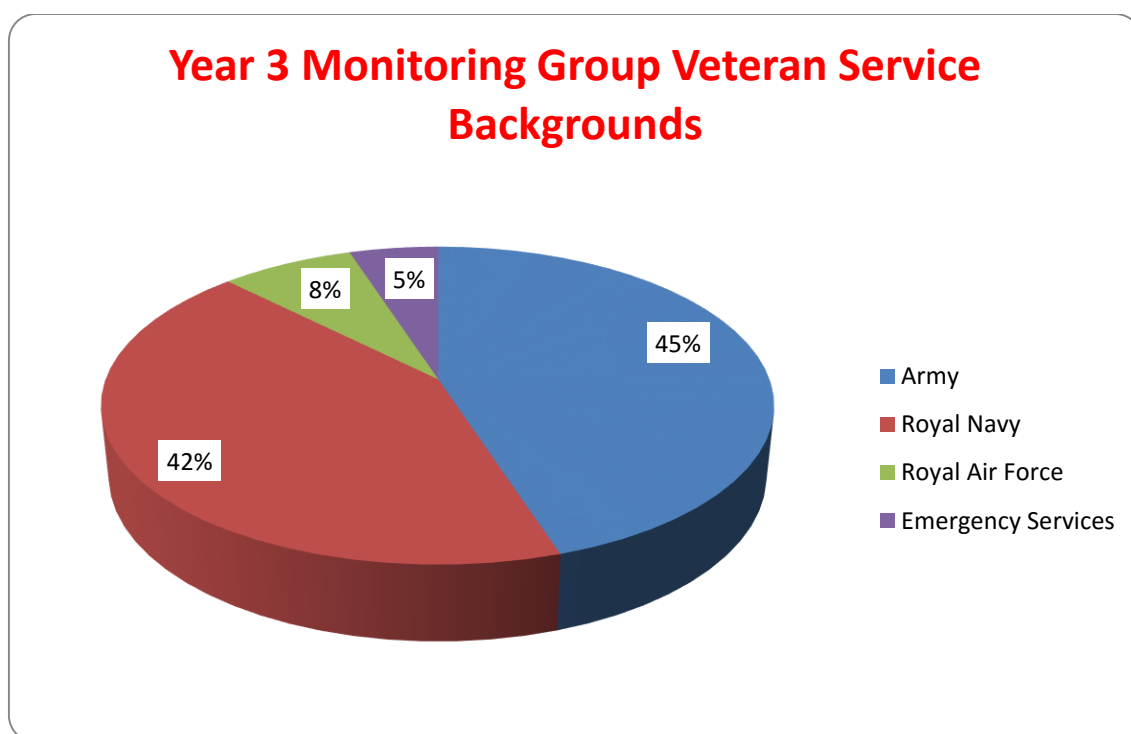
AGE



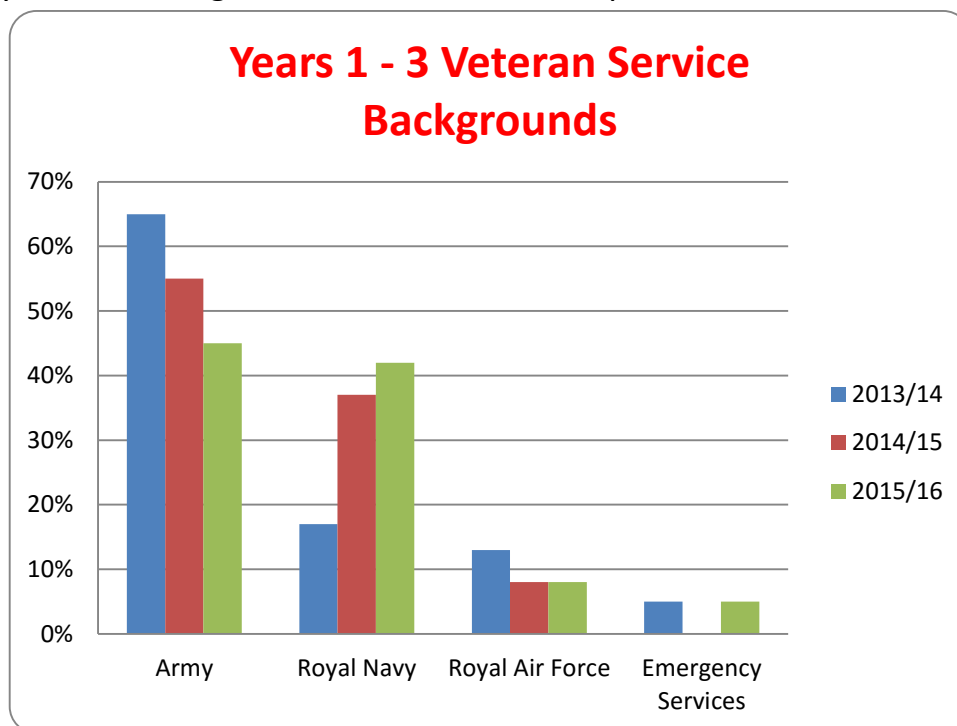
The age distribution does show a slight positive skew overall and we would expect the skew to increase over time as younger veterans come forward. It also includes veterans who are younger and older than those in previous year's cohorts.



SERVICE BACKGROUND

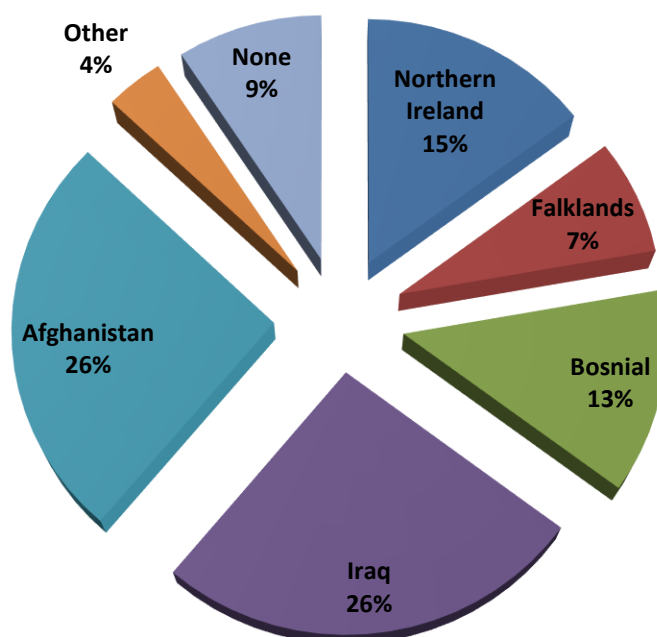


The large rise in the proportion of RN veterans appears to be due to a rise in the number of ex-Royal Marines from legacy conflicts who have engaged with Surf Action. This is not an area where proportions can be easily forecasted but we would always expect the army to be the primary service background due to its size compared to the other services.



VETERAN CONFLICT EXPERIENCES

A Pie Chart showing the Background Conflict/War Experiences of the Year 3 Veterans Monitoring Group



In line with most other military charities Surf Action finds that the legacy conflicts are still the source of most veteran referrals.



EMOTIONAL NEEDS AUDIT RESULTS AND FINDINGS

The anonymised veterans' 'Wheel of Life' scores on initial engagement with Surf Action were used as the baseline for measurement (T1) with $n=40$ and then the Mean score, Standard Deviation (σ) and Variance (σ^2) were calculated across each of the 24 audit categories. Their combined scores (including the T1 scores) across at least 3 more 'Wheels of Life' completed regularly over 3 months were then combined in the 24 audit categories (T2) and an Intervention Mean score calculated in each category along with the σ and σ^2 . The initial and intervention Mean, σ and σ^2 allowed for the better interpretation of the data particularly in terms of compactness and consistency. All data was entered onto a Surf Action designed spreadsheet so both individual data and group data was preserved at all times. This also allowed the generation of the necessary analytical data diagrams.

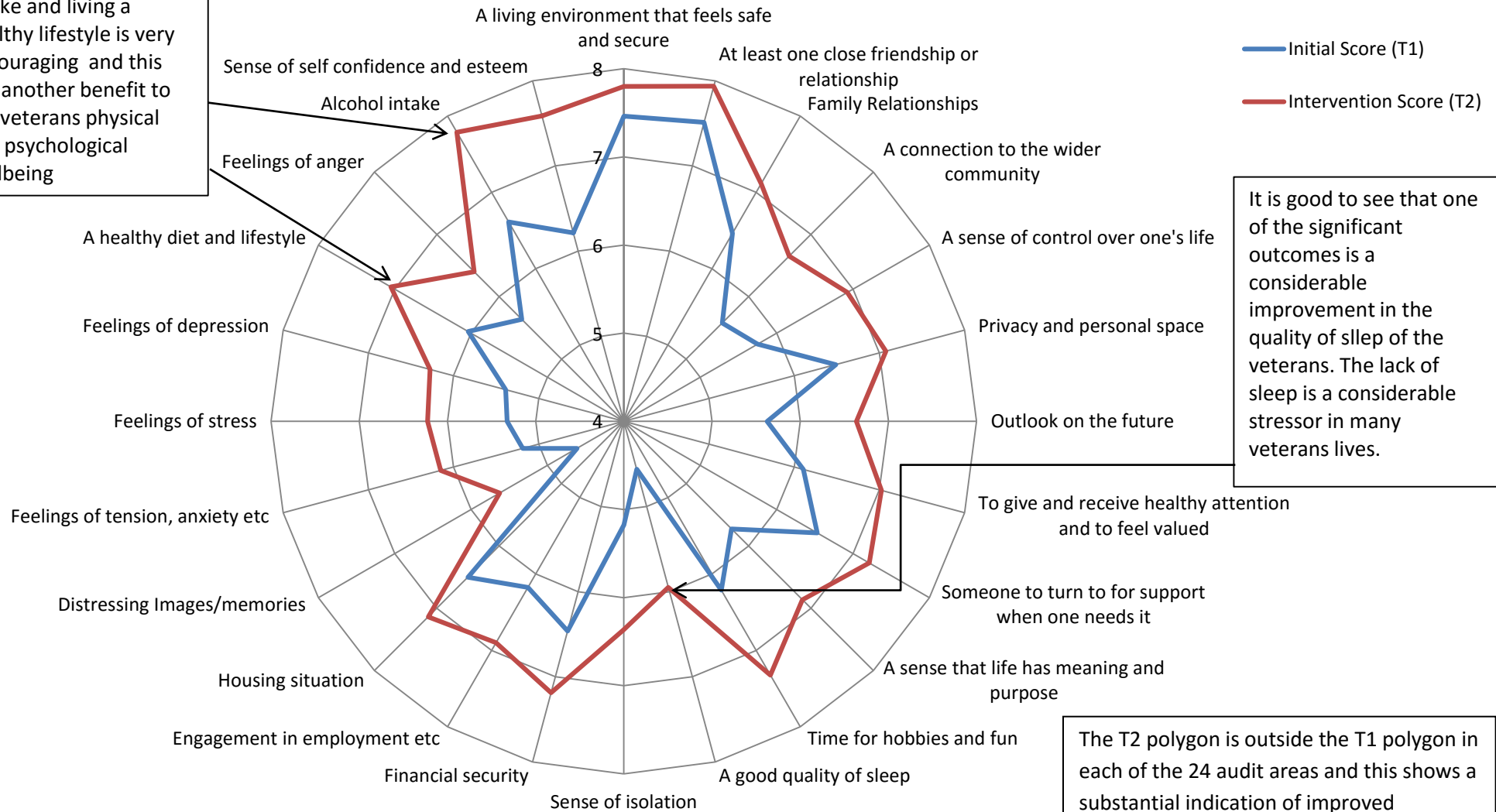
| Year 3 Lottery Data on 40 Veterans-Initial Scores | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------------------|----------------------|----------------------|-----------------|------------|---------|--------|-------------|--------------------|---------------------|---------|-------|-----------|-------|----------------|---------|--------------------|---------|----------|-----------|-------------------|-------|---------|--------|-------------|------------|----------------------|----------|
| | Safe Environment | 1 Close Relationship | Family Relationships | Wider Community | In Control | Privacy | Future | Feel Valued | Someone To Turn To | Meaning and Purpose | Hobbies | Sleep | Isolation | Debt | Employment etc | Housing | Distressing Images | Anxiety | Stressed | Depressed | Healthy Lifestyle | Angry | Alcohol | Esteem | Wheel Total | Wheel Mean | Standard Deviation σ | Variance |
| 1 | 7.0 | 8.00 | 4.00 | 4.00 | 5.00 | 8.00 | 5.00 | 4.00 | 6.00 | 6.00 | 6.00 | 9.00 | 4.00 | 7.00 | 7.00 | 9.00 | 6.00 | 5.00 | 6.00 | 6.00 | 5.00 | 6.00 | 10.00 | 6.00 | 149.00 | 6.21 | 1.67 | 2.78 |
| 2 | 6.0 | 6.00 | 6.00 | 5.00 | 5.00 | 7.00 | 5.00 | 7.00 | 7.00 | 5.00 | 8.00 | 3.00 | 5.00 | 6.00 | 5.00 | 7.00 | 4.50 | 5.00 | 5.00 | 5.00 | 7.00 | 5.00 | 7.00 | 5.00 | 136.50 | 5.69 | 1.14 | 1.3 |
| 3 | 5.0 | 4.00 | 4.00 | 5.00 | 4.00 | 6.00 | 4.00 | 5.00 | 6.00 | 4.00 | 7.50 | 6.00 | 4.00 | 5.00 | 4.00 | 5.00 | 3.00 | 4.50 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 6.00 | 117.00 | 4.88 | 0.96 | 0.92 |
| 4 | 10.0 | 10.00 | 10.00 | 6.00 | 7.00 | 9.50 | 7.00 | 8.00 | 10.00 | 5.00 | 10.00 | 10.00 | 6.00 | 10.00 | 10.00 | 10.00 | 7.00 | 6.00 | 6.00 | 6.00 | 3.00 | 5.50 | 10.00 | 6.50 | 188.50 | 7.85 | 2.16 | 4.66 |
| 5 | 10.0 | 10.00 | 10.00 | 5.00 | 7.00 | 9.50 | 3.00 | 7.00 | 9.50 | 3.00 | 9.50 | 9.50 | 5.00 | 9.50 | 9.50 | 9.50 | 4.00 | 5.00 | 5.00 | 5.00 | 1.00 | 5.00 | 10.00 | 7.00 | 168.50 | 7.02 | 2.80 | 7.86 |
| 6 | 7.5 | 9.50 | 7.50 | 3.10 | 2.50 | 4.00 | 5.50 | 6.00 | 9.50 | 5.50 | 4.50 | 5.00 | 10.00 | 10.00 | 6.00 | 2.50 | 4.50 | 6.50 | 8.50 | 6.00 | 8.00 | 8.00 | 6.00 | 9.00 | 155.10 | 6.46 | 2.31 | 5.32 |
| 7 | 8.0 | 9.00 | 7.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 9.00 | 9.00 | 7.00 | 6.00 | 7.00 | 6.00 | 8.00 | 8.00 | 5.00 | 6.00 | 7.00 | 6.00 | 9.00 | 6.00 | 9.00 | 8.00 | 180.00 | 7.50 | 1.18 | 1.39 |
| 8 | 7.0 | 9.00 | 7.00 | 5.00 | 7.00 | 7.00 | 5.00 | 7.00 | 7.00 | 7.00 | 9.00 | 7.00 | 9.00 | 3.00 | 5.00 | 3.00 | 7.00 | 7.00 | 7.00 | 7.00 | 9.00 | 7.00 | 9.00 | 6.00 | 163.00 | 6.79 | 1.67 | 2.78 |
| 9 | 6.0 | 6.00 | 5.00 | 4.00 | 5.00 | 6.00 | 5.00 | 5.00 | 6.00 | 5.00 | 7.00 | 4.00 | 4.00 | 4.00 | 6.00 | 6.00 | 3.00 | 3.00 | 3.00 | 3.00 | 5.00 | 3.00 | 7.00 | 5.00 | 116.00 | 4.83 | 1.27 | 1.62 |
| 10 | 5.0 | 6.00 | 7.00 | 6.00 | 5.00 | 6.00 | 5.00 | 8.00 | 8.00 | 5.00 | 8.00 | 3.00 | 3.00 | 6.00 | 5.00 | 7.00 | 3.00 | 3.00 | 3.00 | 3.00 | 7.00 | 4.00 | 9.00 | 6.00 | 131.00 | 5.46 | 1.86 | 3.48 |
| 11 | 8.0 | 9.00 | 8.00 | 8.00 | 9.00 | 8.00 | 8.00 | 8.00 | 8.00 | 9.00 | 6.00 | 5.00 | 8.00 | 6.00 | 7.00 | 6.00 | 4.00 | 5.00 | 5.00 | 5.00 | 6.00 | 6.00 | 5.00 | 8.50 | 165.50 | 6.90 | 1.56 | 2.43 |
| 12 | 9.0 | 9.00 | 8.00 | 7.00 | 8.00 | 8.00 | 8.00 | 9.00 | 9.00 | 7.00 | 6.00 | 4.00 | 5.00 | 8.00 | 8.00 | 9.00 | 4.00 | 6.00 | 6.00 | 6.00 | 7.00 | 7.00 | 7.00 | 8.00 | 173.00 | 7.21 | 1.50 | 2.26 |
| 13 | 6.0 | 7.00 | 3.00 | 4.00 | 4.00 | 5.00 | 4.00 | 6.00 | 6.00 | 4.00 | 4.00 | 4.00 | 5.00 | 6.00 | 5.00 | 7.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 2.50 | 117.50 | 4.90 | 1.10 | 1.22 |
| 14 | 7.0 | 8.00 | 8.00 | 7.00 | 7.00 | 7.00 | 7.00 | 6.00 | 6.00 | 7.00 | 6.00 | 6.00 | 6.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 6.00 | 7.00 | 164.00 | 6.83 | 0.56 | 0.32 |
| 15 | 7.0 | 6.00 | 5.00 | 5.00 | 5.00 | 5.00 | 4.00 | 5.00 | 5.00 | 4.00 | 5.00 | 4.00 | 4.00 | 5.00 | 5.00 | 5.00 | 4.00 | 4.00 | 4.00 | 4.00 | 5.00 | 5.00 | 2.50 | 7.00 | 114.50 | 4.77 | 0.98 | 0.96 |
| 16 | 7.0 | 6.00 | 6.00 | 4.00 | 4.00 | 4.00 | 4.00 | 5.00 | 4.00 | 4.00 | 6.00 | 3.00 | 3.00 | 4.00 | 5.00 | 7.00 | 4.00 | 5.00 | 4.00 | 4.00 | 5.00 | 5.00 | 5.00 | 5.00 | 113.00 | 4.71 | 1.08 | 1.17 |
| 17 | 7.0 | 8.00 | 8.00 | 6.00 | 6.00 | 7.00 | 5.00 | 7.00 | 7.00 | 6.00 | 8.00 | 4.00 | 3.00 | 5.00 | 6.00 | 6.00 | 4.00 | 4.00 | 5.00 | 5.00 | 7.00 | 5.00 | 6.00 | 7.00 | 142.00 | 5.92 | 1.38 | 1.91 |
| 18 | 8.0 | 8.00 | 2.00 | 3.00 | 3.50 | 8.00 | 6.00 | 6.00 | 8.00 | 8.00 | 6.00 | 2.00 | 6.00 | 9.50 | 4.50 | 8.00 | 2.50 | 4.00 | 4.00 | 4.50 | 2.50 | 6.00 | 9.50 | 5.00 | 134.50 | 5.60 | 2.38 | 5.65 |
| 19 | 9.0 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 7.00 | 9.00 | 8.00 | 7.00 | 8.00 | 5.00 | 6.00 | 9.50 | 5.00 | 9.00 | 5.00 | 7.00 | 7.00 | 7.00 | 8.00 | 6.00 | 9.00 | 8.00 | 179.50 | 7.48 | 1.31 | 1.73 |
| 20 | 5.0 | 6.00 | 4.00 | 4.00 | 4.00 | 5.00 | 4.00 | 4.00 | 4.00 | 4.00 | 6.00 | 3.00 | 4.00 | 4.00 | 4.00 | 5.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 5.00 | 95.00 | 3.96 | 1.00 | 1 |
| 21 | 10.0 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 8.00 | 6.00 | 10.00 | 4.00 | 8.00 | 10.00 | 4.00 | 5.00 | 6.00 | 10.00 | 6.00 | 8.00 | 6.00 | 10.00 | 2.50 | 6.00 | 189.50 | 7.90 | 2.46 | 6.04 |
| 22 | 10.0 | 10.00 | 7.00 | 2.00 | 2.50 | 5.00 | 2.50 | 3.00 | 4.00 | 6.00 | 6.00 | 3.00 | 5.00 | 4.00 | 10.00 | 5.00 | 5.00 | 10.00 | 10.00 | 5.00 | 5.00 | 5.00 | 2.00 | 3.00 | 130.00 | 5.42 | 2.73 | 7.45 |
| 23 | 8.0 | 9.00 | 8.00 | 2.00 | 3.50 | 6.00 | 4.00 | 4.00 | 4.00 | 6.00 | 4.00 | 6.00 | 4.00 | 4.00 | 3.00 | 4.00 | 8.00 | 2.50 | 2.50 | 4.00 | 6.00 | 4.00 | 8.00 | 4.00 | 118.50 | 4.94 | 2.02 | 4.07 |
| 24 | 10.0 | 10.00 | 10.00 | 7.50 | 9.00 | 9.00 | 6.00 | 9.00 | 7.00 | 7.00 | 4.00 | 4.50 | 9.00 | 8.00 | 9.00 | 7.00 | 4.00 | 5.00 | 7.00 | 9.00 | 8.00 | 7.00 | 9.00 | 10.00 | 185.00 | 7.71 | 1.90 | 3.63 |
| 25 | 8.0 | 6.00 | 3.00 | 2.00 | 5.00 | 5.00 | 4.00 | 4.00 | 6.00 | 6.00 | 5.00 | 4.00 | 5.00 | 5.00 | 5.00 | 5.00 | 6.00 | 6.00 | 7.00 | 7.00 | 7.00 | 7.00 | 5.00 | 4.00 | 127.00 | 5.29 | 1.40 | 1.95 |
| 26 | 2.0 | 2.00 | 2.00 | 1.00 | 1.50 | 1.50 | 3.00 | 2.80 | 2.80 | 1.00 | 2.00 | 1.00 | 2.00 | 2.00 | 1.00 | 2.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 | 2.00 | 4.00 | 2.00 | 43.60 | 1.82 | 0.78 | 0.61 |
| 27 | 7.0 | 7.00 | 3.00 | 7.00 | 7.00 | 7.00 | 7.00 | 6.00 | 5.00 | 7.00 | 7.00 | 3.00 | 5.00 | 9.00 | 7.00 | 9.00 | 3.00 | 4.00 | 5.00 | 5.00 | 9.00 | 7.00 | 9.00 | 8.00 | 153.00 | 6.38 | 1.88 | 3.55 |
| 28 | 9.0 | 9.00 | 9.00 | 7.00 | 8.00 | 6.00 | 6.00 | 8.00 | 9.00 | 6.00 | 6.00 | 4.00 | 4.00 | 5.00 | 5.00 | 7.00 | 3.00 | 4.00 | 4.00 | 4.00 | 6.00 | 5.00 | 5.00 | 8.00 | 147.00 | 6.13 | 1.90 | 3.59 |
| 29 | 6.0 | 6.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 6.00 | 5.00 | 5.00 | 5.00 | 5.00 | 4.00 | 5.00 | 5.00 | 4.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 121.00 | 5.04 | 0.46 | 0.22 |
| 30 | 7.0 | 7.00 | 7.00 | 5.00 | 5.00 | 6.00 | 4.00 | 5.50 | 6.00 | 5.00 | 4.00 | 4.00 | 3.00 | 4.00 | 4.00 | 7.00 | 4.00 | 7.00 | 5.00 | 5.00 | 6.00 | 5.00 | 5.00 | 6.00 | 126.50 | 5.27 | 1.19 | 1.41 |
| 31 | 8.0 | 8.00 | 8.00 | 7.00 | 8.00 | 6.00 | 8.00 | 5.00 | 6.00 | 6.00 | 5.00 | 4.00 | 6.00 | 7.00 | 7.00 | 7.00 | 5.00 | 6.00 | 7.00 | 6.00 | 7.00 | 7.00 | 7.00 | 6.00 | 157.00 | 6.54 | 1.10 | 1.22 |
| 32 | 7.0 | 8.00 | 6.00 | 7.00 | 7.00 | 6.00 | 6.00 | 6.00 | 3.00 | 6.00 | 7.00 | 5.00 | 4.00 | 6.00 | 5.00 | 8.00 | 7.00 | 7.00 | 7.00 | 8.00 | 9.00 | 6.00 | 10.00 | 6.00 | 157.00 | 6.54 | 1.50 | 2.26 |
| 33 | 8.0 | 10.00 | 6.00 | 10.00 | 5.50 | 8.00 | 4.00 | 5.50 | 6.00 | 6.00 | 10.00 | 2.50 | 8.00 | 10.00 | 10.00 | 8.00 | 6.00 | 4.00 | 4.00 | 4.00 | 8.00 | 4.00 | 10.00 | 5.00 | 162.50 | 6.77 | 2.43 | 5.89 |
| 34 | 9.0 | 4.00 | 8.00 | 10.00 | 7.00 | 8.00 | 8.00 | 6.00 | 10.00 | 9.00 | 4.00 | 6.00 | 1.00 | 10.00 | 9.00 | 6.00 | 7.00 | 5.00 | 6.00 | 9.00 | 6.00 | 10.00 | 10.00 | 7.00 | 175.00 | 7.29 | 2.33 | 5.43 |
| 35 | 8.0 | 6.00 | 4.00 | 2.50 | 6.00 | 6.00 | 4.00 | 5.50 | 5.50 | 2.50 | 4.00 | 4.00 | 4.00 | 8.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 6.00 | 4.00 | 4.00 | 5.00 | 113.00 | 4.71 | 1.41 | 2 |
| 36 | 6.0 | 7.00 | 6.00 | 5.00 | 4.00 | 5.00 | 5.00 | 5.00 | 5.00 | 4.00 | 5.00 | 3.00 | 4.00 | 7.00 | 7.00 | 7.00 | 4.00 | 5.00 | 5.00 | 5.00 | 6.00 | 7.00 | 7.00 | 5.00 | 129.00 | 5.3 | | |

| Year 3 Lottery Data on 40 Veterans-Intervention Scores | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|------------------|----------------------|----------------------|-----------------|------------|---------|--------|-------------|--------------------|---------------------|---------|-------|-----------|-------|----------------|---------|--------------------|---------|----------|-----------|-------------------|-------|---------|--------|-------------|--------|----------------------|----------|------|
| | Safe Environment | 1 Close Relationship | Family Relationships | Wider Community | In Control | Privacy | Future | Feel Valued | Someone To Turn To | Meaning and Purpose | Hobbies | Sleep | Isolation | Debt | Employment etc | Housing | Distressing Images | Anxiety | Stressed | Depressed | Healthy Lifestyle | Angry | Alcohol | Esteem | Wheel Total | Mean | Standard Deviation σ | Variance | |
| 1 | 7.00 | 8.00 | 5.00 | 4.00 | 6.00 | 8.00 | 7.00 | 5.00 | 6.00 | 7.00 | 8.00 | 9.00 | 5.00 | 7.00 | 7.00 | 9.00 | 6.00 | 6.00 | 7.00 | 7.00 | 7.00 | 7.00 | 10.00 | 7.00 | 165.00 | 6.88 | 1.39 | 1.94 | |
| 2 | 7.00 | 7.00 | 6.00 | 6.00 | 7.00 | 7.00 | 6.00 | 8.00 | 7.00 | 7.00 | 9.00 | 5.00 | 6.00 | 7.00 | 6.00 | 8.00 | 5.00 | 6.00 | 6.00 | 6.00 | 7.00 | 5.00 | 7.00 | 7.00 | 158.00 | 6.58 | 0.97 | 0.95 | |
| 3 | 5.00 | 5.00 | 5.00 | 6.00 | 5.00 | 6.00 | 6.00 | 6.00 | 6.00 | 5.00 | 9.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 5.00 | 5.00 | 5.00 | 6.00 | 7.00 | 6.00 | 6.00 | 7.00 | 141.00 | 5.88 | 0.90 | 0.81 | |
| 4 | 10.00 | 10.00 | 10.00 | 7.00 | 8.00 | 10.00 | 7.50 | 8.00 | 10.00 | 7.00 | 10.00 | 10.00 | 7.00 | 10.00 | 10.00 | 10.00 | 7.00 | 7.00 | 7.00 | 7.00 | 5.00 | 7.00 | 10.00 | 8.00 | 202.50 | 8.44 | 1.57 | 2.46 | |
| 5 | 10.00 | 10.00 | 10.00 | 6.00 | 9.00 | 10.00 | 4.00 | 7.00 | 10.00 | 5.00 | 10.00 | 10.00 | 6.00 | 10.00 | 10.00 | 10.00 | 5.00 | 7.00 | 7.00 | 6.00 | 3.00 | 5.00 | 10.00 | 8.00 | 188.00 | 7.83 | 2.35 | 5.54 | |
| 6 | 7.50 | 9.50 | 8.00 | 5.00 | 4.00 | 6.00 | 6.00 | 7.00 | 9.50 | 7.00 | 7.00 | 6.00 | 9.50 | 9.50 | 6.00 | 3.00 | 6.00 | 7.00 | 9.00 | 7.00 | 9.00 | 9.00 | 7.00 | 9.00 | 9.00 | 173.50 | 7.23 | 1.81 | 3.26 |
| 7 | 8.00 | 9.00 | 8.00 | 8.00 | 9.00 | 8.00 | 9.00 | 8.00 | 9.50 | 9.00 | 8.00 | 7.00 | 8.00 | 6.00 | 9.00 | 9.00 | 7.00 | 7.00 | 8.00 | 7.00 | 9.00 | 7.00 | 9.00 | 9.00 | 9.00 | 195.50 | 8.15 | 0.93 | 0.86 |
| 8 | 7.50 | 9.00 | 8.00 | 7.00 | 8.00 | 8.00 | 6.00 | 7.50 | 7.00 | 7.00 | 9.00 | 8.00 | 9.00 | 4.00 | 6.00 | 4.00 | 7.00 | 8.00 | 8.00 | 8.00 | 9.00 | 7.00 | 9.00 | 7.00 | 178.00 | 7.42 | 1.37 | 1.88 | |
| 9 | 6.00 | 7.00 | 6.00 | 7.00 | 7.00 | 8.00 | 7.00 | 6.00 | 6.00 | 6.00 | 7.00 | 6.00 | 5.00 | 5.00 | 6.00 | 7.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 8.00 | 7.00 | 147.00 | 6.13 | 0.99 | 0.98 | |
| 10 | 5.00 | 6.00 | 7.00 | 7.00 | 7.00 | 6.00 | 7.00 | 8.00 | 8.00 | 6.00 | 8.00 | 5.00 | 5.00 | 7.00 | 7.00 | 8.00 | 5.00 | 7.00 | 5.00 | 5.00 | 7.00 | 5.00 | 9.00 | 7.00 | 157.00 | 6.54 | 1.22 | 1.48 | |
| 11 | 8.00 | 9.00 | 8.00 | 8.00 | 9.50 | 8.00 | 9.00 | 9.00 | 8.00 | 9.50 | 7.00 | 6.00 | 8.00 | 6.00 | 8.00 | 6.00 | 5.00 | 6.00 | 6.00 | 6.00 | 6.00 | 7.00 | 6.00 | 8.50 | 177.50 | 7.40 | 1.35 | 1.83 | |
| 12 | 9.00 | 9.00 | 8.00 | 8.00 | 9.00 | 8.00 | 8.00 | 9.00 | 9.50 | 8.00 | 8.00 | 5.00 | 6.00 | 9.00 | 8.00 | 9.50 | 5.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 9.00 | 9.00 | 189.00 | 7.88 | 1.29 | 1.66 | |
| 13 | 7.00 | 8.00 | 4.00 | 5.00 | 5.00 | 6.00 | 6.00 | 7.00 | 7.00 | 5.00 | 5.00 | 5.00 | 5.00 | 6.00 | 5.00 | 8.00 | 6.00 | 6.00 | 6.00 | 6.00 | 7.00 | 6.00 | 6.00 | 5.00 | 142.00 | 5.92 | 1.02 | 1.04 | |
| 14 | 8.00 | 9.00 | 9.00 | 7.00 | 8.00 | 8.00 | 8.00 | 7.00 | 8.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 8.00 | 7.00 | 8.00 | 8.00 | 180.00 | 7.50 | 0.66 | 0.43 | |
| 15 | 8.00 | 7.00 | 6.00 | 7.00 | 6.00 | 7.00 | 5.00 | 7.00 | 7.00 | 5.00 | 6.00 | 7.00 | 6.00 | 7.00 | 6.00 | 7.00 | 6.00 | 6.00 | 6.00 | 6.00 | 7.00 | 6.00 | 6.00 | 8.00 | 155.00 | 6.46 | 0.78 | 0.61 | |
| 16 | 7.00 | 7.00 | 7.00 | 5.00 | 5.00 | 4.00 | 5.00 | 5.00 | 5.00 | 5.00 | 8.00 | 5.00 | 5.00 | 6.00 | 6.00 | 7.00 | 5.00 | 5.00 | 5.00 | 5.00 | 7.00 | 5.00 | 7.00 | 7.00 | 138.00 | 5.75 | 1.07 | 1.15 | |
| 17 | 8.00 | 9.00 | 9.00 | 7.00 | 7.00 | 7.00 | 7.00 | 8.00 | 8.00 | 7.00 | 9.00 | 7.00 | 5.00 | 7.00 | 7.00 | 7.00 | 6.00 | 5.00 | 5.00 | 5.00 | 8.00 | 6.00 | 8.00 | 9.00 | 171.00 | 7.13 | 1.30 | 1.68 | |
| 18 | 8.00 | 8.00 | 3.00 | 5.00 | 6.00 | 8.00 | 7.00 | 7.00 | 9.00 | 9.00 | 8.00 | 4.00 | 8.00 | 9.50 | 6.00 | 8.00 | 4.00 | 5.00 | 5.00 | 5.00 | 5.00 | 7.00 | 9.50 | 7.00 | 161.00 | 6.71 | 1.87 | 3.50 | |
| 19 | 9.00 | 9.00 | 9.00 | 8.00 | 9.00 | 8.00 | 8.00 | 9.00 | 8.00 | 8.00 | 9.00 | 6.00 | 8.00 | 9.50 | 5.00 | 9.00 | 7.00 | 7.00 | 7.00 | 7.00 | 9.00 | 7.00 | 9.00 | 9.00 | 193.50 | 8.06 | 1.15 | 1.31 | |
| 20 | 6.00 | 6.00 | 6.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 4.00 | 7.00 | 5.00 | 6.00 | 6.00 | 5.00 | 7.00 | 5.00 | 4.00 | 5.00 | 4.00 | 5.00 | 4.00 | 3.00 | 7.00 | 125.00 | 5.21 | 1.02 | 1.04 | |
| 21 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 8.00 | 7.00 | 10.00 | 5.00 | 8.00 | 10.00 | 5.00 | 6.00 | 6.00 | 10.00 | 7.00 | 9.00 | 7.00 | 10.00 | 4.00 | 7.00 | 199.00 | 8.29 | 2.01 | 4.04 | |
| 22 | 10.00 | 10.00 | 7.50 | 3.00 | 3.00 | 5.00 | 3.00 | 4.00 | 5.00 | 7.00 | 6.00 | 4.00 | 6.00 | 5.00 | 10.00 | 6.00 | 6.00 | 10.00 | 10.00 | 6.00 | 6.00 | 5.00 | 4.00 | 5.00 | 146.50 | 6.10 | 2.35 | 5.52 | |
| 23 | 8.00 | 9.00 | 9.00 | 5.00 | 7.00 | 7.00 | 6.00 | 7.00 | 7.00 | 7.00 | 5.00 | 6.00 | 6.00 | 6.00 | 5.00 | 7.00 | 8.00 | 3.00 | 3.00 | 5.00 | 7.00 | 5.00 | 8.00 | 7.00 | 153.00 | 6.38 | 1.58 | 2.51 | |
| 24 | 10.00 | 10.00 | 10.00 | 9.00 | 9.00 | 9.00 | 7.00 | 9.00 | 8.00 | 10.00 | 8.00 | 8.00 | 9.00 | 9.00 | 9.00 | 7.00 | 5.00 | 6.00 | 8.00 | 9.00 | 8.00 | 7.00 | 9.00 | 10.00 | 203.00 | 8.46 | 1.32 | 1.74 | |
| 25 | 8.00 | 7.00 | 4.00 | 3.00 | 7.00 | 6.00 | 5.00 | 5.00 | 6.00 | 6.00 | 7.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 7.00 | 8.00 | 8.00 | 7.00 | 7.00 | 7.00 | 6.00 | 150.00 | 6.25 | 1.19 | 1.41 | |
| 26 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 2.00 | 5.00 | 4.00 | 4.00 | 1.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 2.00 | 3.00 | 3.00 | 3.00 | 4.00 | 3.00 | 6.00 | 3.00 | 75.00 | 3.13 | 0.99 | 0.98 | |
| 27 | 9.00 | 9.00 | 4.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 7.00 | 8.00 | 9.00 | 5.00 | 7.00 | 10.00 | 9.00 | 9.00 | 5.00 | 6.00 | 6.00 | 6.00 | 9.00 | 7.00 | 9.00 | 9.00 | 188.00 | 7.83 | 1.69 | 2.84 | |
| 28 | 9.00 | 9.00 | 9.00 | 8.00 | 9.00 | 7.00 | 7.00 | 9.00 | 9.00 | 9.00 | 8.00 | 6.00 | 5.00 | 6.00 | 7.00 | 7.00 | 5.00 | 5.00 | 5.00 | 5.00 | 7.00 | 6.00 | 7.00 | 9.00 | 173.00 | 7.21 | 1.56 | 2.43 | |
| 29 | 7.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 5.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 5.00 | 5.00 | 5.00 | 5.00 | 6.00 | 6.00 | 6.00 | 6.00 | 7.00 | 7.00 | 7.00 | 143.00 | 5.96 | 0.62 | 0.39 | |
| 30 | 7.00 | 7.00 | 7.00 | 7.00 | 6.00 | 6.00 | 5.00 | 6.50 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 5.00 | 9.00 | 5.00 | 8.00 | 7.00 | 6.00 | 6.00 | 6.00 | 7.00 | 7.00 | 153.50 | 6.40 | 0.92 | 0.85 | |
| 31 | 9.00 | 8.00 | 9.00 | 8.00 | 9.00 | 7.00 | 9.00 | 7.00 | 7.00 | 8.00 | 7.00 | 6.00 | 7.00 | 7.00 | 8.00 | 7.00 | 6.00 | 6.00 | 7.00 | 7.00 | 8.00 | 8.00 | 9.00 | 8.00 | 182.00 | 7.58 | 0.97 | 0.95 | |
| 32 | 7.00 | 8.00 | 6.00 | 7.00 | 8.00 | 8.00 | 7.00 | 7.00 | 5.00 | 8.00 | 7.00 | 6.00 | 5.00 | 7.00 | 5.00 | 8.00 | 7.00 | 7.00 | 7.00 | 8.00 | 9.00 | 7.00 | 10.00 | 8.00 | 172.00 | 7.17 | 1.20 | 1.45 | |
| 33 | 8.00 | 10.00 | 7.00 | 10.00 | 6.50 | 8.00 | 5.00 | 7.00 | 7.00 | 6.00 | 10.00 | 5.00 | 8.00 | 10.00 | 10.00 | 8.00 | 6.00 | 5.00 | 5.00 | 5.00 | 8.00 | 5.00 | 10.00 | 7.00 | 176.50 | 7.35 | 1.89 | 3.58 | |
| 34 | 9.00 | 6.00 | 9.00 | 10.00 | 7.00 | 8.00 | 9.00 | 7.00 | 10.00 | 9.00 | 7.00 | 7.00 | 4.00 | 10.00 | 10.00 | 7.00 | 7.00 | 6.00 | 6.00 | 9.00 | 9.00 | 10.00 | 10.00 | 8.00 | 194.00 | 8.08 | 1.67 | 2.78 | |
| 35 | 9.00 | 7.00 | 5.00 | 5.00 | 7.00 | 7.00 | 6.00 | 7.00 | 7.00 | 5.00 | 6.00 | 5.00 | 7.00 | 9.00 | 6.00 | 6.00 | 5.00 | 5.00 | 5.00 | 5.00 | 7.00 | 7.00 | 7.00 | 8.00 | 153.00 | 6.38 | 1.24 | 1.55 | |
| 36 | 7.00 | 7.00 | 7.00 | 6.00 | 5.00 | 5.00 | 6.00 | 6.00 | 6.00 | 7.00 | 7.00 | 5.00 | 6.00 | 7.00 | 7.00 | 7.00 | 6.00 | 6.00 | 6.00 | 6.00 | 7.00 | 7.00 | 9.00 | 7.00 | 155.00 | 6.46 | 0.88 | 0.78 | |
| 37 | 7.00 | 8.00 | 8.00 | 7.00 | 6.00 | 7.00 | 8.00 | 7.00 | 7.00 | 7.00 | 6.00 | 5.00 | 6.00 | 7.00 | 9.00 | 7.00 | 5.00 | 6.00 | 7.00 | 6.00 | 8.00 | 6.00 | 7.00 | 9.00 | 166.00 | 6.92 | 1.06 | 1.12 | |
| 38 | 8.00 | 8.00 | 7.00 | 9.00 | 7.00 | 7.00 | 8.00 | 6.00 | 6.00 | 7.00 | 5.00 | 5.00 | 6.00 | 7.00 | 8.00 | 7.00 | 5.00 | 6.00 | 5.00 | 6.00 | 7.00 | 6.00 | 9.00 | 8.00 | 163.00 | 6.79 | 1.22 | 1.48 | |
| 39 | 8.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 6.00 | 5.00 | 7.00 | 7.00 | 7.00 | 7.00 | 6.00 | 6.00 | 6.00 | 8.00 | 8.00 | 6.00 | 8.00 | 9.00 | 167.00 | 6.96 | 0.86 | 0.74 | |
| 40 | 8.00 | 7.00 | 8.00 | 6.00 | 6.00 | 6.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 5.00 | 6.00 | 6.00 | 6.00 | 7.00 | 5.00 | 6.00 | 6.00 | 6.00 | 7.00 | 6.00 | 8.00 | 8.00 | 158.00 | 6.58 | 0.88 | 0.78 | |
| | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | Total | | | | |
| | 312.0 | 317.5 | 284.5 | 266.0 | 277.0 | 283.0 | 265.5 | 281.0 | 288.5 | 274.5 | 293.0 | 238.0 | 254.5 | 287.5 | 276.0 | 285.5 | 225.0 | 246.0 | 249.0 | 251.0 | 282.0 | 256.0 | 311.5 | 303.5 | 6608.0 | | | | |
| | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | Mean | | | | |
| | 7.80 | 7.94 | 7.11 | 6.65 | 6.93 | 7.08 | 6.64 | 7.03 | 7.21 | 6.86 | 7.33 | 5.95 | 6.36 | 7.19 | 6.90 | 7.14 | 5.63 | 6.15 | 6.23 | 6.28 | 7.05 | 6.40 | 7.79 | 7.59 | 165.20 | | | | |
| | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | σ | | | | | |
| | 1.48 | 1.57 | 1.95 | 1.83 | 1.75 | 1.61 | 1.69 | 1.39 | 1.54 | 1.46 | 1.75 | 1.48 | 1.40 | 1.84 | 1.78 | 1.61 | 1.05 | 1.42 | 1.42 | 1.34 | 1.43 | 1.39 | 1.76 | 1.3 | | | | | |

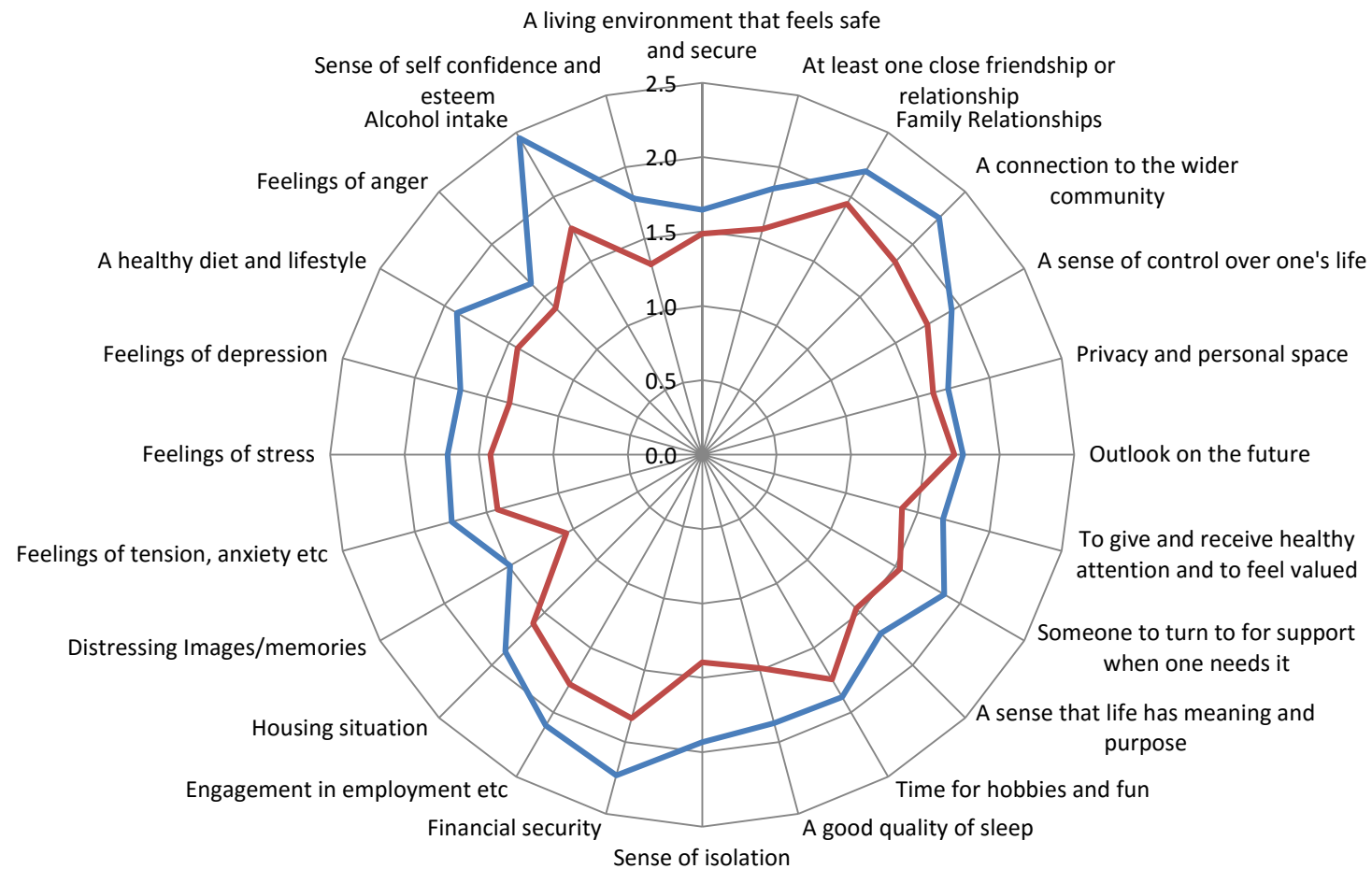
| Table 1: Year 3 Monitoring Group Emotional Needs Audit Group Mean Scores | | | | | | |
|---|-----------------------|--|-----------------------|--|---------------------------------|---------------------------------------|
| Audit Area | T1 Audit Score | T1 Standard Deviation σ | T2 Audit Score | T2 Standard Deviation σ | % Mean Score Improvement | % σ Increase |
| A living environment that feels safe and secure | 7.46 | 1.65 | 7.80 | 1.48 | 4.52 | -9.85 |
| At least one close friendship or relationship | 7.51 | 1.85 | 7.94 | 1.57 | 5.66 | -15.24 |
| Family Relationships | 6.46 | 2.20 | 7.11 | 1.95 | 10.06 | -11.51 |
| A connection to the wider community | 5.58 | 2.25 | 6.65 | 1.83 | 19.23 | -18.58 |
| A sense of control over one's life | 5.75 | 1.93 | 6.93 | 1.75 | 20.43 | -9.61 |
| Privacy and personal space | 6.49 | 1.71 | 7.08 | 1.61 | 9.06 | -6.08 |
| Outlook on the future | 5.63 | 1.75 | 6.64 | 1.69 | 18.00 | -3.34 |
| To give and receive healthy attention and to feel valued | 6.11 | 1.68 | 7.03 | 1.39 | 15.02 | -16.99 |
| Someone to turn to for support when one needs it | 6.53 | 1.88 | 7.21 | 1.54 | 10.41 | -18.27 |
| A sense that life has meaning and purpose | 5.73 | 1.70 | 6.86 | 1.46 | 19.87 | -13.84 |
| Time for hobbies and fun | 6.21 | 1.88 | 7.33 | 1.75 | 17.91 | -7.21 |
| A good quality of sleep | 4.56 | 1.87 | 5.95 | 1.48 | 30.41 | -20.55 |
| Sense of isolation | 5.18 | 1.93 | 6.36 | 1.40 | 22.95 | -27.80 |
| Financial security | 6.46 | 2.23 | 7.19 | 1.84 | 11.22 | -17.76 |
| Engagement in employment etc | 6.18 | 2.10 | 6.90 | 1.78 | 11.74 | -15.30 |
| Housing situation | 6.50 | 1.87 | 7.14 | 1.61 | 9.81 | -14.20 |
| Distressing Images/memories | 4.61 | 1.49 | 5.63 | 1.05 | 21.95 | -29.29 |
| Feelings of tension, anxiety etc | 5.19 | 1.74 | 6.15 | 1.42 | 18.55 | -18.24 |
| Feelings of stress | 5.33 | 1.71 | 6.23 | 1.42 | 16.90 | -16.87 |
| Feelings of depression | 5.39 | 1.68 | 6.28 | 1.34 | 16.47 | -20.33 |
| A healthy diet and lifestyle | 6.04 | 1.90 | 7.05 | 1.43 | 16.77 | -24.77 |
| Feelings of anger | 5.64 | 1.63 | 6.40 | 1.39 | 13.53 | -14.32 |
| Alcohol intake | 6.61 | 2.46 | 7.79 | 1.76 | 17.77 | -28.52 |
| Sense of self confidence and esteem | 6.21 | 1.78 | 7.59 | 1.32 | 22.13 | -25.69 |

National Lottery Year 3 - T1 and T2 Mean Score Analysis by Audit Area

The increase in the T1 scores concerning controlling alcohol intake and living a healthy lifestyle is very encouraging and this has another benefit to the veterans physical and psychological wellbeing



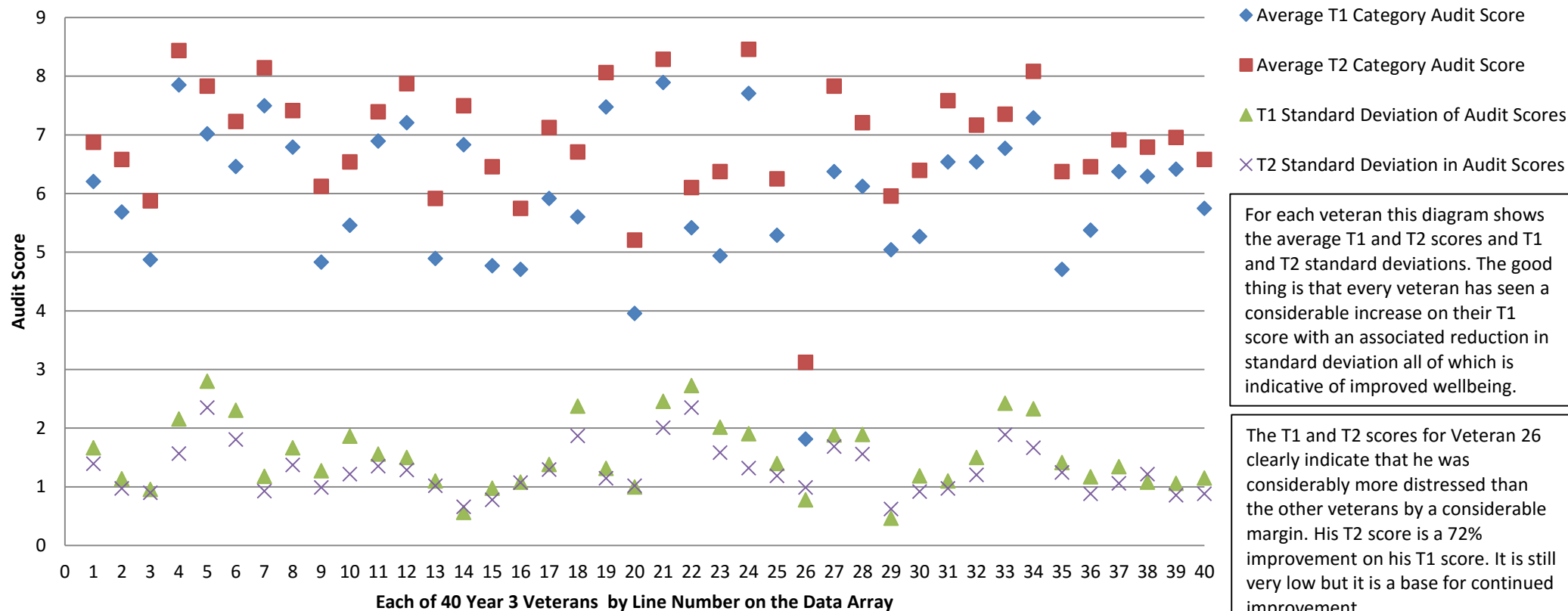
National Lottery Year 3 - Changes in Standard Deviation Between T1 and T2 by Audit Area



— Initial Standard Deviation σ
 — Intervention Standard Deviation σ

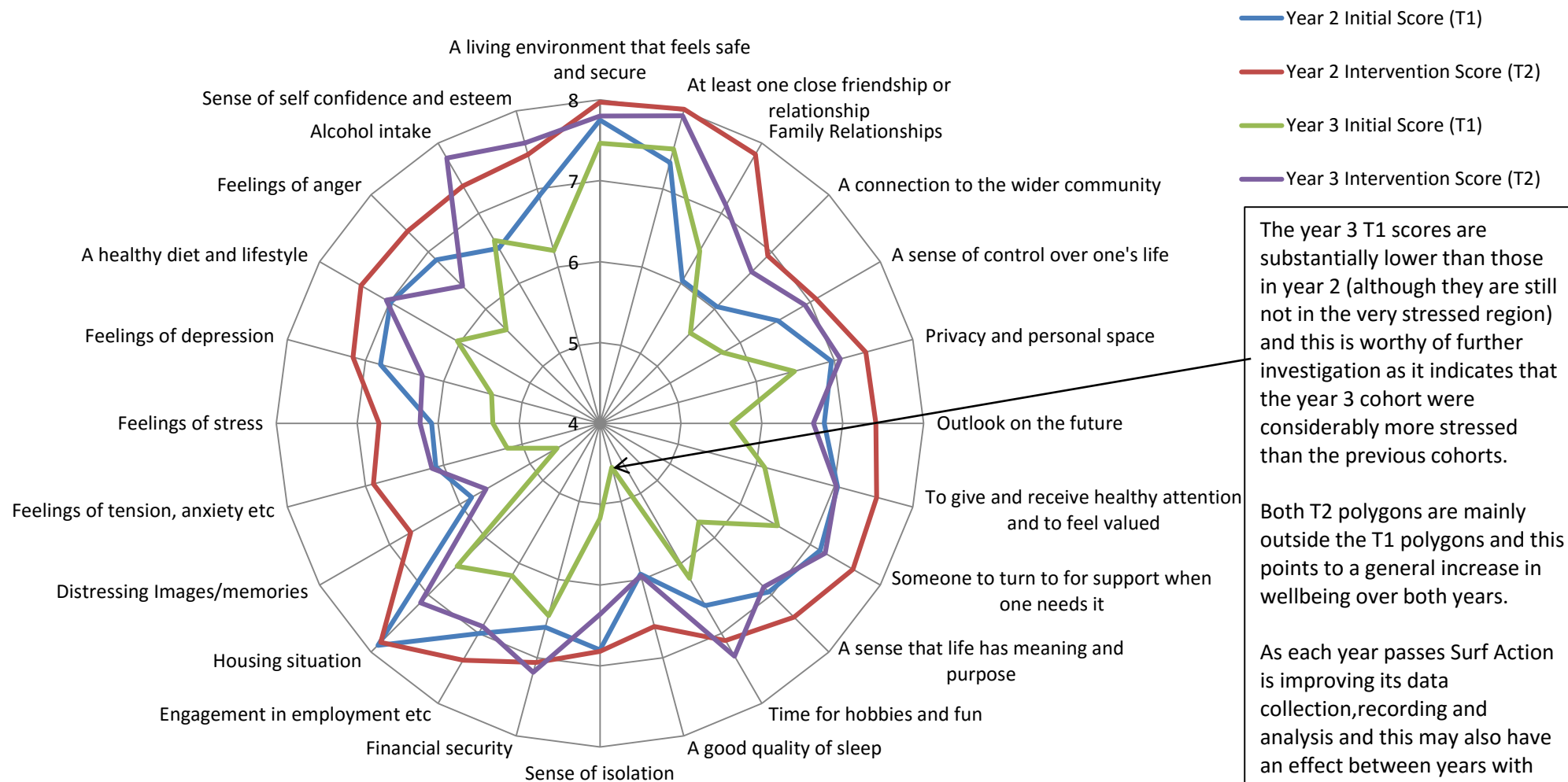
The Standard Deviation (SD) in Audit Scores is a measure of the compactness of the scores and in each of the 24 categories the T2 SD is smaller than the T1 SD which shows that the T2 scores are more consistent and less spread out than the T1 scores. This is an indication of increased psychological stability which can benefit general wellbeing.

A Scatter Graph showing T1 and T2 Average and Standard Deviation Audit Scores across the 24 Wheel of Life Audit Areas for each of the 40 Year 3 Veterans



Note: The doubling etc of an individual's audit score cannot reasonably be interpreted as a doubling in their wellbeing. It is however a significant indication of a noticeable improvement in their wellbeing. For Veteran 26 their T2 score is still only marginally over 3 which is still indicative of a much stressed person despite the large T1 score improvement.

A Comparison of the Year 2 and Year 3 T1 and T2 Scores



The year 3 T1 scores are substantially lower than those in year 2 (although they are still not in the very stressed region) and this is worthy of further investigation as it indicates that the year 3 cohort were considerably more stressed than the previous cohorts.

Both T2 polygons are mainly outside the T1 polygons and this points to a general increase in wellbeing over both years.

As each year passes Surf Action is improving its data collection, recording and analysis and this may also have an effect between years with later years data increasing in accuracy

Combined T1 and T2 Scores for 80 Veterans over Year 2 and Year 3

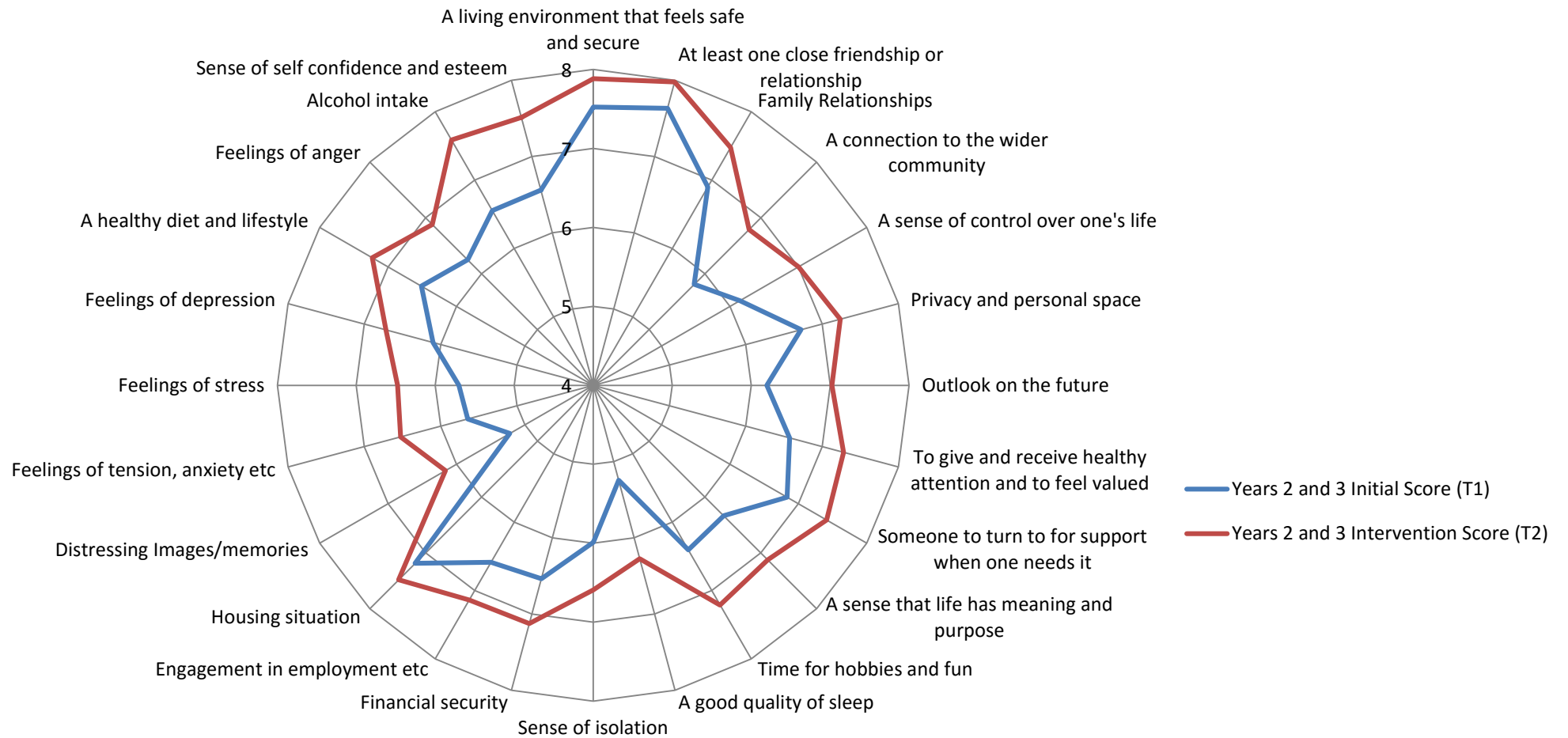
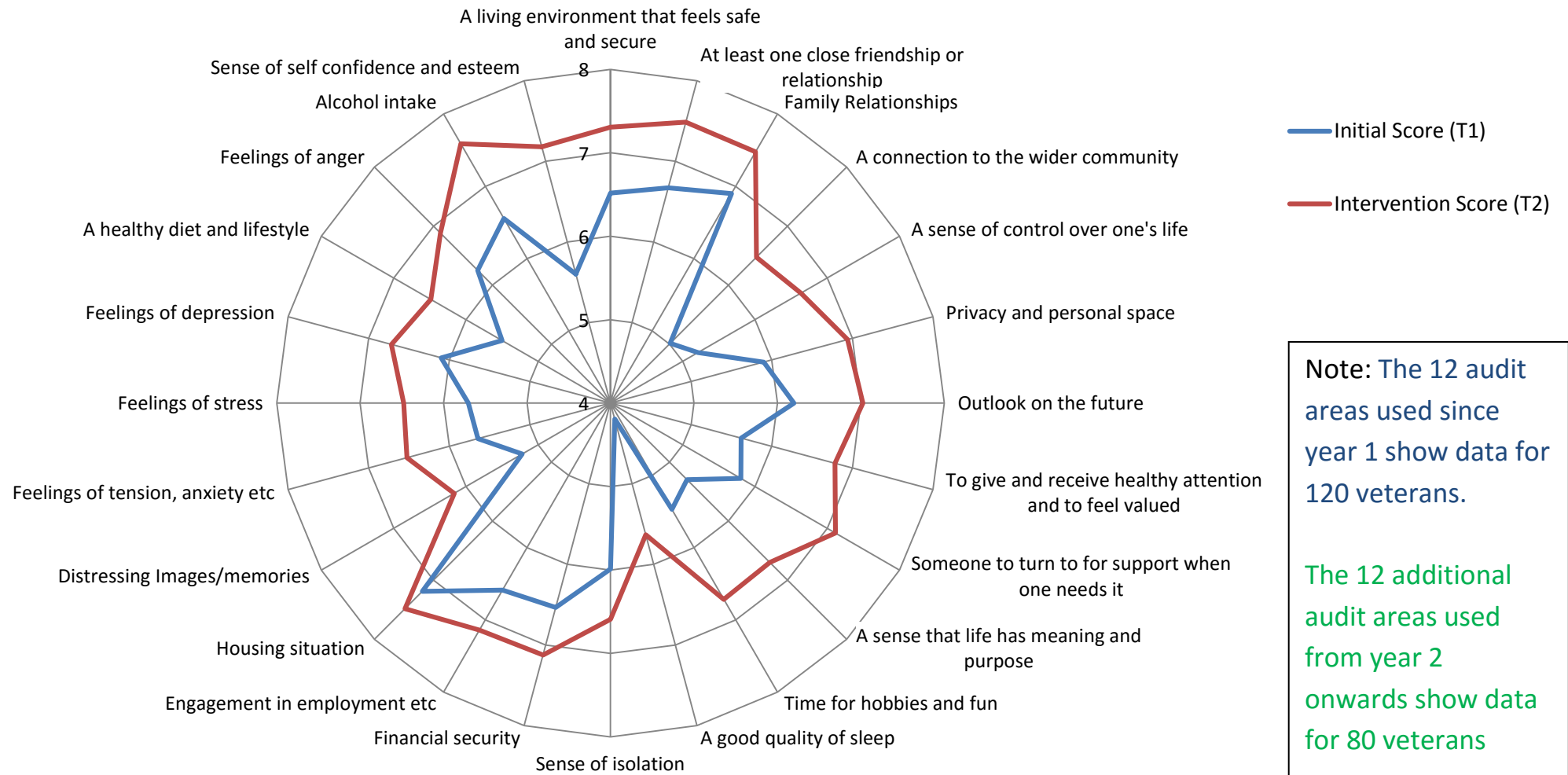


Table 2: T1 and T2 Data by Audit Area over 2 and 3 years

| | 80 Veterans over 2 years | | | 120 Veterans over 3 years | | |
|--|--------------------------|-------------------------|------------------------|---------------------------|-------------------------|------------------------|
| Audit Area | Initial Score (T1) | Intervention Score (T2) | % Increase in T1 Score | Initial Score (T1) | Intervention Score (T2) | % Increase in T1 Score |
| A living environment that feels safe and secure | 7.53 | 7.89 | 4.78 | 6.52 | 7.31 | 12.12 |
| At least one close friendship or relationship | 7.63 | 7.98 | 4.55 | 6.67 | 7.49 | 12.22 |
| Family Relationships | 6.90 | 7.48 | 8.35 | 6.90 | 7.48 | 8.35 |
| A connection to the wider community | 5.81 | 6.79 | 16.89 | 5.01 | 6.47 | 29.14 |
| A sense of control over one's life | 6.15 | 7.00 | 13.95 | 5.21 | 6.64 | 27.27 |
| Privacy and personal space | 6.72 | 7.24 | 7.64 | 5.90 | 6.94 | 17.61 |
| Outlook on the future | 6.20 | 7.02 | 13.33 | 6.20 | 7.02 | 13.33 |
| To give and receive healthy attention and to feel valued | 6.57 | 7.28 | 10.78 | 5.62 | 6.79 | 20.75 |
| Someone to turn to for support when one needs it | 6.84 | 7.41 | 8.41 | 5.80 | 7.11 | 22.57 |
| A sense that life has meaning and purpose | 6.34 | 7.13 | 12.45 | 5.30 | 6.70 | 26.55 |
| Time for hobbies and fun | 6.41 | 7.21 | 12.59 | 5.47 | 6.72 | 22.74 |
| A good quality of sleep | 5.25 | 6.28 | 19.61 | 4.20 | 5.63 | 34.21 |
| Sense of isolation | 5.99 | 6.59 | 10.08 | 5.99 | 6.59 | 10.08 |
| Financial security | 6.54 | 7.12 | 8.99 | 6.54 | 7.12 | 8.99 |
| Engagement in employment etc | 6.59 | 7.14 | 8.39 | 6.59 | 7.14 | 8.39 |
| Housing situation | 7.19 | 7.48 | 4.09 | 7.19 | 7.48 | 4.09 |
| Distressing Images/memories | 5.22 | 6.16 | 18.03 | 5.22 | 6.16 | 18.03 |
| Feelings of tension, anxiety etc | 5.64 | 6.53 | 15.61 | 5.64 | 6.53 | 15.61 |
| Feelings of stress | 5.70 | 6.48 | 13.59 | 5.70 | 6.48 | 13.59 |
| Feelings of depression | 6.10 | 6.72 | 10.15 | 6.10 | 6.72 | 10.15 |
| A healthy diet and lifestyle | 6.51 | 7.23 | 11.00 | 5.50 | 6.49 | 17.96 |
| Feelings of anger | 6.25 | 6.88 | 10.10 | 6.25 | 6.88 | 10.10 |
| Alcohol intake | 6.56 | 7.59 | 15.75 | 6.56 | 7.59 | 15.75 |
| Sense of self confidence and esteem | 6.56 | 7.51 | 14.52 | 5.60 | 7.18 | 28.18 |

The Audit Areas which were used in Year 1
Extra Audit Areas added from Year 2 onwards

T1 and T2 Scores for Veterans over 3 Years





RESULTS

Year 3 Data The year 3 Veteran Monitoring Group demonstrated a lower audit score profile at T1 than the year 2 group. One veteran in particular at line number 26 in the data array scored extremely low in all the audit areas and way below the rest of the cohort. This may have been disproportionately reflected in the overall shape of the T1 score polygon. Most encouragingly the scatter graph on page 20 shows an improvement in the T1 scores by all 40 veterans in the cohort. The standard deviation is reduced in all but veterans 14, 26, 29 and 38 and even then the difference is miniscule. When the Year 3 results are considered by mean scores in each of the 24 audit areas on pages 17-19 they show considerable improvements in all audit areas. The improvements ranged from 4.5% (Safe and secure environment) to 30.41% (Quality of sleep) with an average improvement of 15.8% in each audit area. This was a significant improvement on the average improvement per audit area of 7.64% in year 2. The year 3 standard deviations per audit area also reduced in each audit area thus indicating a more compact and consistent set of scores at T2. The most significant stressors of the year 3 cohort at T1 by some margin were quality of sleep and distressing images/memories. These are some of the classic

symptoms in people who are diagnosed with PTSD and other stress related health conditions. Prolonged sleep problems are acknowledged as giving rise to a large number of other health conditions such as diabetes and heart disease all of which negatively impact the individual. It is therefore good to see that the T1 scores in the area of 'Quality of sleep' and 'Distressing images' increased by 30.41% and 21.95% respectively. The scores in the 'healthy lifestyle' audit areas such as diet and alcohol intake also showed very pleasing improvements and these may have been very influential in improving their quality of sleep and reduced levels of distressing dreams etc. This could then also help account for the 22% increase in the year 3 veterans' sense of confidence and self-esteem. **It is therefore logical to say that the Year 3 Monitoring Group shows a considerable improvement in wellbeing**

Comparison Data Now that we have 3 years worth of data we are in a much better position to examine how this part of the project is developing. We have improved our data collection, recording and analysis considerably over the 3 years and hence the data for years 2 and 3 is much improved on that of year 1. At the end of year 1 we also realised that the 12 audit areas we were using did not give us all the information we needed to be able to monitor our outcomes as laid out on page 7 so another 12 audit areas were added. Thus for years 2 and 3 we have the data in 24 audit areas compared to year 1's 12 audit areas. As a result by the end of year 3 we have reported on 120 different veterans and have the data in the 12 new audit areas for 80 of them whilst having the data for all 120 in the original 12 audit areas. This data was combined to generate the diagrams on pages 22-24. It shows that the average percentage increase in T1 score by audit area over the last 2 years is a most satisfactory 11.4%. When viewed over 3 years it is an even better average of 17% in each audit area. **From these percentages we can justifiably say that all cohorts over the past 3 years have demonstrated a significant improvement in wellbeing.**

Ocean Therapy. The 8 week Ocean Therapy Course remains at the core of Surf Action's service delivery. It uses the concept of the 'Blue Gym' and offers the opportunity to those who engage to experience the outdoor classroom environment and an exhilarating physical, emotional and social experience which can act as the foundation for improvement in health and wellbeing.

EMPLOYMENT

The Surf Action 'Joined-up Recovery Model' continued to encourage those who were able to return to the workplace. Specific employment sessions/advice was available to any veteran who wished to engage in order to boost their own situation. This included veterans who were

inside and outside the monitoring group. Veterans who were on benefits were referred to specialist advice to ensure they did not compromise their standing through their interaction with Surf Action. The seasonal shape of the local economy suits many veterans and they relish the opportunity to work outside rather than in an office environment. Many have gained Pool Lifeguard qualifications and are now working in local holiday parks. This especially benefits those who have to put a lot of concentration into monitoring their own psychological wellbeing.

CONCLUSIONS

- By providing a mixture of high intensity watersports, physical activities and family activities, PTSD information sessions and facilitating access to therapy, Surf Action has continued to make a demonstrable improvement in the quality of the veterans' lives. Improvements were evidenced in all of the 24 audit areas.
- By actively encouraging families to attend surf clinics and by providing shared activities where families can have fun and connect in a more open and beneficial way, Surf Action has helped facilitate a positive change in both family relationships and connection. This also improves/strengthens community relationships.
- By providing a platform where veterans and their families can meet others with shared experiences, Surf Action is helping reduce the sense of isolation which many veterans feel and to boost family and community engagement and cohesion.
- By providing information sessions about Post Traumatic Stress Disorder, referral routes, its background, effects, coping mechanisms and treatments to the veterans, their families and volunteers, Surf Action is helping veterans and their families better deal with PTSD in their day-to-day lives with the associated benefits to family life and bonds.
- The Surf Action 'Centre of Excellence' project has continued to make good progress.

LESSONS LEARNED AND FUTURE PLANS

1. By working hard at improving and maintaining regular client contact good results have been achieved however there are still many veterans with whom this is still

quite difficult and contact somewhat sporadic. We will continue to work on trying to improve on this where possible

2. The enhanced 24 areas of the Emotional Needs Audit used on the Surf Action 'Wheel of Life' (Griffin and Tyrrell as amended by Surf Action) have been a success and enabled improved specificity in data capture, monitoring, recording and analysis. Changes to several questions to aid ease of understanding are being considered.
3. The Warwick and Edinburgh Universities Mental Wellbeing Scale (WEMWBS) has helped with the monitoring of the projects which are run specifically for youngsters. Recent information from the University of East Anglia regarding another measuring tool, 'The California Healthy Kids Survey' which may be even more suitable for youngsters means consideration will be given whether or not to use it in place of WEMWBS in years 4 and 5.
4. Surf Action has continued to work hard to create a strong and sustainable platform on which to base its current and future projects. The strong governance of the charity has seen the introduction of Improved monitoring systems to capture real-time data and more robust financial and operational management. Support systems have also continued to be refined.
5. The improvements outlined above have kept the charity on a sound financial basis. Surf Action has put a lot of effort into building good and sustainable relationships with a wide variety of other charities/organisations and can now look to expanding its activities and services into other parts of the UK, working more closely with the Ministry of Defence and its units/establishments and other centres of excellence. The Cabinet Office recently said: **"Surf Action is an excellent project that will build on the already strong links with community organisations, this organisation is delivering first-hand the covenant priorities"** We were delighted to hear this.
6. Having a well designed, easy to use and informative website is an essential for any charity/organisation. Surf Action will continue to develop and enhance its successful website (<http://www.surfaction.co.uk>) along with its use of social media including Facebook, Instagram and Twitter. Complimentary comments about its format and content from several large national mental health charities has been well received.

7. Surf Action relies heavily on volunteers in order to keep core costs to a minimum in order to maximise the amount of money available to be spent in directly supporting its charitable objectives and will continue to support, value and encourage volunteering amongst its veterans and the wider community.
8. None of this would have been possible without the fantastic support of the 'Reaching Communities Big Lottery Fund' and we express our profound thanks.

