



PRO BONO ECONOMICS

The Trussell Trust:  
Building the data needed for assessing TTT's economic  
and social impact

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# 1. Scope

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# Our understanding and scope

- The Trussell Trust (TTT) is looking to determine how they can measure the social and economic impact of the work it undertakes (specifically with regards to their furniture recycling project). This hopefully will form the basis for economic valuation on other TTT projects.
- Our objective is to assist TTT with identifying key pieces of data that would likely be required to assess TTT's economic and social impact (quantitatively and qualitatively)
- Our analysis does not include explicitly the development of a detailed methodology for calculating TTT's impact on society and the economy. We recognise that data requirements may vary depending on methodology required, therefore, we propose a wider range of variables for TTT to consider in their economic impact assessment.
- The list of variables included in this report is an 'ideal' list, which may need to be altered depending on methodology and sensitivity concerns held by TTT.

## 2. Theories of Benefit

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# The TTT Demographic Matrix

- We provide TTT with a matrix of beneficiaries in order to provide a framework for how to estimate the impact of various volunteer types:

1. Volunteer now retired from work	➔	Improved quality of life	Reduced depression & social isolation	Increased life satisfaction
2. Volunteer whilst job hunting	➔	Skills development (incl. references)/ reduction in re-offending	Increased life satisfaction	Improved employability
3. NEETs	➔	Skills development (incl. confidence)	Educational attainment	Increased well being
4. Volunteers alongside studying	➔	Skills development	Integration into society	
5. Volunteers with physical/mental difficulties	➔	Increased life satisfaction	Skills development	Reduced depression & social isolation
6. Volunteers alongside work	➔	Increased life satisfaction	Improved quality of life	

## 3. Broad Methodology

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# Methodological Approach (1/2)

- The scope of this work does not include developing a detailed methodology. To inform the choice of which data to collect, it is however necessary to outline in broad terms what we expect a methodology would look like.
- Any methodology would likely be performed in two steps.
  1. First, the effect of TTT's programme on *impact variables* should be established. For example, this first step would be to quantify by how much TTT's programme increases some measure of well-being.
  2. Second, that effect would be converted into a monetary value. For example, this second step would attach a £ value to the increase in well-being estimated in the first step.
- We outline possible methodologies for each of these steps. It is with these broad methodologies in mind that we then discuss the data collection.



# Methodological Approach (2/2)

## Step 1: Effect on impact variables

- Any analysis would attempt to compare the outcomes of TTT's programme (which are observed) with the *counterfactual*. This counterfactual is the value of the impact variable, *had TTT's programme not taken place*. Crucially, this is unobserved as it did not take place.
- There are, broadly, two approaches by which the counterfactual can be approximated.
  1. First, one could measure the impact variables (e.g. well-being) *before* and *after* TTT's programme, and compare the outcome. This, however, relies on the assumption that the subject's well-being would not have changed absent the programme.
  2. Second, one could overcome the assumption required for the first step by comparing how a subject's well-being changed over the course of TTT's programme (*treatment group*) with how the well-being of a subject that did not participate in the programme changed (*control group*). The difficulty here is that the control group would ideally need to have identical characteristics as the treatment group, except for their participation in TTT's programme.

## Step 2: Monetising the effect

- This step would likely be informed by academic estimates on the economic benefit of a range of outcomes measured from the impact variables.

## 4. Variables for Impact

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# Monetising the impact

- As discussed later, monetising the impact of TTT's programme will likely involve reference to academic estimates of the economic benefit from a change to the impact variables considered in the first step.
- For example, the cost of service provision for adults suffering from depression was £1,355 per person year in 2013 (Manchester New Economy Model). This information could be combined with the effect of TTT's programme on an impact variable measuring mental health.
- We consider that it is not necessary to collect additional data from volunteers to monetise the impact of TTT's programme, over and above the information already collected to estimate the effect on the impact variables.

# Key variables to capture up front

- We anticipate that the analysis will involve trying to understand the relationship between our ‘impact variables’ (i.e. well-being, skills, environment) and a number of volunteer characteristics.
- As such, with any impact assessment, we will need to identify key characteristics for each individual in order to appropriately assess the impact of volunteering prior to capturing information on ‘impact variables’. These include:

## Independent Variables

- Age;
- Socio-demographic characteristics- gender, race/ethnicity
- Volunteer hours (daily/weekly)
- Volunteer role (specific nature of volunteering- e.g. is a volunteering disseminating information, assisting is sales, building furniture, etc.)

## Control Variables

- Social status (i.e. married, single, etc.)
- Socioeconomic status (education- highest level, family income, recipient of benefits)
- Functional impairment (any physical/mental difficulties)
- Social integration (frequency of contact with family or friends on a weekly basis)
- Social support- do they receive social support?
- Health care- are volunteers in need of healthcare to deal with physical and mental issues)

## Importance of independent and control variables

- Independent variables allow you to capture basic data about the volunteer, including age, volunteer hours and role of the volunteer.
- It also captures socio-demographic characteristics- this allows TTT to segment the volunteers appropriately to undertake statistical analysis on the impact of volunteering on certain socio-demographic groups (N.B. this is a nice to have as it allows TTT to develop a rich dataset of its volunteers so they can perform more complex statistical procedures in evaluating impact variables)
- Control variables are important as they allow TTT to determine which ‘impact variables’ to analyse in detail. For example. Functional impairment, social support, health care status all provide TTT with a monetary cost impact for such volunteers.

# Key variables to capture up front

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- As such, with any impact assessment, we will need to identify key characteristics for each individual in order to appropriately assess the impact of volunteering prior to capturing information on ‘impact variables’. These include:

Control Variables	
Age	The effect of TTT’s programme on a volunteer’s well-being and/or skills may systematically differ depending on their age. For example, younger volunteers may benefit more from the skills aspect, while older volunteers may see larger effects on their health and well-being.
Gender	Existing literature may indicate that there is a gender bias in terms of employment opportunities (as illustrated by the gender wage gap)
Ethnicity	Most wage equations in the economics literature includes ethnicity if available to outline any systematic discrepancies that exist with various ethnicities.
Volunteer hours	We expect the amount of volunteering to be a strong determinant of the effectiveness of the programme.
Volunteer role (e.g. sales, building furniture – come up with good categories)	The effect of the programme may differ, depending on the exact role a volunteer fills.
Relationship status	This may affect some of the impact variables. e.g., people that are in a relationship may not receive the same amount of satisfaction/improved well-being as others
Education	Volunteers may obtain different benefits depending on their level of education. For example, we would expect less educated volunteers to see a larger impact on their skills and employability.
Functional impairment	Volunteers may obtain different benefits depending on whether they have functional impairment. For example, we would expect volunteers with functional impairment to see a larger impact on their health than their skills.
Social interaction (frequency of contact with friends/family)	This may affect some of the impact variables. E.g., people that are actively social may not need achieve the same level of improved satisfaction/well-being as others.
Do they receive social support	This may systematically affect some of the impact variables. E.g., people that receive social support may benefit more in terms of skills or well-being than people who aren’t receiving social support.
Currently receiving treatment (physical/mental)	This may systematically affect some of the impact variables. E.g., people that receive treatment may benefit more in terms of health and well-being than people who aren’t receiving treatment.
Other volunteering?	If volunteers are also active on other programmes, any effect on the impact variables may not be solely due to TTT’s programme. This would need to be disentangled.

# Estimating TTT's impact

Impact Variable	Benefits	Data needed
Direct-impact of volunteering	<ul style="list-style-type: none"> <li>TTT provides two direct channels of economic benefit:               <ul style="list-style-type: none"> <li>Direct contribution of volunteering</li> <li>Reduction in social care and health costs, where applicable</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Use ONS estimates to derive a per hour value of volunteering</li> <li>Use information collected for those individuals requiring constant social care and apply the monetary rate to estimate savings</li> </ul>
Well-being	<ul style="list-style-type: none"> <li>Inclusion into TTT's programs, allows for individuals to achieve a state of increased well-being as they:               <ul style="list-style-type: none"> <li>Participate in group activities</li> <li>Interact with other individuals</li> <li>Attain increased self-esteem/self-belief</li> <li>Increased life-satisfaction</li> <li>Increased perception in health</li> </ul> </li> <li>What can be monetised?               <ul style="list-style-type: none"> <li>Well-being from volunteering</li> <li>Reduction in social/health care</li> <li>Impact of volunteering in terms of value add</li> <li>Relief from depression/anxiety</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Life Satisfaction: Use of life satisfaction surveys with a banding of 1-5 for each volunteer before and after a volunteer session;</li> <li>Health benefits: Use periodical assessments of health (specifically with anxiety and depression), which can be done fortnightly, monthly, etc.</li> </ul>

# Estimating TTT's impact

Impact Variable	Benefits	Data needed
Skills	<ul style="list-style-type: none"> <li>TTT's volunteer programs allows individuals to develop and gain new skills. This may be either through direct intervention or indirect effects from volunteering, including: <ul style="list-style-type: none"> <li>Learning new skills and translating these into a future job</li> <li>Using skills acquired through volunteering to gain vocational qualifications</li> </ul> </li> <li>What can be monetised? <ul style="list-style-type: none"> <li>Attainment of new qualifications</li> <li>Employment opportunities related to volunteering role (median wage of jobs obtained)</li> </ul> </li> <li>What cannot be monetised? <ul style="list-style-type: none"> <li>Increased self-confidence allows NEETs to (re)enter the work-force</li> <li>Soft skills obtained through the volunteering program</li> <li>For soft skills, where TTT believes there is a visible impact, descriptive statistics/surveys/case studies can be used to supplement the story.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Data of volunteers that have found work during the program (how long since commencing volunteering with the TTT)</li> <li>Data of volunteers that have found work after leaving the program (length of duration for finding employment)</li> <li>Ex-post questionnaires on whether volunteering with TTT featured in job interviews/played a role in acquiring a job.</li> <li>What professional level of employment has the former volunteer attained? (industry and position). <ul style="list-style-type: none"> <li>We can use median wage data to infer direct impact of employability per annum and impact on government revenues (fiscal benefit)</li> </ul> </li> <li>Has the volunteer attained any professional qualifications? If so, what is the wage premium associated with the level of educational attainment?</li> </ul>
Environment	<ul style="list-style-type: none"> <li>TTT's furniture recycling program allows for reduced waste, which has positive implications for waste management and pollution.</li> </ul>	<ul style="list-style-type: none"> <li>TTT should aggregate all costs associated with recycling furniture (waste costs/scrap costs) and apply this to the furniture recycled.</li> </ul>

## 5. Monetising the Impact

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# Monetising TTT's impact

Impact	Variable	Metric
Direct	Direct value from volunteering (direct value-add)	£10.6, per person, per hour
Wellbeing	Well-being attributed to volunteering (Andy Haldane), >25 years old Well-being attributed to volunteering (PBE), <25 years old Reduction in seeing healthcare professionals for depression for adults Reduction in seeing healthcare professionals for depression for children Reduction in service provision for mental health disorders Mental health community provision - average cost per contact Reduction in social care costs Cost of day-care services for older people (Local Authority) Carer's allowance	£3,249, per person, per year £2,895, per person, per year £830, per person, per year £230, per person, per year £1,866, per person, per year £156, per person, per session £57, per person, per year £92, per person, per session £61, per person, per week
Skills	Money saved from attaining employment sooner; N.B. avg. duration of unemployment in the UK is 26.8 weeks NVQ Level 3 qualification (encouraged by TTT) Impact of job attainment  Apprenticeship, Level 3- impact on economy Fiscal and economic benefit from a workless claimant entering work	Wage*(26.8weeks-Xweeks)  £513, per person, per year Wage of job*working life remaining (65-age of volunteer) £1,321 per person, per year £9,800 per person per year
Environment	Total costs for scrappage of furniture	Scrappage fee

*\*TTT will need to carefully assess how to scale the above values to volunteers that is both conservative and sensible. This should be done in lieu of what the average volunteer looks like under the various demographics.*

# Non-monetisation of impact variables

- Where some impacts cannot be monetised, TTT should resort to utilising other means to illustrate its impact, including:
  - Use of case studies
  - Statistical analysis (inferring causal relationships between volunteering and impact- e.g. volunteering at TTT improves likelihood of finding a job, etc.)



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