# Youngest British army recruits come disproportionately from England's most deprived constituencies

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#### **Abstract**

**Background:** Public health and human rights concerns have been raised about the enlistment of young people under the age of 18 into state armed forces. In the UK, some of these concerns relate to the impact of military enlistment on disadvantaged young people in particular, who may be enlisted into the British armed forces from age 16. Factors associated with socioeconomic disadvantage may increase the vulnerability of this group in military settings, yet there have been few investigations of the socioeconomic profile of soldiers recruited at this age.

**Objective:** The aim of the study was to investigate the socioeconomic background of enlisted minors in England, by looking at the economic characteristics of the areas they come from.

**Methods:** Data showing how many minors were enlisted into the army from each English constituency over a five-year period was matched with data on the relative socioeconomic deprivation of constituencies. The study investigated whether the number of recruits varied according to the deprivation of constituencies.

**Results:** A statistically-significant correlation was found between the relative deprivation of constituencies and the number of minors enlisted, with the rate of recruitment 57 percent higher in the most deprived fifth of constituencies than the least deprived fifth.

**Conclusion:** The study found that, over a five-year period, minors were enlisted into the army disproportionately from the more deprived constituencies of England, lending weight to public health and human rights concerns.

## **Background**

The UK enlists for the armed forces from age 16. In the five financial years from 2013 to 2018, the British army enlisted 36,250 new soldiers. 8,870 of these (24 percent) were aged under 18, an average of 1,774 per year (MoD, 2018a); most joined the army.

The policy of recruiting from age 16 is unique among the major military powers and rare worldwide (Child Soldiers Initiative, 2019). Concerns have been raised by human rights authorities, statutory bodies and public health organisations about the potential effects of the policy on the rights and health of enlistees in this age group (Child Soldiers International, 2016; UN CRC, 2016; HC & HL JCHR, 2009; Medact, 2016).

# Demographic and socioeconomic targeting in military recruitment practices

Official documents show that army recruitment campaigns target young working-class people, particularly those aged 16-24 in the three lowest socioeconomic classes ('C2DE'), and those with an annual family income of £10,000 or less (Independent, 2017). Marketing is geographically targeted at cities and towns with typically high levels of deprivation, particularly in the north of England, on the coast, and in Scotland and Wales. A study of army visits to London schools in 2010 also found

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<sup>&</sup>lt;sup>2</sup> The media buying brief for the 2019 recruitment campaign stated the 'Primary targets' as 'Newcastle, Sunderland, Middlesbrough, Glasgow, Liverpool, Leeds, Cardiff, Sheffield, Bradford, London, Birmingham, Manchester' and the 'Secondary targets' as 'Leicester, Stirling, Dundee, Blackpool, Hull, Scunthorpe, Nottingham, Stoke, Swansea, Bournemouth, Plymouth, Southampton' (British army/Capita, 2019). Seven of the 20 English towns and cities named (Blackpool, Hull, Liverpool, Manchester, Middlesbrough, Birmingham and Nottingham) are among the top ten most

that the poorest schools were visited most often (Gee and Goodman, 2010). Senior recruitment officials confirm that the army targets potential recruits from disadvantaged backgrounds.<sup>3</sup>

The army does not collect data on the socioeconomic profile of its recruits (British army, 2009; MoD, 2017). However, characteristics that correlate with deprivation, such as low educational attainment and a childhood background of adverse experiences, indicate that army enlistees come disproportionately from deprived backgrounds (British army, 2015a; Iversen et al., 2007). Young people with restricted economic opportunities are also more likely than others to enlist; the government and army note a long-standing correlation between higher enlistment rates and periods of higher unemployment, for example.

Children's rights and public health bodies have called for an end to the socioeconomic targeting of recruitment practices. In 2016 the UN Committee on the Rights of the Child noted that, in the UK, "children who come from vulnerable groups are disproportionately represented among recruits" and recommended that the government "ensure that recruitment does not have discriminatory impact on children of ethnic minorities and low-income families" (2016: 23-24; 2008: 3). The House of Commons and House of Lords Joint Committee on Human Rights endorsed the same recommendation in 2009 (HC & HL JCHR, 2009: 47-48). Medical professionals have made a public health case against the recruitment of minors in the UK, criticising especially the impact on disadvantaged young people (Abu-Hayyeh and Singh, 2019; Medact, 2016).

The recruitment of disadvantaged young people raises concerns of two kinds: capacity for consent and health effects.

## Capacity for informed consent

Under international law, States that enlist minors must ensure that "such recruitment is genuinely voluntary" and "such persons are fully informed of the duties involved" (CRC OPAC, 2000). Young age and socio-economic deprivation both complicate this obligation.

During mid-adolescence the cognitive capacity to make responsible long-term decisions involving risk, particularly when options are presented as thrilling, has yet to mature (Strasburger et al., 2009; Galvan and McGlennen, 2012; Kishiyama et al., 2009; Hackman and Farah, 2009). Stressful childhood experiences and underdeveloped literacy, which are common among young recruits from socio-economically deprived backgrounds (Iversen et al., 2007; British army, 2015a), may compound this problem. Childhood adversity can impede development of the critical brain structures involved in consequential decision-making (Medact, 2016: 8, 12), while underdeveloped literacy precludes full comprehension of the legally binding enlistment papers.

deprived local authorities in the country, according to the English Index of Multiple Deprivation Local Authority summaries. Seventeen are in the top 100, meaning they are in the most deprived third of local authorities (Department for Communities and Local Government, 2015b).

<sup>&</sup>lt;sup>3</sup> E.g. Cath Possamai, Chief Executive of the British Army Recruiting Group, said in oral evidence to the *Wales and the Armed Forces* Inquiry: "We do target [specific socioeconomic groups and deprived geographical areas] because they are very traditional recruiting grounds for the Army". (HC Welsh Affairs Committee, 2019: Q57).

<sup>&</sup>lt;sup>4</sup> Mark Francois MP wrote in a report analysing recruitment challenges: "The Armed Forces have traditionally benefited from periods of high unemployment, with Service in the Forces often seen as a "way out" from deprived communities. The near record level of those in employment has depressed this source of recruits for the forces" (2017: 11). See also British army (2015b: 2).

<sup>&</sup>lt;sup>5</sup> In 2015, 74 percent of 16-year-old British army recruits had the literacy normally expected of an 11-year-old or less; seven percent had a reading age of between five and seven years (British army, 2015a).

## Health risks

The army is a stressful setting. New recruits experience multiple stressors from their first day, including harsh discipline, sleep deprivation, physical and mental exhaustion, and isolation from friends and family. According to the British army, the training process for the age group involves "all round degradation" (British army, 2014: 2). As an indication of the chronic stress experienced at this early stage, research in the US army, which recruits from age 17 and uses similar training methods, found that the rate of attempted suicide during initial training was substantially higher than during or after subsequent deployment to a war zone.

Minors in mid-adolescence are more susceptible than adults to the effects of prolonged stress, particularly those with a background of adversity during childhood. Specifically, they are temperamentally more anxious, are more likely to experience depressed mood and emotional volatility, and react to stressors with greater anxiety and then remain anxious for longer. Under stress, adolescents are more likely than adults to develop anxiety-related mental health problems, such as depression (Spear, 2000; Giedd et al., 2008; Baker et al., 2014; Den et al., 2014). The mid-adolescent brain is also more sensitive to repeated or prolonged stress, which impedes and can impair the maturation process, particularly the development of structures involved in the regulation of emotions; there is some evidence that this can lead to lasting problems with anxiety in adulthood (Kishiyama et al., 2009; Hackham and Farah, 2009).

The mental health outcomes of enlisted minors as a discrete group, relative to same-age civilians and to adult recruits, have yet to be addressed in the British or North American literature. However, young age and childhood adversity are now well-attested as risk factors among military personnel and veterans for stress-related disorders such as PTSD (Jones et al., 2006; Fear et al., 2010), anxiety and depression (Goodwin et al., 2015; Iversen et al., 2009), self-harm (Hines et al., 2013; Pinder et al., 2012), and suicide (Kapur et al., 2009; MoD, 2019), and for behavioural problems such as alcohol misuse (Fear et al., 2010; MacManus et al., 2001) and violent behaviour (MacManus et al., 2012; 2013). The cited studies show that, in general, younger soldiers are more likely than both civilians of the same age and older soldiers to suffer from stress-related mental health and behaviour problems.

The over-representation of the youngest British army recruits in high-risk roles, particularly the infantry, also leads to increased exposure to physical and psychological risks over the course of their military careers.<sup>8</sup>

# Study aim

Despite the evidence that the British army targets young people from deprived backgrounds for recruitment and the public health concerns that the practice raises, little is known about the geographic distribution and socioeconomic profile of soldiers recruited under the age of 18. Since the army does not collect data on recruits' socioeconomic background, we looked at the relative deprivation of the areas from which they come.

<sup>&</sup>lt;sup>6</sup> The British army notes the impact of 'the shock of capture' on new recruits aged under 18, associating the stress of their experience with that of prisoners of war (2014: 2), while military academics in the US have argued that prolonged conditions of high stress are essential in the process of training for obedience (McGurk et al., 2006 13-31). For more information about the stressors of military training, see Child Soldiers International, 2018.

<sup>&</sup>lt;sup>7</sup> As recorded by the US army between 2004 and 2009, the peak rate of attempted suicide during initial training was four times higher than the peak rate during soldiers' first deployment (Ursano et al., 2016: 741-749).

<sup>&</sup>lt;sup>8</sup> Each year between 2012-13 and 2015-16, an average of 768 minors joined the infantry, accounting for 34 percent of the armed forces' enlisted minors over the period, versus 21 percent of enlisted adults (MoD 2016; 2018a).

#### Methods

We collected data showing: a) the number of minors enlisted by the British army from each parliamentary constituency; and b) the relative socioeconomic deprivation of each constituency. We then investigated whether a correlation exists between recruitment and geographic deprivation.

We used data from the Ministry of Defence, obtained through a parliamentary question, showing how many enlisted army recruits came from each Westminster parliamentary constituency in the United Kingdom over five years from 1 April 2013 to 31 March 2018, and how many of these were aged under 18 at the point of enlistment (MoD, 2018b). The data was supplied rounded to the nearest five. Figures less than five and greater than zero were represented as ~, which we changed to 2.5, the average of the possible values. We excluded constituencies outside England, since indicators of deprivation for Northern Ireland, Scotland, and Wales are not comparable with those used in England (DfCLG, 2016c: 5). Two English constituencies were missing from the Ministry of Defence data for unknown reasons. 11

We matched the constituency recruitment figures to data produced by the House of Commons Library (2015) on the relative deprivation of constituencies in England. The English Index of Multiple Deprivation 2015 (IMD) calculates a deprivation score for small neighbourhood areas (Lower-layer Super Output Areas, or LSOAs) and ranks them accordingly. The House of Commons Library data calculates a population-weighted average of LSOA deprivation scores to provide a score for the constituency that contains them. These scores are then ranked to provide an Index of Multiple Deprivation by constituency, with 1 being the most deprived (HofC Library, 2015: 6).

We matched the number of recruits aged under 18 from each constituency with that constituency's deprivation ranking. We used data from the Office for National Statistics (2018) to adjust the analysis for the number of 16- and 17-year-olds estimated to be living in each constituency in 2015. We then divided the data into fifths by level of deprivation, and tested for a correlation between deprivation ranking and the rate of recruitment per 1,000 population in the age group.

## **Results**

We found a linear correlation between the deprivation ranking of constituencies and the rate of recruitment from the age group. As the relative deprivation of constituencies increased, so did the average rate of recruitment. Over the five-year period covered by the data, the average rate of recruitment in the most deprived fifth of constituencies was 6.6 recruits per 1,000 in the 16-17 age group, compared with 4.2 in the least deprived fifth. That is, **the rate of recruitment at age 16 and 17 in the most deprived constituencies was 57 percent higher than in the least deprived.** Using Spearman's rank correlation coefficient and a t-test of significance, this correlation was found to be statistically significant [r(s) = 1].

The north was the region of highest recruitment density for the age group, and the lowest was the south-east including London.

<sup>&</sup>lt;sup>9</sup> The period covered by the data was clarified in email correspondence with Defence Statistics.

 $<sup>^{10}</sup>$  Rounding procedures were clarified through email correspondence with Defence Statistics.

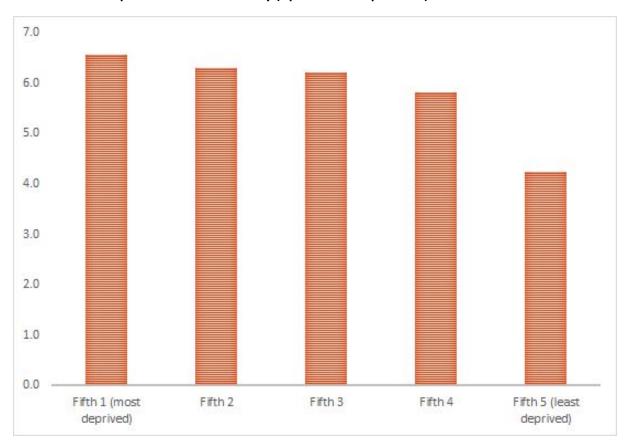
<sup>&</sup>lt;sup>11</sup> Northampton North (ranked 180 on the Index of Multiple Deprivation) and Dudley South (ranked 200) were missing from the data.

Table 1: Minors enlisted from England into the British army (per 1,000 in population), by socioeconomic deprivation of constituency (April 2013 to April 2018).

Deprivation bracket of constituencies (fifths)	Recruits aged under 18**	Average rate of recruitment (per 1,000 in the 16-17 age group)
Most deprived (rank 1-106)	1623	6.6
2 <sup>nd</sup> (rank 107-212)	1478	6.3
3 <sup>rd</sup> (rank 213-319)*	1523	6.2
4 <sup>th</sup> (rank 320-425)	1418	5.8
Least deprived (rank 426-531)	1070	4.2

<sup>\*</sup> The number of constituencies in the data (n=531) does not divide exactly into fifths. The remainder constituency was allocated to the middle fifth.

Figure 1: Minors enlisted from England into the British army (per 1,000 in population), by socioeconomic deprivation of constituency (April 2013 to April 2018).



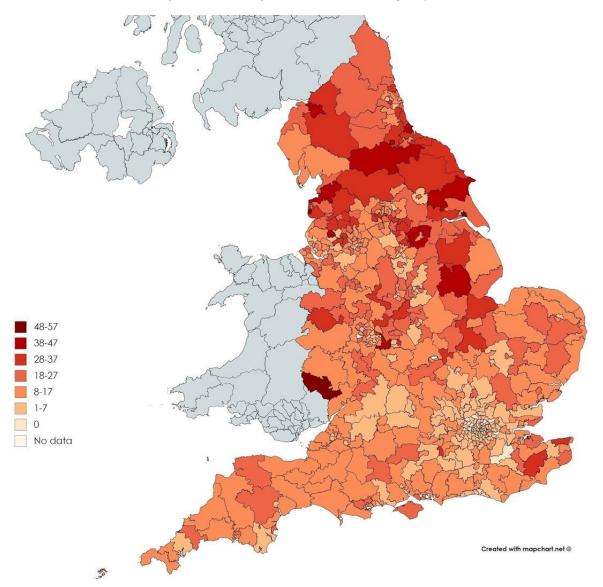
<sup>\*\*</sup> Figures have been rounded to the nearest whole number. Some totals were not whole numbers, since we represented ~ in the data as 2.5, the average of the possible values.

## Strengths and limitations

As the first study in the UK analysing where army recruitment of minors is concentrated, this investigation contributes to the understanding of their socioeconomic profile. It uses a reliable measure of socioeconomic deprivation - the Index of Multiple Deprivation - to draw conclusions about the constituency-level areas that recruits come from.

For data protection reasons, street- or neighbourhood-level data on where recruits live is not available. A limitation of our study is the use of a recruit's constituency, a relatively large geographic area, to indicate the level of socioeconomic deprivation experienced prior to enlistment. Constituencies vary internally, containing areas of both high and low socio-economic deprivation that our study does not capture. For example, a constituency that ranks low on the IMD may contain pockets of highly-deprived areas, and *vice versa* (DfCLG, 2015a: 23-27). Since other evidence indicates that the degree of deprivation among recruits is relatively high we speculate that, were a similar study to use a smaller geographic area, such as a neighbourhood, it would find a stronger correlation between deprivation and recruitment than is shown in ours.

Figure 2: Map showing the number of minors enlisted into the British army in English constituencies between April 2013 and April 2018 (created using mapchart.net).



#### Discussion

This investigation found that the British army recruits minors disproportionately from the most deprived regions and constituencies of England. It adds to evidence showing that enlisted minors tend to come from socioeconomically deprived backgrounds. This could be attributable to the socioeconomic targeting of recruitment, to limited alternative economic opportunities for young people in poorer areas, or, as seems likely, a combination of these factors.

Insofar as young age and stressful childhood experiences associated with socioeconomic deprivation are both implicated in long-term susceptibility to stress, recruits with such a background carry elevated vulnerability to the stressful conditions of initial military training and deployment. Consequently, they may be more likely than other young people to experience stress-related mental health and behavioural problems, such as anxiety and depression, alcohol misuse and violent behaviour. This would be consistent with British research in the last decade finding that: common mental disorders (i.e. anxiety and depression) were twice as common in the armed forces than among working civilians; alcohol misuse was substantially more common among young personnel than their civilian peers; and that the rate of violent and drug/alcohol-related offending by recruits increased after enlistment, rising again after deployment to a war zone (Fear et al., 2010; MacManus et al., 2013).

As noted earlier, the association between deprivation and underdeveloped literacy also jeopardises the right of all minors not to be enlisted without being 'fully informed' about its risks and legal obligations.

Our findings lend weight to concerns raised by public health and human rights bodies that socioeconomic deprivation and other kinds of adversity, especially when combined with young age, render enlisted minors a particularly vulnerable group in military settings.

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