

# Northumbria Research Link

Citation: Kiernan, Matt, Arthur, Antony, Repper, Julie, Mukhuty, S. and Fear, N. T. (2016) Identifying British Army infantry recruit population characteristics using biographical data. *Occupational Medicine*, 66 (3). pp. 252-254. ISSN 0962-7480

Published by: Oxford University Press

URL: <http://dx.doi.org/10.1093/occmed/kqv202>  
<<http://dx.doi.org/10.1093/occmed/kqv202>>

This version was downloaded from Northumbria Research Link:  
<http://nrl.northumbria.ac.uk/id/eprint/25406/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)

## **Identifying British Army infantry recruit population characteristics using biographical data**

### **Abstract**

#### Background

The Infantry accounts for more than a quarter of the British Army but there is a lack of data about the social and educational background of its recruit population.

#### Aim

The current study uses biographical data to provide an insight into British Army Infantry Recruits' personal, social and educational background prior to enlistment.

#### Methods

The study sample consisted of 1000 Infantry recruits who enlisted into the British Army School of Infantry. Each recruit completed a 95-item biographical questionnaire. Descriptive statistics were used to describe the whole study sample in terms of demographics, physical, personal, social, and educational attributes.

#### Results

Over half of the recruits were consuming alcohol at a hazardous or harmful level prior to enlistment and 60% of recruits had used cannabis prior to joining the Army. Academic attainment was low, with the majority of recruits achieving GCSE grade C and below in most subjects, with 15% not taking any examinations. Over half the recruits had been in trouble with the police and either been suspended or expelled from school.

#### Conclusion

Substance misuse and poor behaviour are highly prevalent among recruits prior to enlistment. Taken alongside existing evidence that these problems are commonplace among personnel in regular service, the assumption that the British Army Infantry is, in itself, a cause of these behaviours should be questioned.

## **Introduction**

In the financial year 2013/14 the British Army recruited 7020 officers and soldiers into basic training in various roles [1]. The Infantry, comprising the Army's "foot soldiers" accounts for more than a quarter of the British Army [2]. A freedom of information request shows that up until the financial year 2012/13 the infantry recruited over 3400 recruits annually [3].

Biographical questionnaires measure non-cognitive attributes assuming that past behaviour is a valid indicator of future behaviour in similar situations [4]. There is limited literature reporting biographical data and its relationship with military training success. This study uses a biographical questionnaire to describe a recruit population within the British Army [5] thereby providing an insight into British Army Infantry Recruits' personal, social and educational background prior to enlistment.

## **Methods**

The sample comprised 1000 British Infantry recruits enlisted between 2001 and 2003 and was stratified to ensure that all the areas that recruits' enlist from throughout the United Kingdom, were represented. All participants provided written informed consent, and the Defence Medical Services Clinical Research Committee along with the Army Recruitment and Training Division granted ethical and scientific approval.

The US Army Research Institute developed the only biographical data questionnaire extant for military recruits, [5] aiming to determine the relationship between a recruits' antecedant biographical factors and identification with the US Army. This questionnaire was adapted for this study and comprises 95 items grouped within five areas: demographic and physical measurement, education, outdoor education, non-physical activity, employment and coping behaviour. The Alcohol Use Disorders Identification Test was used to identify patterns of alcohol consumption [6].

Descriptive statistics, analysed using STATA and SPSS software, describe this sample in terms of demographics, physical, personal, social, and educational attributes; expressed as proportions for categorical and ordinal variables, and means with standard deviations for continuous variables.

## **Results**

Table 1 shows that the study sample was all male<sup>1</sup> with a mean age of 19.0 years (SD = 2.3 years). Of the total sample, 23% (n=232) left school before they were 16 years of age, only 9% (n=91) stayed on in school after the age of 17 years. The ethnic mix was predominately white British, with only 22 (2%) recruits recording themselves as Black British. The mean Body Mass Index score of the study subjects was 22.5 (SD = 3.5) which was in the normal BMI range. Nearly three quarters of the recruits had smoked, with over half still smoking on enlistment. Alcohol Use Disorders Identification Test (AUDIT) scores on the recruits showed that over half of the recruits were consuming alcohol at a hazardous or harmful level prior to enlistment. Over 60% of recruits had used cannabis prior to joining the Army, with nearly a third using cannabis in the year prior to enlistment.

### **INSERT TABLE 1 NEAR HERE**

Academic attainment was low, with the majority of recruits achieving GCSE grade C and below in most subjects, with 14% not taking any examinations (Table 2). Antecedent poor behaviour amongst recruits appeared common place with 87% receiving detentions at school and 76% having played truant. Over half the recruits had been in trouble with the police (53%) and either been suspended or expelled from school (52%). Nearly all recruits preferred team sports and most recruits regularly participated in outdoor activities.

### **INSERT TABLE 2 NEAR HERE**

## **Discussion**

In this sample, recruits were predominately white with a history of substance usage prior to enlistment. Educational attainment amongst the sample was low with poor behaviour being commonplace. This is the only study to have used a wide ranging biographical data questionnaire on a

---

<sup>1</sup> All personnel within the British Infantry are male.

British Army population to describe antecedent characteristics of infantry recruits. A limitation of the study is that data were collected between 2001 and 2003 and there have been changes to the recruitment strategy used by the military. However, existing evidence would suggest that characteristics identified in this studies sample such as substance misuse, educational attainment and poor behaviour remain commonplace among personnel currently in regular service. This study fills an important gap in the literature surrounding British Army recruitment in the 21st century.

Over two-thirds of the sample had a smoking history, with over half the sample reporting to be actively smoking at the point of enlistment. Fear et al's [7] report that in the seven years following this study smoking remains particularly common in males under the age of 25, who smoke more cigarettes per day than the general population.

Over half of the study sample recorded an Alcohol Use Disorders Identification Test (AUDIT) score of 8 or more. Later studies on alcohol consumption conducted on the British Armed forces [8, 9] would suggest that the relationship with alcohol remains consistent with this sample. It is plausible that recruits in our study were entering service already engaged in alcohol consumption deemed hazardous and harmful [6] suggesting a pre-disposition that would appear to either continue or exacerbate with military service [8, 9].

The findings of the study describe a sample with low educational attainment and poor behaviour during their school years. MacManus et al [10] identified that more recently 17% of UK military personnel had a criminal record. Within this study, serious behaviour that resulted in suspension or expulsion from school and the involvement of the police were observed in over half the sample and truancy in three quarters. The offending behaviour and low educational attainment observed in the study are potentially predetermining factors associated with violent behaviour during and after military service [10].

The results show that substance use and poor behaviour observed in this sample is consistently observed in later studies of personnel in regular military service. The behaviours that are commonplace in this study imply that the aetiology of problematic health behaviours are causally complex and may have their origin in the pre-existing attributes of recruits.

## **Key Points**

This study and later studies demonstrate that smoking in male military personnel under the age of 25 remains a consistent issue.

Pre-enlistment alcohol consumption identified in this study is very similar to the levels observed in the serving population in more recent studies.

Substance use and poor behaviour are commonplace in the infantry recruits in this study prior to enlistment, suggesting that the British Army Infantry is recruiting individuals with these problems and may not be causing them.

## References

1. MOD, *UK Armed Forces Annual Personnel Report*. Retrieved 04 September 2015 from Ministry of Defence Website [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/312539/uk\\_af\\_annual\\_personnel\\_report\\_2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/312539/uk_af_annual_personnel_report_2014.pdf). 2014, Ministry of Defence.
2. armedForces. *British Army Manning Figures* <http://www.armedforces.co.uk/army/listings/l0133.html> 2014 [cited 2015 15th April].
3. ThinkDefence, *Infantry Manning Figures*. 2015, Accessed 26 June 2015: <http://www.thinkdefence.co.uk/2013/06/infantry-manning-figures/>.
4. Hough, L., B. Barge, and J. Kamp, *Assessment of personality, Temperament, Vocational Interests, and Work Outcome Preferences*, in *Exploring the limits of personnel selection and classification*, J.P. Campbell and D.J. Knapp, Editors. 2001, Lawrence Erlbaum Associates: Mahwah, NJ. p. xlii, 637 p.
5. Mael, F.A. and B.E. Ashforth, *Loyal from Day One - Biodata, Organizational Identification, and Turnover among Newcomers*. *Personnel Psychology*, 1995. **48**(2): p. 309-333.
6. Babor, T.F., et al., *The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care*, W.H.O., Editor. 2001, Department of Mental Health and Substance Dependence: Geneva. p. 41.
7. Fear, N.T., et al., *Smoking among males in the UK Armed Forces: Changes over a seven year period*. *Preventive Medicine*, 2010. **50**(5–6): p. 282-284.
8. Fear, N.T., et al., *Patterns of drinking in the UK Armed Forces*. *Addiction*, 2007. **102**(11): p. 1749-1759.
9. Hooper, R., et al., *Cigarette and alcohol use in the UK Armed Forces, and their association with combat exposures: A prospective study*. *Addictive Behaviors*, 2008. **33**(8): p. 1067-1071.
10. Macmanus, D., et al., *Violent offending by UK military personnel deployed to Iraq and Afghanistan: a data linkage cohort study*. *Lancet*, 2013. **381**(9870): p. 907-17.