HM Prison & Probation Service

ARMED FORCES COVENANT

Network for Ex-Service Personnel (NESP): Strand 3

Does offence type, length of stay and age predict the likelihood of MCTC detainees receiving (HMPPS) custodial or a community sentences after leaving the military?

Lauren Butler
Evaluation Manager

Executive summary

The aim of this study was to examine whether offence type, length of stay and age can predict reoffending of MCTC detainees upon release from MCTC. Data was collected from MCTC databases and matched with MoJ and NPS databases in order to identify ex-service personnel who have reoffended after discharge from the military. Data matching was completed using surname, forename, date of birth and gender. 1294 service personnel were detained in MCTC between 2011 and 2016 and after matching 193 (14.9%) detainees were identified as having reoffended upon release from MCTC. Chi square and independent t-tests were used to explore the data further, age was not significantly associated with reoffending of MCTC detainees and there was no significant difference in days spent in MCTC between those who reoffended and those who did not. However, offence type was significantly associated with reoffending and therefore this was the initial predictor entered in the logistic regression model. Results provided evidence that offence type was the best predictor of MCTC detainees reoffending upon discharge from the military and those who had committed military offences when detained were more likely to offend. This is likely due to differences in the support provided in MCTC, such as offending behaviour interventions, which needs to be investigated further to gain a comprehensive understanding of how it affects reoffending. Further analysis was conducted to investigate the relationship between MCTC offence type, type of reoffending and sentence type. Violent reoffending was the most prevalent re-offence type for both military and civilian MCTC offence type (48.3% and 52.7%). There was a significant association between the type of offence committed when detained in MCTC (military or civilian offence) and the type of re-offence upon discharge from the military. This was broken down further into specific civilian offence types for MCTC offence, this test was not statistically significant. Finally, there was no significant association between MCTC offence type and sentence type.

Context

The overall aim of Her Majesty's Prison and Probation Service Co-Financing Organisation (HMPPS CFO3) programme is to reduce recidivism by improving offender education, training & employment opportunities and increase access to existing mainstream resettlement provision. Effective engagement with offenders in custody and in the community helps to more adequately prepare them for employment, training, education and other mainstream activities. The provision of CFO3 enhances existing activity within prisons and the community by

identifying the gaps in delivery for the harder to help groups, which includes ex-service personnel. CFO3 received a £500,000 grant from the Armed Forces Covenant Fund to support fast-tracking onto resettlement schemes and enhanced provision for ex-service personnel who have been recently discharged from the military and have received a custodial sentence following conviction or released into the community following detention at the Military Corrective Training Centre (MCTC). This project was branded as Network for ex-Services Personnel (NESP).

MCTC Colchester can hold up to 323 male and female detainees who have usually offended against Armed Forces Law. Service personnel are sentenced either following Court Martial or a Summary Hearing by their Unit Commanding Officer. The Service Justice System allows Commanding Officers to impose immediate sanctions to enforce discipline in less serious offences, which may not result in detention. MCTC holds two companies, A company, those who will return to their unit upon release from MCTC and D company, those who will be discharged from the military upon release. Detainees who have committed serious offences are often held in MCTC for a short period of time before being transferred into the HMP custodial estate. MCTC also hold detainees who are under investigation (remanded)[1].

Background

The Ministry of Defence (MOD) provided a revised estimated figure of the proportion of prisoners in England and Wales who are regular ex-service personnel of 3.5%[2], although accurate figures have proven difficult to obtain and estimates range from 4% to 16.75%[3]. These difficulties often arise due to the dependence of the individual to identify themselves to either: their key worker (custody), Veterans in Custody Support Officer (ViCSO) or Probation Officer. The reluctance of some ex-service personnel to disclose their status is likely due to shame or embarrassment, a reluctance to admit they need support or a fear of being targeted by others[4].

NESP was divided into three strands, the continuity of resettlement provision for those transferred to HMPPS custodial estate, continuity of resettlement provision for community discharges from MCTC Colchester and trend analysis to inform future provision. CFO3 worked directly with highly motivated staff at MCTC Colchester to build upon the strong links developed between them and HMPPS receiving establishments for those transferred to custody following a court martial. This project also aimed to bridge the gap in support given to ex-service personnel who are discharged into the community following their sentence at MCTC Colchester. This

[1] Ministry of Defence (2010) An Overview of the Service Justice System and the Armed Forces Act. London.
[2] DASA (2010) Estimating the proportion of prisoners in England and Wales who are ex-Armed Forces – further analysis. London: MoD.
[3] Treadwell, J. (2010) 'Counterblast: More than Casualties of War? Ex-military personnel in the Criminal Justice System', The Howard Journal of Criminal Justice 49 (1).
[4] Phillips, S., (2014) Former Members of the Armed Forces and the Criminal Justice System: A Review on behalf of the Secretary of State for Justice. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389964/former-members-of-the-armed-forces-and-the-criminal-justice-system.pdf.

Lauren Butler
Evaluation Manager
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group are not subject to any licence conditions and therefore receive no statutory support from the National Probation Service (NPS) or their respective Community Rehabilitation Companies[5] (CRC).

Before the commencement of NESP, HMPPS CFO did not have access to data for this cohort to be able to conduct detailed analysis required to measure the reoffending rates of ex-service personnel released from MCTC and similarly, MCTC did not have access to data relating to the future offending patterns of those who have spent time at their establishment. This project has enabled data analysts at CFO3 and MCTC Colchester to exchange data in a controlled manner to allow this analysis to be conducted. The purpose of strand 3 is therefore to examine whether the type of offence committed, sentence length and detainees' age can predict the likelihood of MCTC detainees receiving HMPPS custodial or community sentences after leaving the military.

Method

Datasets

Protocols were developed to enable controlled data exchanges, compliant with all legislative controls and protections between CFO3 and MCTC Colchester. Data analysts at MCTC Colchester provided CFO3 with information stored on their systems; Fletcher, Detainee Assessment Record (DAR), AB12 and sentencing plans for all current and historic service personnel who spent time in MCTC. Data received from MCTC data analysts included demographic information for matching purposes, the offence, length of sentence, education & training, interventions undertaken in MCTC and whether detainees were discharged from the military or returned to their company.

Whilst collecting the data stored on these databases, it became apparent that there were some issues in the retrieval of archived data and the formats of these databases. Due to these issues CFO3 were unable to collect all relevant data stored on the DAR, subsequently education & training, and interventions were removed as variables in this analysis. These issues will be discussed in further detail in the 'NESP evaluation' document. The remaining data was then cleaned and matched with HMPPS PNomis and NPS NDelius databases in order to determine whether they have come into contact with the civilian criminal justice system after discharge.

Data cleaning

Data cleaning included the separation of multiple names in one field and the standardisation of names in order to facilitate data matching. Initial exploration of the data indicated that information was missing, particularly a small number of offence and sentencing details and addresses. Names and offences were cross examined between Fletcher, AB12 and DAR to ensure that the data matched across MCTC's own records. Discrepancies were found across these three databases, although it was deemed by data analyst staff that the Fletcher data had greater precision when cross referenced with other available data. In order to analyse offence types each

[5] The 21 CRCs are responsible for delivering a resettlement service for low to medium risk offenders released from custody and managing the offenders in the community. Available at: https://www.gov.uk/government/publications/2010-to-2015-government-policy-reoffending-and-rehabilitation/2010-to-2015-government-policy-reoffending-and-rehabilitation.

offence was categorised as either a military offence, such as Absence without Leave (AWOL) or a civilian offence, offences that could be linked to a corresponding civilian offence, such as theft or assault. For the purpose of this reoffending analysis a cut off discharge date of 31st December 2016 was given in order to allow a complete 12 month period in the community for recently released service personnel. In total, 1294 detainees were admitted to MCTC between January 2011 and December 2016.

Data matching

Data matching was performed using demographic information recorded on MCTC databases and cross referenced with PNomis and NDelius. This was divided into several stages, the strictest match required surname, forename, date of birth, gender and address to match. Elements of fuzzy matching were employed to allow for inaccuracies and alternative spellings in the name information that might result in true matches being missed. All matches had the minimum of matching forename, surname, gender and date of birth to be confirmed as a true match. The date of matching was 1st February 2018, therefore any proven re-offending data after this date was not included in this analysis.

In total 482 service personnel were matched to PNomis and NDelius records. Each match was inspected manually before being accepted or rejected, 289 matches were removed, leaving a total number of 193 MCTC detainees. The below table outlines the breakdown of match rejections.

Table 1-Breakdown of data match rejections

Number of individuals removed	Reason for removal
38	Court Martial
112	Offence linked to MCTC offence (either on probation for offence or transferred to HMPPS custodial estate)
63	Offence was sentenced before individual was detained in MCTC
12	Release from MCTC post 2016
63	False positive matches
1	Deported from UK upon release from MCTC
Total 289	

A total of 1101 detainees could not be matched to PNomis and NDelius records meaning that the reoffending rate of ex-service personnel who have previously been detained in MCTC between 2011 and 2016 is 14.9%. This is much lower than the Ministry of Justice (MoJ) proven reoffending rate of 24.8%[6] between October 2014 and September 2015. This figure has fluctuated between 25 and 27% and is now at its lowest since 2004.

Statistical analysis

Pearson's Chi-square analysis was conducted as an exploratory measure to determine if there were any significant differences between the characteristics of ex-service personnel who did offend after discharge and

[6] Ministry of Justice (2017) Proven Reoffending Quarterly Bulletin, October 2014 to September 2015. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/633194/proven-reoffending-2015-q3.pdf

those who did not offend. Logistic regression was then used to examine whether the type of offence committed when detained in MCTC and the sentence length predicts the likelihood of ex-service personnel receiving HMPPS custodial or community sentences after being discharged from the military.

Results

Table 2 represents the age groups of service personnel detained at MCTC between January 2011 and December 2016. As the table demonstrates, the majority of detainees, both those who reoffended upon discharge from the military and those who did not, were between the ages of 26 and 34 years. Using Pearson's Chi-Square significance test, the age group of detainees was not significantly associated with proven reoffending.

Table 2- Age Group of MCTC Detainees

	MCTC detainees who reoffended		MCTC detainees who did not reoffend	
Age group	**Number**	**Percentage %**	**Number**	**Percentage %**
18-25 years	52	26.9	267	24.3
26-34 years	125	64.8	696	63.2
35-44 years	14	7.3	112	10.2
45-54 years	1	0.5	16	1.4
55-64 years	1	0.5	6	0.5
65-74 years	0	0	4	0.4

An independent t-test was conducted to determine whether days spent in MCTC was significantly different between those who reoffended upon release and those who did not. Table 3 outlines the mean time spent in MCTC for those who reoffended and those who did not. This difference was not statistically significant.

Table 3- Mean number of days spent in MCTC

	MCTC detainees who did reoffend	MCTC who did not reoffend
Time spent in MCTC (days)	58.2 days	67.5 days

Pearson's Chi-Square significance test with Yate's Correction for Continuity[7] showed that there was a significant association between proven reoffending and the MCTC offence type[8]. Based on the odds ratio, the odds of MCTC detainees reoffending upon release from the military were 1.68 times higher if their initial MCTC offence was a military offence.

Table 4- Cross tabulation: Proven Reoffending x Offence Type

Proven reoffending	MCTC offence type	Number of detainees	Percentage
Yes	**Civilian**	38	19.7%
	Military	153	79.3%
	Missing	2	1%
No	**Civilian**	316	28.7%
	Military	758	68.8%
	Missing	27	2.5%

[7] http://www.statisticshowto.com/what-is-the-yates-correction/

[8] The p value for this significance test was <.01

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Evaluation Manager

In order to explore how these variables affect reoffending rates of MCTC detainees, logistic regression was conducted to ascertain whether offence type and days spent in MCTC can accurately predict likelihood of reoffending of MCTC detainees who have been discharged from the military. As initial analysis indicated that age was not significantly associated with MCTC detainees proven reoffending, this variable was excluded from the logistic regression model. The model of MCTC offence type was significant in predicting reoffending[9].

Days spent in MCTC and the MCTC offence type *multiplied by* Days spent in MCTC interaction added nothing to the model and were not significant in predicting whether an MCTC detainee reoffended or not. Therefore these variables were removed from the model. MCTC offence was the best predictor of reoffending for MCTC detainees upon release from the military[10]. The predicted probability of detainees who committed civilian offences reoffending is .11, this means that around 11% of detainees reoffend when their initial offence was a civilian offence. However, the predicted probability of detainees who committed military offences reoffending is .17, around 17% of detainees reoffend when their initial offence was a military offence.

Further analysis was conducted to investigate the relationship between MCTC offence, type of reoffending and sentence type of ex-service personnel discharged from the military upon release from MCTC. Table 5 represents the type of re-offence for those who committed military and civilian offences.

Table 5- Cross tabulation: type of re-offence x MCTC offence type

		MCTC offence type				
		Military		Civilian		Unknown
		Number	%	Number	%	
Re-offence type	**Sex offence**	1	0.7	7	18.4	0
	Violent offence	74	48.3	20	52.7	1
	Drugs related	9	5.9	2	5.3	0
	Fraud related	0	0	1	2.6	0
	Driving related	23	15	4	10.5	0
	Murder inc. attempted	1	0.7	0	0	0
	Criminal damage	4	2.6	0	0	0
	Acquisitive	30	19.6	4	10.5	1
	Other	9	5.9	0	0	0
	Unknown	2	1.3	0	0	0

Violent reoffending was the most prevalent re-offence type for both military and civilian MCTC offence. Pearson's Chi-Square significance test was used to determine if there was an association between the offence committed when detained in MCTC and the type of offence committed upon release. This test was statistically significant[11]. 85.7% of sex offences were committed by those who had been detained in MCTC for a civilian offence type compared to 14.3%. 77.9% of violent offences were committed by those who had committed

[9] The p value for this logistic regression model was .005
[10] The p value for this predictor was <.01
[11] The p value for this significance test was <.05

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Evaluation Manager

military offences. MCTC offence type could not be broken down into specific offence types, for the purpose of analysis, due to the low number of civilian type offences recorded.

Table 6 represents the cross tabulation of MCTC offence and Sentence type. Overall, 73.1% of MCTC detainees who offended upon discharge from the military received community sentences. Pearson's Chi-Square significance test was used to determine if there was an association between the type of offence committed when detained in MCTC and the type of sentence received for re-offence upon release. This test was not statistically significant. 72.5% of those who committed a military offence when detained in MCTC received a community sentence and 22.2% received a custodial sentence. 54.1% of those who committed a civilian type offence when detained in MCTC received a community sentence upon re-offending and 37.8% received a custodial sentence.

Table 6- Cross tabulation: MCTC offence type x Sentence type

		Sentence type		
MCTC offence type		Custody	Community	Unknown
	Military	34	111	8
	Civilian	15	20	3
	Unknown	0	2	0

Limitations

Data matching can result in two types of error: false positive matches and false negative matches. A false positive match is where two records are matched, when in reality they are not the same person. A false negative match is where two records are not matched, when they do in fact belong to the same person. The data matching process utilised in this analysis was relatively strict with a minimum of surname, first name, gender and date of birth being required to constitute as a match, to attempt to reduce the risks of these errors occurring. Also each matching record was manually inspected before being accepted.

Due to the limited demographic information available for matching, false positive matches are possible. If there are two records that match with the same surname, forename and date of birth, this will be accepted as a match if address information is unavailable. This is especially problematic in the event of commonly used names, although manual inspection may have reduced the risk of false positive matches being accepted.

Negative matches are also possible, discrepancies were identified throughout the databases provided by MCTC Colchester and are therefore not comprehensive. It is possible that individuals missing from the Fletcher database would be excluded from this analysis. Also Fletcher records are entered manually, therefore if data was entered incorrectly it may not have been matched with PNomis and NDelius data.

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PNomis and NDelius hold the records of all individuals who have received some form of custodial or community sentence in England and Wales. If a detainee moved out of these areas e.g. Scotland, upon release from the military, any reoffending data would not be stored on these databases. This is also the case for service personnel who return to their home Commonwealth countries upon discharge from the military.

The data collected from MCTC Colchester pertain solely to their records, any Summary Hearing cases that did not result in detention are not recorded on MCTC records and therefore trend analysis could not be conducted to identify any patterns in the escalation of offences or the total number of offences for each detainee.

Recommendations and implications

The results of this analysis provide evidence that the type of offence committed when detained in MCTC can predict future reoffending upon release from the military. MCTC deliver a range of offending behaviour interventions through Essex CRC, although the criteria for enrolment onto these interventions is not known by CFO analyst staff. If detainees who have committed civilian transferable offences do complete offending behaviour interventions this may explain the reduction in reoffending. Also if detainees who have committed military offences do not receive this type of support this may explain the increased probability of them reoffending upon release. Future research should examine the interventions undertaken at MCTC for those detained for civilian equivalent offences in comparison to military offences to gain a comprehensive understanding of the effects that offence type has on rates of reoffending. As the majority of MCTC detainees who reoffended received community sentences, resettlement support in the community is vital to enable ex-service personnel to reintegrate into the civilian world and to reduce recidivism.

The data collection systems utilised at MCTC Colchester result in detainee information being stored in various formats and locations. This made it difficult to collate all relevant information for the purpose of this analysis. Recommendations include developing a system that incorporates the information stored in each database into one central location in order to reduce the risk of error in data entry, to allow for evaluation and general ease of use. Another recommendation is to develop appropriate data sharing agreements with the MoD to collect Summary Hearing data in order to conduct further data analysis on the offending patterns of ex-service personnel.

Lauren Butler
Evaluation Manager

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Appendix1

Logistic regression output

	b	95% CI for Odds Ratio		
		Lower	Odds	Upper
Included				
Constant	-1.60			
		0.41	0.56	0.87
Offence type	-.518*			
R^2 = 0. (Hosmer & Lemeshow), .006 (Cox & Snell), .011 (Negelkerke). Model x^2= 7.74, p-.005. * p<.01.				

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Evaluation Manager

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