

Northumbria Research Link

Citation: Storey, Steven (2022) Intelligence systems: their tacit adoption and use with community based offenders. Doctoral thesis, Northumbria University.

This version was downloaded from Northumbria Research Link:
<https://nrl.northumbria.ac.uk/id/eprint/51593/>

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>

INTELLIGENCE SYSTEMS: THEIR TACIT ADOPTION AND USE WITH COMMUNITY BASED OFFENDERS

Steven George Storey MSc

PhD

2022

INTELLIGENCE SYSTEMS: THEIR TACIT ADOPTION AND USE WITH COMMUNITY BASED OFFENDERS

STEVEN GEORGE STOREY

A thesis submitted in partial fulfilment of
the requirements of the University of
Northumbria at Newcastle for the
degree of Doctor of Philosophy.

Research undertaken in the Faculty of
Arts, Design & Social Science

June 2022

Abstract

This research considers whether intelligence system principles are in tacit use within the non-traditional environment of a Community Rehabilitation Company (CRC). Unlike their “Intelligence-Led” partners in the Police Service, intelligence work was not a mandated activity for CRC staff at the time of this research. A review of the literature revealed that intelligence activity in the probation domain is entirely under researched. To explore an intelligence system, the study constructs a conceptual model which is entrenched in existing theory and practice from adjacent domains. Regarding methods, with Integrated Offender Management (IOM) as a lens, observation and interview are used to explore how IOM Officers interpret the criminal environment with which they are faced. Wider survey data uncovers the extent to which staff use intelligence at their disposal. Conviction data reveals how the CRC monitors the impact the IOM scheme has on that criminal environment. Additionally, the research considers partnership working, information exchange and organisational capability. The study found that despite the absence of formally supportive organisational architecture, CRC staff engage in defined activities which mirror the principles of established intelligence systems. Rather than finding an Intelligence subculture within IOM, the study found a myriad of intelligence streams being used by CRC staff at various levels. Additionally, this thesis reveals, the 3i intelligence model developed by Ratcliffe can be modified for use outside of the policing environment.

Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work. I also confirm that this work fully acknowledges opinions, ideas and contributions from the work of others.

Any ethical clearance for the research presented in this thesis has been approved. Approval has been sought and granted by the Faculty Ethics Committee / University Ethics Committee on 03/11/2014.

I declare that the Word Count of this Thesis is 82,585 words.

Name: Steven George Storey

Signature:

Date: 24/06/2022

List of Contents

Contents

Chapter one: Introduction to the thesis.....	13
Background to the study.....	15
The main research questions within this study.....	22
Intelligence in Context.....	26
An example of intelligence.....	31
The history of intelligence and its separation from parent domains.....	32
Systems in context	39
What is a socio-technical system?	42
What are intelligence systems?	45
The Intelligence Cycle	47
Probation, work, nature, and a short history.	50
Changes Probation has experienced during the course of this thesis	59
Probation and Intelligence	63
Making an original contribution to knowledge.	64
Scope and Limitations.....	65
The Structure of this thesis	66
Drawing thesis themes together	69
Chapter two: A review of the relevant literature.	74
Interpreting the Environment.....	90
Influencing Decision Makers	93
Impacting the Environment.....	97
A brief introduction to Integrated Offender Management schemes	98
Process and thematic evaluations of IOM schemes.	102
Emerging policing models, COMPSTAT, Community and Problem Orientated Policing	103
Literature used to introduce intelligence systems.....	106
Intelligence systems in different domains.	108
Intelligence as a business model.....	109
Analysis as a fundamental component of intelligence	111
Intelligence led Policing.....	112
Similar Component Parts Within Intelligence Models	122
Probation Intelligence Literature.....	126

Literature review conclusion	132
Chapter three: Methodology and Methods used.....	139
A summary of fieldwork undertaken.....	140
The Theoretical Framework	142
How the theoretical framework informs the analysis for this study	143
Epistemology	146
Realism	147
Positionality, insider / outsider status	148
Research Design.....	153
Rational for a mixed methods approach	160
Choosing Appropriate Methods	161
Using Integrated Offender Management as a methodological lens	163
The sampling process; Key Roles	165
Rationale for using the 3I model as an overarching framework.	167
Adapting the 3i to interpret the probation environment.	168
Observation of cohort allocation meetings.....	171
Using semi-structured interviews in addition to the Cohort Allocation Meetings	172
Adapting the second of the 3i's – Influencing the decision makers.....	175
Establishing types of probation intelligence	177
Establishing the probation decision makers	179
The Electronic Survey	179
Adapting the third of the 3i's - Impact in the context of this study.....	181
Layered data collection	183
Using Systems Theory to understand business processes.....	186
Process mapping	189
Attending IOM Management Meetings.....	189
Conducting the Gap Analysis.....	190
Ethical and Practical issues.....	194
Methodology Conclusion	195
Chapter four: Data Collected for this thesis.	198
Introduction	198
Research question 1 Interpreting the environment.....	198
Observation of Cohort Allocation	200
Research question two Influencing decision makers	226

Research question three Impact – Reoffending data	235
The end of year position in the Probation area.....	237
Impact / Conviction data for Area A	239
Impact / Conviction data for Area B	240
Impact / Conviction data for Area C	241
Impact / Conviction data for Area D	242
Impact / Conviction data for Area E	243
Impact / Conviction data for Area F	243
Phase four - Organisational Process Mapping	245
Data Chapter discussion.....	251
Chapter five: Analysis of collected data.....	253
Analysis of Interpretation data	258
The partnership approach	258
Prior Planning and Preparedness.....	262
Collection of information – types of information and sharing.....	264
Information Validity	266
Collation of Information.....	267
Analysis of information	269
Conclusions drawn on the first of the three research questions: Interpreting the environment.....	273
Analysis of the data on Influencing the decision makers.....	276
Arrest and Conviction Data	278
Priorities provided by the local Crime and Disorder Reduction Partnerships	279
National guidelines provided by the National Offender Management Service.	279
Scores and Bands for the Offender Group Reconviction Scale.....	280
Intelligence on offenders which is provided by the police	281
Probation Offender Assessment System (OASys)	281
Drug Test Scores	282
Alcohol test scores.....	282
Accredited / internal programme scores.....	283
Internal or External types of Intelligence.....	284
The Analyst as an influencer to the decision makers	287

Conclusions drawn on the second of the three research questions: Influencing the decision makers.	287
Analysis of data on Impacting the criminal environment.	290
Reviewing the Impact.....	293
Conclusions drawn on the third research question.	294
A note on Interventions; the missing piece of the puzzle?	294
Analysis of data covering Organisational Capability	296
GAP Analysis Results	300
The Tacit Socio-Technical Intelligence System	304
Conclusion to the analysis chapter	305
Chapter six: Conclusion and Discussion.	312
Introduction	312
Original Contribution to Knowledge	313
What the findings mean for the different domains	315
Intelligence Impact	316
Probation Impact.....	319
Application beyond the CRC featured in this study	326
Perceived problems between intelligence work and the underlying nature of probation work.....	327
Integrated offender Management Impact.....	329
Police Impact.....	332
Corroborative claims - Socio-technical systems.....	333
A repeatable model.....	335
Researcher Reflection	336
Research Limitations.....	337
Further research	340

List of Figures

Figure 1 – Basic Process Model	40
Figure 2 - The Intelligence Cycle	48
Figure 3 – The National Intelligence Model	117
Figure 4 – Intelligence Models Comparison	124
Figure 5 – Methodology Rich Picture	157
Figure 6 – Checkland & Haynes SSM	187
Figure 7 – Burge, Hughes & Walsh SSM	188
Figure 8 – Data Streams	193
Figure 9 – IOM Process Steps & Competencies	248
Figure 10 – IOM Conviction Monitoring Process	249
Figure 11 – Thesis Analysis Layers	256
Figure 12 – Contribution to Knowledge diagram	314

List of Tables

Table 1 – Gill & Phythian’s INT’s	91
Table 2 – Components within the 3i model	184
Table 3 – Survey Question 1 Summary	227
Table 4 – Survey Question 2 Summary	228
Table 5 – Survey Question 3 Summary	229
Table 6 – Survey Question 4 Summary	230
Table 7 – Survey Question 5 Summary	230
Table 8 – Survey Question 6 Summary	231
Table 9 – Survey Question 7 Summary	232
Table 10 – Survey Question 8 Summary	233
Table 11 – Survey Question 9 Summary	234
Table 12 – Arrest & Conviction data – examples	236
Table 13 – Probation Intelligence: Influence figure by Collection Method & Staff	285
Table 14 – Probation Intelligence: Influence Ranked	286
Table 15 – Evidence & Capability Matrix	299
Table 16 – GAP Analysis Results Interpret the Criminal Environment	301
Table 17 – GAP Analysis Results Influence the Decision Makers	302
Table 18 – GAP Analysis Results Impact the Criminal Environment	303

List of Charts

Chart 1 – Arrest & Conviction Data IOM scheme Total	238
Chart 2 – Arrest & Conviction Data quarterly comparison	239
Chart 3 Area A Arrest & Convictions	240
Chart 4 Area B Arrest & Convictions	241
Chart 5 Area C Arrest & Convictions	242
Chart 6 Area D Arrest & Convictions	242
Chart 7 Area E Arrest & Convictions	243
Chart 8 Area F Arrest & Convictions	244

Appendices

Appendix A	List of Abbreviations
Appendix B	Letter Authorising Research
Appendix C	Research information for Participants
Appendix D	Participant consent form
Appendix E	Data Capture Template
Appendix F	Bibliography

Acknowledgement(s)

I offer my sincere thanks to my doctoral supervision team, Professor Michael Rowe and Charlotte Bilby, for their guidance, understanding and patience. I thank my family, for their support during what has been an interesting and extremely challenging few years.

I am extremely grateful to the research respondents, without whom the electronic survey would not have provided data. I am grateful to the IOM managers who generously gave their time and also to the management team within the Probation Trust / Community Rehabilitation Company which was the focus of this research. All of those involved gave their time generously during an extremely difficult period for the Probation Service. I am equally grateful the Police Service for allowing their officers to take part in this research.

Chapter one: Introduction to the thesis.

The main themes explored within this piece of research are intelligence systems and their component parts. Intelligence systems are examined through the lens of the non-traditional environment of a Community Rehabilitation Company (CRC). The core of this work is about intelligence systems rather than probation work. In that respect this is about whether the application of intelligence theory can be applied to the probation environment. Whilst the activities of probation staff managing offenders and in administrative functions are important, and will be considered in context, the framing for this work sits squarely within the Intelligence domain. The framing of this study dictates that there is a greater focus on intelligence work than probation work in this study. The position taken by this thesis is that modern organisations are powered by intelligence, their ability to develop intelligence can support decision making and bolster organisational efficiency and prosperity (Fujitsu, 2020; Halal, 1997). The underlying hypothesis for this thesis is that work carried out in the CRC, mirrors intelligence activity, supervision activity for instance is a recognisable feature of human intelligence or HUMINT (Gill and Phythian, 2012). During this study, the CRC did not operate within a mandated intelligence system. CRC staff observed during fieldwork worked closely with police colleagues who have operated within an established and mandated intelligence system for over two decades. Commentators posit that the mandated system used in the police bears little practical difference to the pre-dated operational activities they had always carried out (James, 2014; Guidetti & Martinelli, 2010). As there is no academic writing on intelligence activity regarding

probation work with community-based offenders, this presents a knowledge gap. Given that there is a gap in knowledge, two broad enquiries drive this thesis. The first is to determine if actions and activities carried out in the CRC amount to a tacit intelligence system. The second concerns the scale and nature of any system found. More broadly, the second question seeks to identify if and how CRC staff make use of or contribute to an intelligence system in their day-to-day work.

This study is grounded in existing intelligence theory. Given that intelligence systems are not explicitly present in the probation domain, this study has constructed a theoretical intelligence system using component parts from existing models in other domains. The project is wrapped in a conceptual framework drawn from intelligence theory provided by the work of Ratcliffe and the sub themes explored here are further informed by intelligence theorists such as Gill, Phythian and Kahn among others. Several existing intelligence models were deconstructed to enable this study to build a theoretical intelligence system for the CRC. Existing models were adapted for probation and as such this study uses an experimental model. The theoretical system was then matched against CRC activity data captured during fieldwork. The matching exercise informed a gap analysis which determined whether a tacit intelligence system was in operation in the CRC.

Regarding the specific environment in which this study takes place, Integrated Offender Management schemes are used as a primary lens for this study. The online survey used for the second research question provided the

opportunity to gather data from IOM staff and a wider group of general offender managers. The data gathered from the wider group of staff enabled a comparison of intelligence use between IOM staff and their counterparts in general offender management teams.

This initial chapter will provide some background and introduce main themes such as intelligence, systems, and probation work before drawing these main themes together in the context of the study. There is an interconnecting element to the enquiry which involves the system aspect of intelligence. Intelligence systems are positioned here as a business process and it is Systems Theory which, although on the periphery of the project, will act as the normative glue holding the study together.

Background to the study

When Ratcliffe (2003, p.1) proclaimed “Since the 1990’s, Intelligence Led Policing (ILP) has entered the lexicon of modern policing”, this was not a reference to the common understanding of intelligence work which invokes images of covert meetings and clandestine operations. Ratcliffe was using the term to reflect upon a set of operational business models that are now commonplace within the policing function of criminal justice. Intelligence production is a mandated business activity within the police, but at the time of this study was not a formal, mandated aspect of work for Community Rehabilitation Companies (CRC). Towards the end of this study, the National Probation Service announced the intention to introduce a formal intelligence capability into its operations. The

announcement did not compel private probation providers to do the same. This study was carried out within a private probation provider, a Community Rehabilitation Company (CRC). By observing intelligence work via the lens of probation activity in the CRC, this study highlights a new way to consider intelligence systems from the perspective of that non-traditional domain.

As chapter two will show, the theoretical framework for this study is constructed from existing studies, notably Ratcliffe's 3i model along with established intelligence systems developed within the Business, Military and Policing domains. The elements of existing theory which informed the methodology and methods for this study by providing a framework for the researcher to follow and build upon will be discussed in depth in chapters two and three. Theory mapping (Grey, 2017) is used thru out this thesis and provides a focus for both large scale associations between CRC probation activity and intelligence system components as well as more granular connections. As well as narrative signposts in each chapter, this thesis provides a methodology rich picture, figure five, a diagram which depicts the pathway from existing intelligence theory to the findings of this study via methodology and methods. Additionally, at the beginning of chapter five, the thesis also provides figure eleven, a diagram depicting the layers of analysis used in this study used to verify the existence of an intelligence system.

This study is not the first time the 3i model has been used to actively uncover an intelligence system, Racliffe himself used the framework in a case study in New Zealand (2005) whilst Gul and Kule (2013) utilised the 3i system for

their study. Gul and Kule employed only the first two aspects of Ratcliffe's model to ascertain the level of interpretation and influence intelligence had on different organisational levels of police personnel. Partial use is expressly against the guidance provided by Ratcliffe (2005) who advocates using all three aspects of the model.

The following chapters will disclose how this research followed a similar path to the above-named studies but will show that this study has also gathered data on the third aspect of Ratcliffe's model which considers any observable impact on the criminal environment. Ratcliffe (2005) advocates that evidence for each of the three elements should be present for an intelligence system to be in place.

The study is significant for several broad reasons. With regards to the intelligence domain itself, the study provides a new perspective with which to consider intelligence in an academic and operational sense. With regards to probation work, the study explores a tacit system in operation in a non-traditional environment which did not have a mandate to carry out intelligence work. The study posits that finding an intelligence system therein would have significance for the probation domain and its operational culture. With regards to policing there are implications for partnership working with probation. With regards to academic practice, the study shows that the 3i system along with domain centric adaptations, can be used to examine intelligence systems outside of the policing environment.

The literature review chapter will show that the fledgeling professional associations within the Intelligence domain have not yet reached staff in probation, therefore, finding a system therein has implications for Intelligence in relation to domain knowledge and continuous professional development. The literature review will also show that the subject of intelligence in probation is entirely under researched within academia. Academia provides a myriad of research articles, courses and books on Intelligence and its applications in Policing, the Military and in Business, however there is an academic gap in relation to the Probation domain.

The geographic area chosen for this research was done so for reasons of pragmatism. The researcher was employed for the early part of this research as probation support staff. The primary lens used to explore probation and intelligence is Integrated Offender Management (IOM), there are six IOM schemes in the region being studied.

The research questions sit firmly within the organisational constructs of an intelligence system rather than within what is recognised as probation practice. The first research question considers the organisational mechanism used to determine offender suitability for a particular intervention. The activity undertaken by staff during this first activity is similar in concept to the Scanning element of the SARA crime prevention model and is entrenched within community safety or policing rather than probation practice. The second research question considers information types and their level use by probation staff. This second question mirrors the 3i intelligence model rather than anything from the Probation domain.

The third question considers the process by which the impact data is collected and measured. Although this third question is a common activity and has been used in probation rating systems of the past, it is a shared concept that is also used in policing and forms part of the 3i model. The fourth research question is an overarching one about tacit activity and is drawn from operational systems theory aligned to the intelligence process. The methods chosen for this study mirror the previous work of scholars such as Gill, Ratcliffe and Phythian who work mainly within the intelligence domain. Due consideration is given to the environment in which this study takes place, however, the object of the work is to understand more about an intelligence system by observing its component parts in an under researched setting. The scope of the work is to consider the mechanism of a conceptual intelligence system and whether the attributes therein can be observed operating in a tacit fashion in the non-traditional environment of probation. The thesis does not suggest that intelligence operates in an explicit fashion within the probation domain but posits that the probation domain is what Walsh (2011, p.34) refers to as an 'emerging practice area'. The questions and methods used within this research reflect upon and are intended to inform emerging intelligence theory such as that proposed by Kahn and intelligence systems as proposed by Gill.

For the first of the research questions, the researcher undertook interviews with team managers from the Probation Service and observed meetings with probation and police staff in each of the six areas. For the second of the research questions, the researcher used an online survey as it was a more practical avenue

with which to approach all of the offender management staff in the region. For the third research question, the researcher obtained data on convictions pre- and post-IOM scheme as this was the impact measure used within the region. To obtain an understanding of operational systems in place, the researcher visited IOM teams and observed the actors and actions involved. The methodology and methods are discussed further in chapter three.

The findings uncovered in this study will provide knowledge claims with regards to each of these main themes although as the final chapter will discuss, the main impact of this research is in the intelligence and probation domains. Specifically, the thesis, will offer an alternative to Kahn's (2008) theory of intelligence as an auxiliary function. The systems work explored here provides corroborative knowledge claims of existing systems theory whilst exploring the organisational architecture of probation business in the region.

The study used a mixture of methods with regards to data collection which involved fieldwork in the six different areas which make up the probation region. Fieldwork included observations at six different sites, three of which held meetings between police and probation and at the remaining three the researcher conducted semi-structured interviews with probation managers for reasons that will be explained in the methodology chapter. The study included an online social survey which was used to widen the pool of respondents in relation to the second research question. Additionally, the study included collection and analysis of raw data pertaining to convictions of offenders on IOM schemes which was directly relevant to the third research question.

The conviction rate comparison is considered a weak measure of the success of a crime control project not least because offenders can commit several offences before they are caught (Garside, 2004). However, here are two reasons for its inclusion here. The first reason is that it is an established practice used to determine success and continues to be used within probation work particularly with IOM schemes (Wong and Senior, 2011). The second and perhaps more pertinent reason for the inclusion here is that this study is not concerned with the actual success of an IOM scheme or an Intelligence System. The requirement for this study in relation to impact is that the probation service carries out actions which will enable them to assess their impact. It is the evidence of these actions carried out by probation staff which satisfy the 3rd “I” of the theoretical model used here.

The data collection rationale is determined by a combination of the research questions and the practicalities of the fieldwork environment. The rationale for mixed methods and procedural overview is provided in the methodology chapter.

As well as outlining research questions, an original contribution to knowledge and detailing the structure of this thesis, this chapter will introduce several broad themes. It will introduce intelligence and its emergence as an academic subject in its own right, the chapter will then explore systems theory and how a collection of entities interact to produce a desired outcome. The chapter will then explore probation work in the context of this study, outlining why this is a non-traditional area of research with regards to intelligence. Finally, the

chapter will draw together these main themes to provide a platform for this piece of research. Whilst exploring and drawing together the above-mentioned main themes, this chapter will, by necessity, briefly introduce some of the literature which will be explored in more depth during the literature review in Chapter Two.

The main research questions within this study

Although the research questions broadly follow the three themes of the 3i model, they have been tailored to reflect the environment in which this study will examine intelligence: that of probation and more specifically, Integrated Offender Management.

The first question will explore if and how the scheme (the IOM scheme) **interprets** the criminal environment with which they are faced. In the context of IOM, the study will uncover how the scheme considers current and potential candidates during the cohort allocation process. Within this first broad question, the exploration will uncover what types of information officers use, how it is obtained, analysed, presented, and understood. The study will uncover which stakeholders are involved in the process and to what extent are they involved. The study will consider if intelligence work is more apparent within certain job roles, for instance, is it only in use in an operational environment or are system activities evident within layers of management activity? There is a further consideration around agency and culture, for instance, does any agency hold more sway? Do the police for instance, as established intelligence users,

dominate partnership activity over probation who do not have a formal intelligence process. Do missions determine what type of information partners require, does doctrine or ideology compliment, or hinder this part of the process?

The second question is does the information **influence** probation decision makers. The study will uncover who they are within the organisation and what kinds of intelligence are most useful to them. It will explore whether decision makers use a set criterion for their decision making or if they adopt and adapt something more fluid to suit local needs. To answer this second question, a survey was conducted, the questions for which were developed after undertaking observations of the cohort allocation meetings between probation and police and from interviewing IOM team managers about their processes. Using a survey enabled the study to widen participants to include probation staff from general offender management teams.

The last of the broad research questions considers whether there is any observable **impact** on the criminal environment. The third question will be achieved by monitoring levels of arrest and convictions for each cohort of offenders on the IOM schemes. Measurement data incorporates the twelve months before the IOM scheme starts and comparing these figures with the twelve-months of the scheme. The author accepts the weakness of a conviction comparison measure with regards to understanding criminal behaviour. The inclusion for the reoffending measure here is that it is an established performance measure used in probation work. Reoffending measures such as National Indicator 18 (NI 18) are used to monitor prolific offender reconviction. The national

reoffending measure (Local Adult Re-offending) was being used in the probation trust rating system (PTRS) during the time this study was undertaken and is included as a performance measure in the annual plan. At the time of this study, the Local Adult Reoffending measure did not separate probation caseloads into IOM cohorts therefore these figures could not be used. In their IOM evaluation paper, Wong and Senior (2011) reported IOM schemes using similar measures to the one used in this study.

It is worth re-iterating that it is not within the remit of this project to make claims about whether an intelligence system or an IOM scheme works. The goal of this study is to search for the existence of an intelligence system at play within the probation service being studied.

As the preceding paragraphs have outlined. The main research questions are probation centric derivations of the three sides to the 3i triangle. Even though the questions have been defined and their scope is within the parameters of probation work, the questions are at a high level. To understand what actions and activities probation staff use to interpret their criminal environment the study undertook a more granular investigation beneath each of the three main themes outlined in the previous paragraphs. Constructing these more granular questions required the study to cross match several intelligence models to identify their component parts. The cross-matching exercise and the subsequent components and competencies are outlined in the next two chapters. The research questions in this study differ considerably from previous approaches in relation to

intelligence systems in that they focus squarely on the probation environment and not solely on the efforts of their uniformed colleagues in the police.

In an addition to the framework for the three major research questions, this project also determined to observe and map any observed business process by which the intelligence scheme operates. Considerations in the mapping exercise included what organisations are involved and which staff are involved, what are the component parts and actions involved in the process if any? The immense changes in the political and organisational environment afforded the opportunity to conduct a form of action research in relation to systems theory.

Alongside, the research activities of observation, questionnaires and interview activity, and the 3i Intelligence model developed by Ratcliffe, the researcher incorporated aspects of systems thinking. Chapter three will show how the theoretical model uses soft systems methodology.

Falling within the remit of this chapter is the requirement to explain the parameters of what is meant by the core concepts within this study. Intelligence, Systems and Probation are all core concepts each with a myriad of facets to them. Explaining the distinction between intelligence and information, systems and processes for instance will be provided in the coming paragraphs. By framing the research within these clear definitions this chapter will set the scope of this research in an appropriate context.

Intelligence in Context

Kahn suggests that Intelligence has been an academic discipline for half a century (Kahn, 2001, p. 79). Certainly, it is established as a research and teaching subject in Europe and in North America (Scott & Jackson, 2004, p. 140). Other commentators such as Walsh (2011, p. 189) are less sure of its position as an academic discipline, whilst agreeing that it is a coherent subject area, the view from Gill & Phythian (2016, p.8) is that the study of intelligence still benefits from an interdisciplinary status. This study considers Intelligence to be an emerging area of academic scrutiny (Marrin, 2016, 2017; Walsh & Mitchell, 2011). Moreover, the study of Intelligence is now, this thesis suggests, slowly evolving from its position as a sub-domain from more established areas of academic study. Where the hierarchy of academic disciplines would most likely place the study of Intelligence as a sub-discipline of Business, Military History or International Relations, a growing body of literature and the ability to study intelligence as a standalone subject suggests that this is increasingly not the case. The growing body of knowledge suggests that Intelligence is becoming a standalone subject and could soon be studied separately and pursued as a career away from “Military Intelligence”, or “Police Intelligence” or “Business Intelligence”. The second context in which discipline is understood here is that of a business function. Many businesses now have entirely separate Intelligence functions which produce internal (financial and performance targets) and external (competitor insights) intelligence products for decision makers. These new business functions offer

staff the opportunity to become a professional intelligence officers with appropriate training, CPD and access to accredited professional bodies.

This study recognises that the concept or definition of profession is much disputed (Evetts, 2013, p.779). The objective here is not to explore the Foucauldian theories of knowledge and power as the professionalism debate lies on the periphery of this enquiry. Arguments positing the positioning of structured knowledge and conduct in a suppressive manner towards the labour force (Hodgson, 2005, p.57) are noted and would be explored more fully in a mandated intelligence setting, however, they are beyond the scope of this work on tacit practices. Arguments concerning the power relations between practitioners of intelligence is relevant and is discussed in a partnership context in later chapters.

Professional in the context of this study is taken from its organisational meaning in that to be a professional worker the individual would carry out highly skilled activities which require formal training and years of experience to master (Noordegraaf, 2007, p.766). Formal 'professionalisation' of intelligence activities was given impetus by the Butler Review of 2004, although this focussed largely on analytical practice in the Defence domain (Hare & Collinson, 2012). Additionally, a professional in this sense would have a defined professional identity which is purpose driven. The professional role is also social in that the distinct activities being carried out are recognised by peers. The study has previously explained the growing body of knowledge pertaining to Intelligence along with the growth in formal, professional learning programmes for Intelligence. Bruce (2004, p.12) notes that the practice of intelligence analysis

predates the profession which is significant for this study as a key theme here is that an intelligence system exists within the CRC, however, it is a tacit system. Intelligence activity is carried out; however, the actors are not formally recognised as intelligence staff and the actions being carried out are not referred to as part of an intelligence business process. When the reverse is observed then staff are professional intelligence officers and the system an explicit one.

Professionalism is not without its detractors, Fournier explores the notion that professionalism is a 'disciplinary mechanism' (Fournier, 1991, p. 281) which enables control over individuals by effective construction of their occupational actions and identities. Scott describes professionals as institutional agents who themselves via the production of principles and standards influence audiences by providing prescriptive guidance (Scott, 2008, p.225). Viewed in this regard, professionalism may be seen as a more corporate approach.

Fish rails against 'Anti-Professionalism' literature and the arguments like those put forward by Fournier and Scott. To Fish, the professional is someone who can, at the same time, speak for their respective institution whilst at the same time be a vessel for its critique (Fish, 1985, p.107).

The thesis position on this is that offering probation staff the opportunity to become intelligence professionals is a good thing. The logic for this on a personal level is that it provides a sense of identity for probation staff which is coupled with opportunities for further learning for those in offender management and further progression opportunities for probation staff in administrative functions. Offering broader training is recognised as a boost to staff moral and can aid reflective

practice (Fitzgibbon, 2010, p. 104). Effectively, current opportunities offered in similar domains would become available. The Probation Service already acknowledges the professional aspect of its core function, the qualification for becoming a probation officer is called the Professional Qualification in Probation (PQIP). One would expect the service to recognise and extend the opportunity to probation staff outside of the offender management role. The word profession is used by the NPS regarding the rollout of its Intelligence Professionalisation Programme (HMPPS, 2018, p.40). Professional probation intelligence has to deliver more than a set of imposed principles for information handling, in the context of this research, it must contribute to the best use of intelligence so that it may assist in achieving probation outcomes.

There is a need here to distinguish between what is meant by information and what is meant by intelligence. As the literature review will show, the requirement to explain the distinction is not new (Brown, 2007). The realisation for the need for explanation became apparent whilst conducting an initial literature review during the proposal and planning stages of this research. The following paragraphs serve to telegraph the fundamental difference between information and intelligence. In essence, Intelligence is the key ingredient to any decision-making process (Evans, 2009). Kahn (2008, p.4) suggests that intelligence is essential for survival, furthermore that it has 'intrinsic biological roots' stating that animals possess a mechanism to determine if something is good or bad for them. The basic assertion here is that during any enquiry requiring collation of data, it is likely that the end user might find the collected information interesting if it

pertains to their area of responsibility but not necessarily useful, whereas they would find intelligence actually useful as it contributes directly to solving the issue they are faced with. As the quotation below shows, Intelligence in this context is data refined, or rather analysed, to reflect a specific set of end user needs. Variables like context, timing and responsibility are players in the difference between intelligence and information in so much as they can “turn” raw information into intelligence.

Intelligence Wing student training material issued by the Ministry of Defence to the researcher whilst studying at the Defence Intelligence and Security School, defines information as: -

“unevaluated material of every description, including that derived from observations, reports, rumours, imagery and other sources which, when processed, may produce intelligence”. (MOD, 1991, p.1-A-2)

And defines intelligence as: -

“The product resulting from the collection, evaluation, analysis, integration and interpretation of all available information which is immediately or potentially significant to planning and operations.” (MOD, 1991, p.1-A-2)

The reason the above quote is provided here is that the quote, the study posits, can be considered a pure definition as it is devoid of any domain language. Despite continued attempts to provide specific definitions, commentators claim that the exact definition of intelligence to be somewhat elusive (Kahn, 2008, Gill & Phythian, 2012). Rather than add to any confusion around definitions, this study will take a subjective and pragmatic stance and continue with the understanding

that intelligence is simply analysed information that can be acted upon. The general idea put forward by Gill and Phythian is that intelligence, or rather the state achieved because intelligence is obtained, offers decision makers a more advantageous position than they would have without that intelligence.

An example of intelligence

Intelligence in the context of this study is distinct from Management Information or Data, this is a necessary distinction. The context for the following example is that the reader is a probation officer and is due to manage the community proportion of an offender's (John) sentence upon his release from custody. The following information is revealed to the probation officer during the day.

- "John is due for release tonight. He wants to find somewhere to stay" = information – nothing to act upon.
- "John will sofa surf at David's house" = information – nothing to act upon.
- Licence conditions forbid John to meet with David = information – nothing to act upon.

When taken at face value in isolation, each of the above statements are nothing more than information. However, when all become known, and each piece is added together, the resulting product of that processing activity becomes something more than information. The information becomes intelligence because it must be acted upon, something must be done. In terms of the intelligence system, the information has been collected, it has been collated with related information and the analysed result is that something must be done to stop the

activity taking place; someone must act on this intelligence. In the example given, the state of intelligence would change if new information was made available which suggests that John has a place at a hostel and will not be staying with David.

In organisational terms, the above example introduces the need for intelligence, in that it is required to make more informed decisions. As the example shows, the better the intelligence, the more informed the decision maker and the more likely they are to make the right decision. Decision making is harder than ever with demands such as faster decision-making being placed upon individuals and that this is compounded by information overload Power (2009). Power goes on to argue that the situation requires the need for a computerised environment and that this requires staff to attain new skills and new knowledge. Upskilling staff and creating organisational capability in the light of this study will be considered in a later chapter.

The chapter will soon turn towards how the above process is operationalised and routinely carried out in an organised system but will first consider the history surrounding intelligence and its route to becoming a recognised standalone activity, detached from its domain (Police, Military, Business e.g.) level origins.

The history of intelligence and its separation from parent domains.

A worthwhile point to note at this stage is that the recorded use of intelligence is arguably far earlier than the contributions made since the introduction of Intelligence Led Policing in 1990's. The idea that Intelligence can

be operationalised into an administrative function or system is not new; for example, the concept of the “Intelligence Cycle” was first provided by Glass & Davidson in 1948.

Kahn’s (2008) assertion that the biological survival instinct is an intrinsic intelligence system is an interesting one and his argument concerning animal actions to ensure their survival is really, this study posits, little more than an explanation of intuitive logic. This study, however, is concerned with organisational activity tacitly created to mirror what Kahn has described as a biological state. Not unlike Kahn, Warner (2013) considers inherent cognitive attributes and credits the early thinking around the Intelligence Cycle to academic study from the psychology discipline during the early twentieth century. Warner describes the production of intelligence as a cognitive process which is used to adjust one’s mind to a given task. Warner provides a psychological explanation in which the mind considers new information then collates these present happenings with those remembered before combining the two into a complete whole. The stages Warner describes mirror the published segments of the Intelligence Cycle which will be discussed within this chapter.

The origins of Intelligence in this regard are entrenched in the history of both Military and Political domains (Jeffery, 2010). Researchers looking for an early quote have some rich pickings, for instance, Sun Tzu, a Chinese military general authored “The Art of War” reportedly during the late 5th century which includes a final chapter on the use of intelligence. Other commentators (Warner, 2014, Phythian, 2013) note the association of intelligence and espionage with

statecraft, most notably, in England, the position of Secretary of State. They comment on the successful use of spies, codes and ciphers by holders of that position such as Robert Cecil and Sir Francis Walsingham, noted spymaster to Elizabeth I, and approach the origins of intelligence from an English political standpoint (Hutchinson, 2006). The statecraft association is easy to understand given the role of espionage, codes and cyphers to be found within the Babington Plot of 1586 to assassinate Queen Elizabeth, free Mary Queen of Scots and restore the state faith of England to Catholicism (Singh, 1999). There is a lack of continuity with regards to the state intelligence function and achievements throughout the years have been delivered by individuals driven by their own ideas and ideals rather than by some formalised state sponsored machinery (Marshall, 1994). There is a recurring theme within Intelligence suggesting that the lessons of its craft are not passed on and must be re-learned by successive governments and agencies. The issue of an entity having to re-learn hard learned lessons is evident in the disbanding of the Army Intelligence Corps after the First World War (Parritt, 2011). This research will revisit the issue of different domains learning the same lessons in the literature review chapter.

With regards to developments in criminal intelligence, the early 1800's brought with it the formation of a number of bespoke police forces, notably one in Glasgow, another in Paris and then in 1829 the Metropolitan Police. Later developments paved the way for plain clothes divisions but arguably the great strides in the use of intelligence, analysis and informants were made in France. Eugene Francois Vidocq (1775-1857) a colourful character and former criminal

became a police informer and eventually established a plain clothed Security Brigade which survives in France today as the Surete National (Vidocq Society, 2022). In England, the Metropolitan Police took a similar approach and began employing Detectives in the 1840s. The detective remit went beyond the earlier “thief-takers” approach of the early Surete National and the Bow Street Runners to include the identification of patterns of crime (Bruce, 2004) which is a clear step towards collating and analysing information. In the business domain, Devens (1865) noted that the businessman Sir Henry Furnese maintained an intelligence network which to better inform his business dealings. With regards to military and state intelligence apparatus, a combination of global and localised conflicts along with the Cold War years have given rise to modern intelligence agencies such as Government Communications Headquarters (GCHQ) The Security Service (MI5) and the Secret Intelligence Service (MI6) all of which operate within a legislative framework most notably the Investigatory Powers Act 2016. With regards to the uniformed military in the United Kingdom, the military unit The Intelligence Corps was organised during the First World War but disbanded in 1918 before being formally re-established in 1940 and continues to exist today. Crucially, the role of the Intelligence Corps includes offering training not only to the British Army but additionally to multi-national units who would attend courses alongside the author at the Defence Intelligence and Security School in Chicksands, Bedfordshire (MOD, 2020). With regards to advances in the science of policing, early gains are often attributed to August Vollmer, a Berkley Police Chief and academic, who is commonly attributed in the United States as the father of modern policing (Oliver,

2017). Vollmer, reportedly noted the absence of literature on policing and took to reading the memoirs of Vidocq before he reorganised the Berkley police service to incorporate centralised card index systems and motorised patrols specifically targeting areas of high call volumes. Contemporary Intelligence scholars approach the issue from the conception of the National Intelligence Model or its predecessor, The Kent Policing Model, whereas some commentators credit the re-emergence of intelligence as a domain in the United States to the terrorist events on 9/11 (McGarrell, Freilich & Chermak, 2007; Scott & Jackson, 2004).

This study asserts that even a cursory glance at the history and current position would observe the notable direction of travel regarding the Intelligence function. From activities carried out by concerned individuals in positions of authority to a position where business models are now mandated to carry out intelligence activities. Intelligence practitioners can now join professional institutions such as the International Association of Law Enforcement Intelligence Analysts (IALEA) where they are able to take advantage of career progression plans and recognised continuous professional development. There is an argument that Intelligence is somehow confined to the secret domain (Coyne, 2017) however more recently commentators argue that intelligence is not just for security or High-Policing (Brodeur, 2007). McGarrell, Freilich and Chermak (2007) argued that ILP would be most effective if introduced by law enforcement on an all crimes perspective suggesting that it should not be devoted to the most serious crimes only.

The maturity of the domain continues to evolve to the point where even the use of the word Intelligence itself attracts ferocious debate (Gill & Phythian, 2012). Further notable arguments include, when does information become intelligence? And what is the difference between strategic and operational intelligence? Goodman (2007) argues that intelligence as an academic subject can trace its roots to the publication in 1972 of Masterman's work on the Double-Cross system and additionally to F.C. Winterbotham's 1974 book covering the WW2 code breaking effort at Bletchley Park.

In terms of academia, Intelligence is slowly emerging as a subject in its own right (Phythian, 2013) and can be studied at undergraduate and post graduate level. Some universities such as the University of Lincoln offer an Intelligence Systems MSc, Brunel University offers an Intelligence and Security Studies MA and the University of Buckingham has established an interdisciplinary centre to combine Intelligence with Security and Diplomacy (Buckingham.ac.uk 2020). Positioning the study of intelligence at the centre of higher learning serves to remove Intelligence from the confines of a single domain such as Policing and to recognise Intelligence as a subject in its own right. Phythian (2017) also provides commentary on the parallels and contrasts between intelligence analysis and social science, specifically highlighting the need for intelligence analysis to replicate the testing efforts employed within social science research.

In the business community, Intelligence is increasingly spoken of in relation to decision making and risk mitigation, the close relationship between the two is arguably observed most readily with regards to business intelligence (Wu, Chen

and Olson, 2013). Business Intelligence now thrives as an activity and is erroneously credited largely due to an article by Luhn (1958) to the widespread computerisation of business enterprises and the ability for systems to collect, collate and analyse information. Even the term 'Business Intelligence' is erroneously credited to exponents emanating from within the Information Technology domain. Some, such as Watson and Wixom (2007) credit the term to Howard Dressner, an analyst from the Gartner Group, stating that the term originated in the 1990s. The study accepts that information technology has increased the reach and power of intelligence but posits that these developments are an evolution not a discovery. The following chapter will uncover the origins of intelligence in some depth and will provide an early example of the term business intelligence which pre-dates Dressner coining the term (Watson and Wixom, 2007, p. 98). Bean (2018) argues that the study of Intelligence has outgrown its problem-solving origins whilst Gill and Phythian (2012) have argued that the maturity of the domain must expand beyond practitioner theory and explore other domains involved in intelligence work. This study echoes the above theory of Gill and Phythian.

As the last few paragraphs have shown, this project cannot hope to cover the rich history of Intelligence in anything but a brief fashion however it has introduced the concept of intelligence and made the distinction between intelligence and information. The next chapter will undertake a specific literature review pertaining to the research questions whilst asserting that the activities associated with the production of intelligence predate the term and any

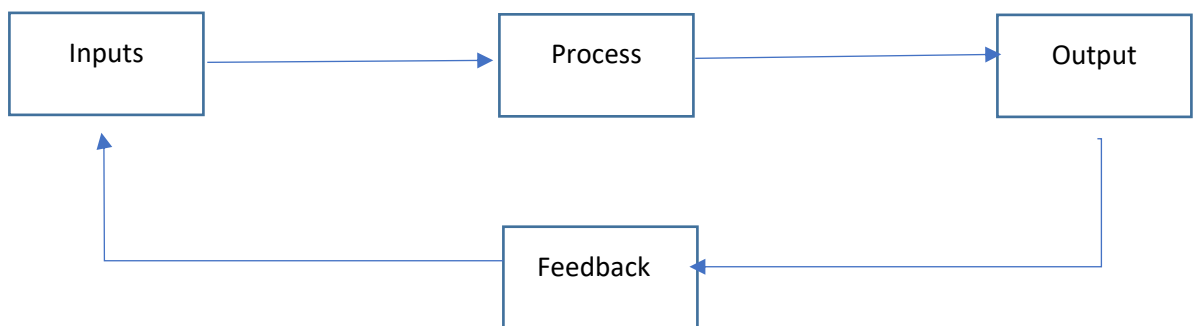
professional associations. The next few paragraphs will briefly consider systems in the context of this study before introducing the Intelligence Cycle.

Systems in context

The starting position of this study is that systems are everyday entities, they are not confined to machinery, information technology or the ways of working within different organisations. Systems can be biological such as the digestive system, they can be observed in sport, for instance different team formations and styles of play, systems can be observed in society such as an education system or a criminal justice system (The Open University, 2020). Even the achievement of desistance from re-offending is recognised as a system of activities rather than a single event (Cluey, 2009). There is precedent for using systems thinking to conduct operational research (Jackson, 2009). Achieving a better understanding of real world problems was once described as the most active part of the systems movement (Checkland & Haynes 1994). With regards to criminal justice, Cawford (1994) argued that crime prevention failures were actually system failures lacking in co-ordination, entrenched in silo working and locked into specialised work practices which do not relinquish control of their own environment. Meadows (2008) provides a generally accepted explanation of what constitutes a system which is an organised set of interconnected elements which are put together in a way that achieves something. Meadows' assertion being that the resulting achievement derived from the actions of each component part makes the system something more than the sum of its parts. The vague notion to achieve something

is key here because a system also requires a definition which describes its purpose. Designing a system starts with a conceptual model of the system components required to achieve the desired purpose (The Open University, 2020). The figure below shows the rudimentary building blocks of any system with inputs, a process, outputs and ideally a system should contain a feedback loop for a review of system success or failure. Analysing system feedback provides the system owners with the opportunity for system improvements to be made.

Figure 1 – Basic Process Model



The above figure could apply to any system, consider making a meal, the inputs would be the ingredients, the process would be measuring quantities, cooking method and timing whilst the output would be a meal delivered to a customer in a restaurant. The same figure could easily be applied in a call centre where inputs would be calls coming in, the process would be a staff member booking a service call to the customers home and the output could be the engineer fixing an appliance in the customer home. Applying systems engineering to real world problems has the pre-condition that the real-world system can be observed clearly along with its objectives (Checkland & Haynes 1994). Meadows

(2008) has provided a rudimentary exercise for anyone wishing to understand how they might unpack a system so that it can be understood and clearly defined.

- A) Are their identifiable parts and
- B) Do the parts affect each other and
- C) Do the parts together produce something that is different that the effect of each part on its own and
- D) Does the effect, the behaviour over time, persist in a variety of circumstances?

Although it is clearly rudimentary, including the above explanation of what a system provides the study with a straightforward guide showing how a basic system is constructed. The simple system provided here will be used as a reference in future chapters. The latter part of this chapter will introduce the mandatory intelligence system in place within UK policing and the next chapter will consider that along with alternate systems uncovered by a review of the literature. There is precedent for incorporating systems theory into related domains such as social work. Payne (2002) provides analysis that systems theory had a major impact on social work in 1970's and although now surpassed in social work by Ecological theory its early involvement is credited with developing networking. Systems involvement within criminal justice provide a cautionary note as to their encroachment upon youth offenders with McAra & McVie (2007) stating that the deeper a child finds themselves in the criminal justice system the less likely they are to desist from offending. Arguably the actions put in place due to

the receipt of intelligence can have an impact on the individual, the extent to which is outside of the scope for this study.

Evolutionary biologist Ludwig von Bertalanffy (1968) proposed that systems have similar underlying properties and from that hypothesis a particular system failure inference has surfaced; that failure occurring in one system has the propensity to occur in another like system particularly if the constituent parts are alike (Toft & Reynolds, 1994). This methodology for this project will consider the other side of that inference and determine whether a working intelligence system exists within the probation domain because the component parts are in place. To do this, the methodology chapter will bind this simple theoretical portrayal of a system together with the component parts of several actual intelligence systems. The resulting theoretical construct provides a bespoke repeatable framework with which to analyse intelligence activity within the probation environment.

What is a socio-technical system?

A broader understanding of the basic system in an organisational context is the socio-technical system (Trist, 1981). Trist developed the theory of the socio-technical system whilst undertaking action research along with former miner Ken Bamforth on behalf of the Tavistock Institute in the coal mining industry in Britain. Trist reflects upon two research projects one of which studied the relationships between management and labour whilst the other studied innovative work practices which promised increased productivity. This socio-technical theory

dictates that the system is made up of a human side and a technical side which hitherto had been expressly considered in isolation and not, as Trist's revelation found, been considered to work jointly to optimise output or performance (Fox, 1995). The human side of the system includes the culture and behaviour of the people doing the work including management practice and the leadership style they adopt. The technical side includes systems used, raw materials, the physical working environment and the complexity of the processes being carried out. In the context of the socio technical system the term technology is broad and not confined to industrialised production involving machines or computerisation of the workplace. An simple example would be someone who is used to digging with their hands, the addition of a shovel to their working life constitutes a technological advance. The underlying premise of the theory developed by Trist and expanded by others since is that due to the complex interdependencies of the parts, to improve performance of a system both the social and technical aspects must be improved (Fox 1995). In the example above, the shovel is a technological improvement, the working life is improved for the worker because they now have a tool with which to dig the dirt and the likelihood, given the specific nature of the tool, is that their productivity will increase. A feature of socio technical systems is the idea of the two halves providing joint optimisation where individuals are encouraged to make decisions autonomously and the social system is adaptable to changing technologies. Features such as these were explored in the probation domain during the latter part of the fieldwork exercises. Introducing an element of systems theory into the study is important because as the literature review

chapter will show, there is no current framework with which to explore an intelligence system in the probation domain. Despite advocating bringing together social and technical systems for better optimisation, Trist (1981. p.24) reflects upon the independent nature of the two systems,

“The technical and social systems are independent of each other in the sense that the former follows the laws of the natural sciences whilst the latter follows the laws of the human sciences and is a purposeful system.”

Trist (1981. p.24) goes on to acknowledge their dependency upon one another for the system to work.

Yet they are correlative in that one requires the other for the transformation of an input into an output, which comprises the functional task of a work system.

Broadly following Trist’s (1981. p.11) direction that socio-technical studies should be carried out at three levels, this study will, as the methodology and data chapters will show, consider the organisations Primary Work Systems by collecting data on the day to day activities of staff to ascertain if they carry out intelligence related tasks and will consider Whole Organisation Systems by analysing data in each of the six probation areas which make up the whole region and will also consider Macro Social Systems looking at each different area which makes up the region. When considering operational analysis at different levels, organisational subcultures suggested themselves at an early stage as geography and operational architecture has a hand to play with regards to probation. The region being studied is co-terminus with local authority boundaries and any difference in management structures may, the study posits, cause different teams

to perform their duties in different ways. Organisational culture and subcultures can determine what knowledge is worth having and sharing. Organisational culture creates a context determining how knowledge will be used in certain situations (De Long & Fahey, 2000). This study proposes to seek out any innovative work practices occurring outside of normal probation procedure and will comment on any that are observed during the data collection and analysis chapters. One could also argue that the project includes the Micro Social approach as it will provide commentary and analysis on smaller groups such as the individual probation areas and staff working with different types of offenders. As the literature review and methodology chapters will show, this study will combine systems theory with the architectural framework of established intelligence systems in other domains to explore intelligence in this under-researched area.

Having introduced the concepts of systems and sociotechnical system theory, this chapter will now expand upon this in the context of the study and introduce intelligence systems along with the core concept of the Intelligence cycle.

What are intelligence systems?

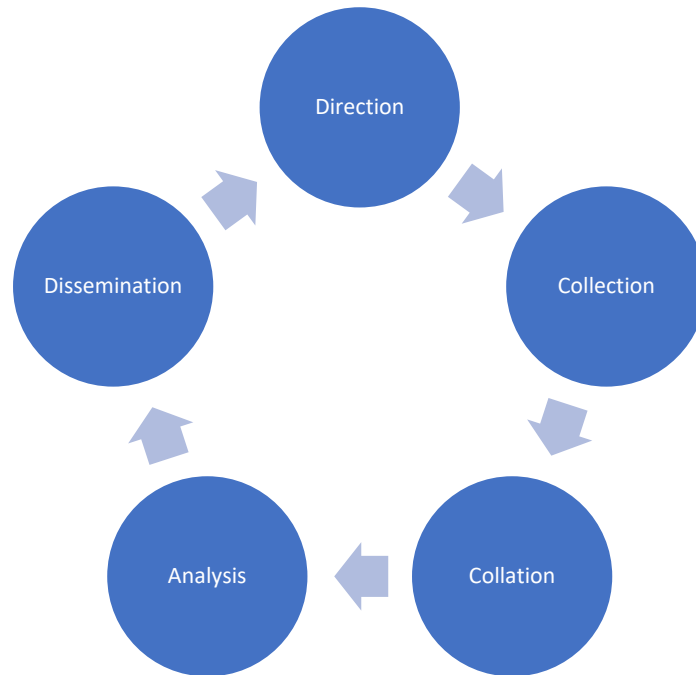
As the previous paragraphs have shown, intelligence is rarely something that just appears, more often it is the product of an organised process in which there are component parts. Operationalising the process to supply regular and correct intelligence is the function of an Intelligence System (Walsh & Mitchell, 2011, p.91). In principle this is nothing more than any other business process.

The inputs, in the context of intelligence, are raw information, followed by a process of analysis, resulting in an intelligence output (analysed information) and then after the application of intelligence by the wider business, the ability to obtain feedback on any impact which might benefit the operational mechanism of the intelligence system in the future. The simple explanation given above is likely compounded in a larger and more complex environment. It follows then that larger systems would be supplemented with further collection processes, analytical sub-processes, and information validity checks. Additional to these mechanisms is the notion of re-learning lessons as was introduced earlier. When an organisation realises, either through isomorphism, failed campaigns or missed targets, that intelligence is a necessary pursuit, logic then dictates that in the age of socio-technical and computerised workplaces, automating the whole process so that it can be repeated also becomes necessary. This sentiment echoes Schneider's (1995) assertion for the need of an effective criminal intelligence function and Gill's (1997) mapping of a Canadian Police "Intelligence System". Therefore, after establishing the need for intelligence, and moreover, the permanent need to develop and refine intelligence, there comes the need to systemise and automate that process. The recognised framework for this process is called the Intelligence Cycle (Glass & Davidson, 1948; Phythian *et al*, 2013). As the next paragraph will show, Intelligence Cycle like any other system has defined component parts, each of which require staff, training, organisational processes and operational parameters so that the system will work properly.

The Intelligence Cycle

A core module in intelligence training is the study of the Intelligence Cycle, (Phythian *et al*, 2013; MOD, 1991). Phythian posits that it has been central to the study and understanding of intelligence in the post-Second World War era. Despite the standing of the intelligence cycle, its usefulness has been called into question in the modern era (Phythian *et al*, 2013; Hulnick, 2006). The cycle consists of a rudimentary process in which each step is carried out by intelligence practitioners in various parts of the organisational intelligence apparatus. The cycle includes the stages of Direction, Collection, Collation, Analysis and Dissemination. The stages of the cycle as it is recognised, remains largely unchanged since it was first introduced by Glass & Davidson in 1948, however, in the United States, the analysis component is commonly split into processing and analysis. The component parts of various intelligence systems will be explored in more detail during the literature review chapter, this forms part of the theoretical framework for this study and will be put to practical use in both the methodology and analysis chapters. Whilst some form of the Intelligence Cycle arguably sits at the core of Intelligence provision in any domain, the literature review will show that many domains have compiled their own intelligence system with additional components to the cycle to reflect the unique circumstances of their business. The cycle is depicted in figure 2 below.

Figure 2 – The Intelligence Cycle



The component parts of the above cycle have varying degrees of complexity depending upon the maturity of the domain in which it is being used. Collection activity for state security for example may employ sophisticated eavesdropping techniques such as drone reconnaissance. Rudimentary techniques such as information validity checks are likely to be carried out as part of the Collation activity regardless of the domain. A common method of validity checking is a matrix approach to the grading of information received before it is fed into an agency database (COP, 2015). The matrix commonly used during the period of study is known as the 3x5x2 which provides a 1-5 score for three separate aspects of each piece of information 1) is the source reliable 2) is the information valid and finally to determine 3) how sensitive the information actually is with regards to sharing that outside of the agency.

Given the system principles provided earlier by Meadows (2008), one can see how the cycle is a system in its own right, the cycle has identifiable parts, the parts affect each other and when fully realised they produce something that is greater than each part would on its own. Thinking more broadly in relation to Meadows' system principles, one can also assert that the linear system behaviour depicted above would persist in a variety of circumstances.

With regards to practitioners, the cycle is considered the bedrock of intelligence activity (Johnson, 2008). It is considered an overarching framework within which specific activities are carried out to produce intelligence Evans (2009). Scrutiny of the Intelligence Cycle continues and Evans argues that the deluge of data now available in the information age is a strain upon the traditional application of the cycle. Pythian (2013) considered the Intelligence Cycle in the context of state security and invited contributors to offer alternatives, which they did, however, ultimately the exercise failed to offer an appropriate alternative and the cycle remains in use. The next chapter will broaden the view of intelligence systems by breaking several down to their component parts. This will enable the study to understand the organisational capabilities required to carry out intelligence activity. Carrying out the exercise will provide this study with several granular research questions which reflect the components parts of an intelligence system. The chapter will also show that the component parts of these alternative intelligence systems are based around the strong central premise of the Intelligence Cycle.

Probation, work, nature, and a short history.

Arguably, the nature of probation is steeped within the ethos of philanthropy and humanitarianism (Canton, 2012). Despite numerous changes over the last century, the current nature of probation work is still shaped by the relational aspect of its origins. Tracing the history of probation provision in England is testament to this. The modern service charts its origins to 1870 when the Church of England Temperance Society (CETS) used a five-shilling grant from Frederick Rayner to appoint a missionary to Southwick court. A relational approach to offender supervision was established at the onset with the society providing volunteer “missionaries” to select offenders deemed as being worthy of being saved (Tidmarsh, 2020, 98 -117). This action, well over a century ago, established the London Police Court Mission (NOMS, 2007) although one could argue that the rehabilitation and reform of convicted offenders started much earlier with the prison reform movement under John Howard and Elizabeth Fry (Cooper, 1981).

The rehabilitative nature of probation work was telegraphed in 1907 when formally establishing provision in the Probation of Offenders Act included directions not only to advise but to befriend those on probation. This relational aspect of offender supervision remains an important tool in the eyes of practitioners today (Mawby and Worrall, 2013). Lack of funding for the newly formed organisation meant that CETS still provided a substantial service to the courts until in 1925 the Criminal Justice Act brought organisational change to the fledgling service. The Home Office pursued a more interventionist approach

combining compulsory recruitment of probation officers to courts with a sustained increase in the use of probation orders (Vanstone,2007; Jarvis,1972). A casework model, which was drawn from social work knowledge, gradually overtook the religious influences within practice and Home Office funded formal training programmes in 1930's (McWilliams, 1985). Subsequent acts such as The Criminal Justice Act 1948 introduced the role of a principal probation officer and in 1949 the Probation Rules introduced the definition of supervisory duties for the role. Formal qualifications such as those in social science, casework, law and criminology became pre-requisites for entry to the service. By 1971 all probation officers were required to have an accredited social work qualification (Gregory, 2011). The literature reveals that the autonomous nature of probation work has been subject to organisational change and increased levels of managerialism over the years (Tidmarsh, 2020). The 1980's brought the introduction of performance targets and in 1992 National Standards, bringing more prescriptive guidelines for probation practice. Increasing levels of managerialism into probation work and practice combined with the use of risk management theory has effectively changed the nature of probation work. These changes effectively distancing day to day practice from its social work origins. In 1996 the requirement for social work training was abolished.

Offender supervision in the community, whether based on the dominant risk-needs model (Ward & Brown, 2006, p.243) to target dynamic risk factors at an appropriate intensity or a good lives model which, using positive psychology

seeks to provide offenders with the skills to flourish both have advocates (McNeill, 2009, p.26).

Fitzgibbon (2007,2008) describes the change in probation from a social casework model to a risk management model where an ethos of providing assistance, advice and befriending offenders changed towards to one in which offenders are essentially a risk from which the public need protection. Fitzgibbon provided critical commentary with regards to the emergence of risk-based offender management, particularly with regards to the primary system, OASys, employed to carry out the assessments. Additionally, Fitzgibbon suggested that using these 'tick box' systems would de-skill probation practitioners, escalate risk assessments on individuals and lead the way to further incarceration and elevate calls for behavioural support programmes.

The OASys assessment provides the Criminogenic risk score. The calculation is determined by the assessment of a group of factors which have a relationship with offending. The recognised factors are Accommodation, Employment, Relationships, Lifestyle & Associates, Drug misuse, Alcohol Misuse, Thinking & Behaviour, Attitudes (Moore, 2015, 239). The OASys assessment provides a way for probation to assess and present the risk posed by an individual by assigning a risk score to each criminogenic need. Each risk factor is assessed during the OASys assessment, and the calculated score is based upon the answers given by the offender to each of the questions within the section. Criminogenic risk or Criminogenic needs as they are also referred to, form the basis of probation

provision to individual offenders. If the assessment determines that scores associated with any factor are sufficient to warrant intervention in order to reduce the risk of reoffending or harm posed by an offender, then the offender manager would seek appropriate treatment. As has been previously noted, the nature of intelligence dictates that any piece of information can become important enough to a given situation for it to be deemed intelligence. Any one of the criminogenic risk factors can become the pivotal piece of intelligence regarding managing the community sentence of an offender. OASys aligns with the 3i in the second broad question in that the results of the OASys assessment provide possible sources of intelligence. As intelligence, on the Gill and Phythian (2012, p. 30) list the OASys information would appear within the HUMINT (Human Intelligence) range when being collected via an interview between a probation worker and an offender. Additionally, in the same list, the intelligence could appear within the PROTINT (Protected Intelligence) range when transferred as data onto the national offender management computer systems as the data would only be available to those with role base access. On a practical level regarding the 3i model, the information from OASys can provide actionable intelligence which would influence the decision making of offender managers at an operational level. Additionally, it would influence team managers at a tactical level when groups of offenders with the same need are collated. It would also influence senior leaders at a strategic level when levels of criminogenic needs are understood regionally with regards to service provision.

Offender facing commentators offer searing views towards the assessment system in place. “Social work by stealth” is how Shepherd (2019, p. 456) describes her work in probation. Reflecting upon offender assessment mechanisms as “Crude but necessary” (OGRS) and “Offensively titled” (OASys Lifestyle Section), Shepherd offers a practitioner’s insight into probation practice and the assessment system. Approaches such as the rise of risk management and managerialism are revisited by Shepherd as they were by Fitzgibbon & Lea (2014, p.27) and again by Tidmarsh (2020, p.103). Risk management mechanisms are offered harsh criticism by Shepherd however what is described by Shepherd as the “tiresome” collection of data is also recognised by Shepherd as essential to improving the service. This collection and subsequent analysis of data is entirely what the intelligence system is about. Shepherd notes the lack of reliable evidence in previous probation eras, citing the lack of understanding about intervention effectiveness and the characteristics of offenders (Shepherd, 2019, p.461). Whilst seemingly un-concerned about the mechanism for data collection and the organisational constructs required for analysis and integration of resulting knowledge into the probation domain, Shepherd does offer recognition of its worth.

Raynor and Vanstone (2018) provide commentary on probation practice in the last decade and focus on the re-emergence of practice skills in probation work claiming that the focus of the last decade has shifted from cognitive-behavioural group programmes towards core correctional practices. It is appropriate to note that probation services in England and Wales are used to change (Tidmarsh,

2020) and that change has increased exponentially over the last thirty years (Tangen & Briah, 2018).

The culmination of these changes, the further introduction to risk management, the distancing of practice from its social work origins and the increased level of managerialism has led some such as Fitzgibbon and Lea (2014, p.27) to equate the changes to a form of “Taylorisation”. They argue that the professional discretion of staff has been over-taken by a centralised management system with increased accountability and oversight of decision-making. Added to this are the influx of probation service officers (PSO), although a longstanding position within the service, an increase in numbers is noted as starting in 1996 when the social work qualification was abolished (Tidmarsh, 2020, 98 -117). The PSO training is said to have less academic rigour and is shorter, however, commentators such as Tidmarsh (2020) note the expansion of the role to expedite tasks normally undertaken by probation officers. Fitzgibbon (2010, p.104) suggests that PSO’s should be enabled to progress to fully qualified status and that the allocation of offenders between PSO’s and probation officers should be reviewed. The view taken by Tidmarsh (2020) is that expanding the PSO role has led to probation officers spending less time face to face with low and medium risk offenders. The idea that commentary persists to analyse the separation of probation practice from its social work origins suggests that this was not a welcome change.

The primary lens through which this research will investigate intelligence is Integrated Offender Management (IOM). IOM schemes rely heavily on probation and police co-operation. Regarding that co-operation, Mawby and Worrall (2011) found that this relationship had transformed during the working lives of the probation personnel they interviewed. Staff indicated a change from “mutual suspicion and hostility” to one of “easy co-operation”. Although Mawby and Worrall (2011, p.17) cite the above changes, their work also commented upon the different missions of the police and probation one where the police are still concerned with catching and convicting offenders rather than rehabilitating them. The relationship aspect is seen as key regarding the role of the probation officer and the offender under their supervision (Mawby and Worrall, 2014). A good relationship is reported to have beneficial effects with regards to compliance with the community sentence and with helping the offender to desist from crime (Lord, Kenny, *et al*, 2014). Probation practice is built upon the power of relationships, although Fitzgibbon (2008, p. 86) provides an account of the forces eroding that element of practice: the change in probation accountability from the offender to the public. Dominey (2019) using findings from pre-Transforming Rehabilitation (TR) research argues that probation supervision is underpinned by a series of relationships and posits a model of “Thick” supervision which requires a series of strong links, each embedded with purpose. The model depicted by Dominey contains within it the elements of monitoring, enforcement and joint working between the probation staff and key workers, which is in line with the IOM model encountered in this study. McNeil *et al* (2005) found during a review of the key

practice literature that relationship skills of probation officers were a critical factor in reducing reoffending. The relationship aspect regarding desistance from crime is corroborated by a later study in which those on the programme reported a higher degree of motivation when staff were in a befriend and assist role rather than the control aspect associated with offender management (Rowe and Soppitt, 2014). Although specifically commenting on the relationship between the probation officer and the offender in their charge it seems highly likely that this relationship skill would appear evident in the IOM partnerships between probation and police. The IOM partnership is one which the study posits will provide the opportunity to observe and uncover intelligence work within the framework of offender management.

This study has segmented the second part of the fieldwork data into different staff groups to uncover and explore any differences in the use of intelligence between staff working with different types of offenders. Analysis of data by staff group may uncover an organisational sub-culture in relation to intelligence use based upon the close working relationship IOM staff have with their police colleagues. The partnership approach to IOM also provides the opportunity to observe the differences in approach due to the different missions of the organisations. There is a convergence of sorts in that reforms to the Probation Service, in particular the training of probation officers in the Diploma in Probation Studies is grounded in criminological rather than social work theory (Tangen and Briah, 2018). It has been argued that demise of relationship-based practice has led to a more punitive service which separated probation work from

its social work origins thus presenting present community-based penalties as more onerous than the befriend and assist policy of the past (Burnette & McNeill, 2005).

As alluded to earlier, the focus on enforcing the community order is a departure of sorts from the supervisory and social work remit in that the Probation Officer became an Enforcement Officer. Whilst it does not fall within the remit of this study, it seems likely that the transformed relationship found by Mawby and Worrall (2011) is, this study suggests, in part due to the closer working relationship between probation and police. Probation work has not, to this point, included an explicit operational intelligence remit however, this may be because the actions and activities carried out by probation staff are codified in a different organisational vocabulary. Gill (2012) offered a similar position regarding those people studying Intelligence and those people studying Risk occupying what he saw as 'similar territories' but drawing distinctions between the two because of a difference in how they referred to their area of study.

As the next chapter will show, James (2014) along with Guidetti & Martinelli (2010) argue that the police organisation looks very much as it did before become intelligence led. Both acknowledge that the police carried out intelligence duties before they were mandated. The theory introduced above that staff establish customs and practices over time is one which forms part of the theoretical framework for this project, it will guide the methodology and ultimately inform the analysis of this project.

The priorities and direction set out in the current Annual Service Plan (CRC 2015) for the organisation now being studied echo those earliest sentiments although the funding has changed. With a contract budget of £21 million, a focus on local partnership working and a remit to deliver and also to enforce the sentence of the court, the current organisation has grown somewhat in terms of organisational scale and operational remit. The business of people changing is the reason probation exists (Tidmarsh, 2019, Mawby & Worrall, 2013). However, this and arguably the role of the probation officer is seen as under threat due to the changes imposed by the Transforming Rehabilitation process (Clare, 2015). The chapter will now turn towards the major changes imposed on the Probation Service during the time this thesis was undertaken.

Changes Probation has experienced during the course of this thesis

In 2010 the Coalition Government published a structural reform plan for the Ministry of Justice in which it announced the intention revolutionise rehabilitation which would reform sentencing and penalties, trial payment by results and harness innovations of the private and voluntary sectors to cut reoffending rates (MOJ, 2010). The plan was followed by a series of consultation documents including a consultation of sentencing policy (MOJ, 2010) a consultation on reform of the probation service (MOJ, 2012) and a consultation on changes to community sentences (MOJ, 2012) and the final consultation document which explained proposals to reform services for community based offenders (MOJ, 2013). The formal consultation process ended in February 2013

and the strategy, *Transforming Rehabilitation: a strategy for reform* was published in May 2013.

At a macro level, the major change was an organisational one which saw the probation service split into two separate entities. The National Probation Service (NPS) became responsible for those offenders assessed as high risk of harm with the remainder of the caseload being managed by newly created private and third sector Community Rehabilitation Companies. The most experienced and qualified staff followed the risk and were transferred to the NPS with CRC staff working in a new environment which is increasingly standardised and reliant upon the voluntary sector to deliver services (Tidmarsh, 2020). The major change was not to last and a reversal in June 2021 brought the organisation back together as one. The steps towards re-unification include transitioning some 8000 staff into the new service then aligning process and procedures with the aim to align digital tools to avoid duplication by 2024 (HMPPS, 2022). Additionally, as has been explained, the National Probation Service introduced an Intelligence aspect to the work of the organisation. This study can only hypothesise as to the reason why it took more than one hundred years for the probation service to formally introduce (at least within public sector probation) an intelligence system into its business practice. Tidmarsh (2020) argues that TR has entrenched the long-term trend towards a more Taylorised probation domain. If the prediction is fulfilled one could argue that the probation domain is ready to fully engage with intelligence systems. Although not the context for Tidmarsh, this thesis argues that in an organisational sense, probation is ready for a national intelligence system. Given the various

systems explored during chapter two, this research argues that Intelligence, whether tacit or explicit, is a Taynorised process which would fit into the post TR probation environment.

The findings provided in the penultimate chapter of this study, show that in the CRC, the elements of a tacit system are already in place.

The literature shows that Probation in nature and work is a social activity. Arguably, people changing and cultivating relationships have been a core element of practice since the service began. Whilst the literature shows that much has been done to erode the social work aspect of probation work over many years, it also shows that practicing the skills associated with this remain a core value to probation staff. In the century since its formal inception probation work has seen the introduction of mandated risk-based management, Managerialism, Computerisation, the apparent dilution of casework skills and any number of organisational changes which have undoubtedly changed probation; however, the study suggests, not beyond recognition. A decision to reverse the Transforming Rehabilitation (TR) initiative was taken and although re-nationalisation is underway, the marketisation model established by TR remains in part. Each of the new 12 probation areas will have a private or voluntary partner with whom they are obliged to contract out services such as unpaid work or accredited programmes (Carr, 2019, p. 279).

The study posits that even changes as radical as TR cannot completely alter the cultural norms and tacit activities within an organisation if the underlying objectives remain the same.

Given what has been said here about the nature of probation work, the cultural stance of probation officers and a work ethic arguably still steeped in social work origins it is unsurprising that a formal prescribed, government introduced, arguably Taylorised, intelligence system has not appeared in the first one hundred years of probation history.

The position taken in this thesis is that TR would have damaged information sharing between CRC and NPS where offenders moved from one to the other. Not least because the NPS will have adopted new intelligence processes and procedures which were alien to the CRC. Subsequently, a gap would have formed between the two probation entities because one would embed and incrementally improve a mandated system where the other would have nothing or potentially 21 different intelligence systems. Additionally having a series of different intelligence systems at CRC and NPS level is likely to have compounded the difficulties of information sharing between probation, police, and other partner organisations. Problems with information sharing are not new, Fitzgibbon (2013) highlights deficiencies in the exchange of risk information between agencies and identifies that the situation could be compounded by a myriad of providers in a privatised environment. Now that Probation is re-unifying, the whole service will, in time, be bound by a single mandated intelligence system. Regarding timeframes, given the history of ILP, it took years to properly embed into the police. The timeframe for truly embedding a national system is important because of the complexity and components involved (James, 2013). Data sharing in the unified probation arena

is linked to the ongoing process of digital change (HMPPS, 2022) which is scheduled for delivery by 2024.

Probation and Intelligence

The focus of this study is on the ways in which ideas and principles from the field of intelligence are applied in the probation domain. The weight of the focus is on the former, but in the context of the latter. The fieldwork for this research started when the Probation Service was one national entity, albeit split by geography into semi-autonomous Probation Trusts. When the Transforming Rehabilitation initiative came about this research carried on in the private sector Community Rehabilitation Company (CRC) because the CRC managed the IOM scheme. Testament to the need for this piece of research, in January 2017 the new National Probation Service announced that it would bring into service a new initiative with two objectives; the first to develop an Agency Intelligence Model and the second to develop a 'Professional Intelligence Presence' within the national organisation (HMPPS, 2018). The policy framework issued in 2019 is explicit in that Community Rehabilitation Companies exist outside of the requirements for the new initiative (MOJ 2019). The proposed emergence of an intelligence function in the National Probation Service does not reduce the validity of this study in any way as this research was carried out in what became the private sector part of probation provision, the CRC. The study posits that the adoption of an intelligence system within public sector probation provision vindicates the need for this study in the private sector. The study posits that any findings within this study would be of operational relevance for those in the

National Probation Service regardless of re-unification and whatever stage the fledgling intelligence function may reach.

Making an original contribution to knowledge.

Given the research questions outlined above, this study can make knowledge claims in the domain of Intelligence and of general probation work as they are the two domains which sit at the center of this enquiry. The study can also make corroborative references to the fields of Systems Theory and Socio-Technical Systems Theory. The aim of this study is not to prove that an intelligence system works or that a fully-fledged system is in place within the probation area being used as the operational lens for this piece of work. The aim here is to determine whether probation staff do carry out intelligence activities and whether the component parts of an intelligence system can be observed in the operational setting even though this activity is not mandated in any way. The contributions to knowledge are bolstered by the fact that the Probation Service is a non-traditional area for a study of this kind. Studies of this kind have been undertaken in the policing domain and have also been undertaken in the investigative areas of Government departments covering benefit fraud for instance but each of these domains had an organized intelligence structure in place when the studies were carried out (Osborn, 2012). The reference to Ratcliffe's "Intelligence-Led" statement at the beginning of this chapter hints towards the rapid growth of intelligence within policing over the last three decades and the numerous studies which have considered intelligence from a policing

perspective (James, 2013; Ratcliffe, 2003) however none of these studies considered probation intelligence.

By looking for a system which, in theory, should not exist, adapting tools constructed for a different domain and drawing from literature which does not directly reference the environment in which this research sits, it is believed that this work will uncover and then claim an original contribution to knowledge within the probation domain. Added to this is the hypothesis that adapting a system from one domain (policing) for use within another (probation) also adds to the body of knowledge in the intelligence and systems theory domains.

Scope and Limitations

The environment in which this study takes place is a sub-set of the probation domain. At the time of this study, the Community Rehabilitation Company (CRC) were responsible for a sub-set of offenders low and medium risk offenders sentenced to supervision in the community. CRC staff were responsible for managing Integrated Offender Management Schemes. The researcher recognises that the study could have made use of general offender management processes to collect data, however it was felt that using IOM came with logistical advantages. Logistical advantages included a single management structure for all six areas, an established process for management information, scheduled meetings with IOM team leaders and some co-location with police counterparts. Similarly, the access limitations to information and probation staff managing offenders under Multi Agency Public Protection Arrangements (MAPPA) effectively discounted that avenue of approach. The study did not collect data on

those offenders sentenced only to Community Payback as this offered limited scope for interaction between offender and offender manager. The study did not collect data on high-risk offenders being managed in the National Probation Service. The study did not collect data on probation staff in the National Probation Service who were responsible for the production of pre-sentence reports to be shared at court. The author acknowledges that the process carried out to produce pre-sentence reports could have provided further evidence of an intelligence system. It could be argued that the process to compile an offender assessment (OASys) includes element of intelligence activity including, for example, information gathering and automated analysis. Whilst not concentrating on the assessment process, this study does include OASys as an intelligence type which is included in a later chapter.

The next paragraph will explain how the path to the original contribution will be structured.

The Structure of this thesis

In terms of chapters, the thesis is set out in a linear fashion consisting of the following six chapters 1) introduction, 2) literature review, 3) methodology, 4) data presentation, 5) data analysis, 6) conclusions and discussion. To aid transparency, the aims of this research will be clearly telegraphed within each of the following chapters at appropriate points. This, the introductory chapter, has provided the reason for this research as the hypothesis that the probation service staff carry out non-mandated intelligence activities. Furthermore, that the

intelligence activity carried out can be broadly recognised against component parts of recognised intelligence systems. This chapter has served to introduce the intelligence domain and intelligence systems as well as an introduction to the political climate within the Probation Service during the time of this research.

The literary heritage of this study will be examined in the second chapter. The exercise will conduct a review of the associated literature covering the history and current thinking within intelligence such as the different systems at play, the role of the analyst and the partnership approach used to integrate the management of offenders. Current themes within probation will be considered and the chapter will present the argument that intelligence and probation have been neglected in academic writing up to this point. The developments of intelligence in policing will be considered within the context of the objectives of this study. This chapter will also consider systems methodology and will explain how this research compliments current thinking. A review of the literature will also enable the study to consider the methodological approaches taken during previous studies on Intelligence-Led Policing and will consider whether they offer a suitable path to take for this enquiry. The chapter will conclude that this study is in the vanguard of an academic avenue not previously pursued.

Chapter three will outline the research path for this study in terms of the researcher's Ontological position. It will outline the theoretical framework employed within this study. The chapter will consider the acquisition of knowledge or Epistemology. Finally the third chapter will outline the methodology and methods employed within this study. With regards to the methodology and

methods, this chapter owes much to the literature which precedes it and the chapter will explain how a mixture of methods was deemed the most appropriate approach. Additionally the chapter will introduce the methods required to answer a more granular set of probation-centric research questions which were informed by a review of the literature.

An explanation of the methodology is followed by a fourth chapter which will present the data obtained during the fieldwork for this piece of research. This chapter is grouped into themes which are structured around the main research questions. This chapter will present data obtained during each of the fieldwork sections as well as provide data on the organisational architecture of the probation service being studied. This chapter will include excerpts from transcripts, the raw data from survey questions as well as the raw data on arrests and convictions collected over a period of twelve months. With regards to the systems aspect of this study, the chapter will provide organisational process maps constructed by the author of observed processes along with organisational capability mapping as necessary. The chapter will comment on the quality of the data in the context of the research questions.

The penultimate chapter will provide an analysis of the data in the context of the research questions. The chapter will unveil the bespoke, layered approach to analysis which was constructed for this study and informed by the theoretical framework. The approach starts with an analysis of the results pertaining to the broad overarching themes aligned with Ratcliffes 3i model and finishes with a gap analysis process which determines the existence of an intelligence system. The

analysis is then cross matched with the literature to provide a consideration of the results in the context of this study whilst reflecting upon those that came before it. Summarising the results and making conclusions are two separate exercises and the conclusions will be explored in the final chapter (Phillips & Pugh, 2002).

The final chapter provides a clear explanation of the contribution this study makes to the overall body of knowledge. The final chapter will reflect upon the whole research process and consider which aspects of the study went well and what lessons there are to be learned for future research in terms of methodology and methods in this area of study. This chapter will include a reflexivity activity carried out by the researcher to better understand their personal journey. The chapter will go on to discuss what the results mean for the wider domains of Intelligence, Probation and Systems Theory. The chapter will conclude with a discussion on how the research design is a repeatable model and can be operationalised within the context of the probation service.

Drawing thesis themes together

The chapter thus far has introduced the broad topic of intelligence and expanded this to outline the lack of academic scrutiny of intelligence in a probation setting. Systems theory was then introduced which telegraphed the introduction of recognised intelligence systems in different environments. The chapter then introduced the probation environment in which this study takes place. This section will serve to tie the different themes together.

Having worked as an Intelligence Analyst in law enforcement, military and business environments and with a growing professional interest in wider intelligence matters, the researcher has observed this ILP concept spawn a plethora of books, associations, courses and computer programs. In relation to academic and practice related literature, this “Intelligence – Led” paradigm is to the author, conspicuous by its absence in the probation environment. With that apparent absence in mind therefore, the central aim of this research is to extend, in terms of scale and nature, the current understanding of intelligence systems knowledge. The study will do this by conducting a critical exploration for the existence and characteristics of an intelligence system in operation within a large probation organisation.

The scope of the study is effectively confined to several agreed parameters, with regards to the term “intelligence system”. The word “system” in this context is effectively interchangeable with the phrase “business process” although the specifics with regards to that and what constitutes “intelligence” will come under further scrutiny during the literature review in the next chapter.

Locating an intelligence system lies at the core of this project, however preliminary reading of the associated literature reveals other considerations. For instance, there is some evidence of organisational intelligence in situ. The Carter (2003) report called for stronger intelligence exchange between police and probation, after which the development of Integrated Offender Management (IOM) reportedly brought with it an extension of the use of police intelligence into probation activity (Home Office, 2011). However, this study suggests that until a

formal organisational intelligence system is embedded within probation work the small gains alluded to by Wong & Senior (2011) during their IOM review in relation police and probation intelligence sharing will stall.

According to the published figures, the Community Rehabilitation Company examined during this piece of research is a successful one. The stretched targets regarding reoffending statistics published locally in the Strategic Plan (2013-2014 to 2015-2016) and those offered by the Ministry of Justice (MOJ, 2014) indicate that probation activity has achieved a constant level of success against the national reoffending targets. To suggest that this large, public-sector organisation has been able to conduct successful activities without being bereft of actionable information would, on the face of it, appear folly. Additionally, there are the researcher's initial observations, formed whilst employed as an analyst within the probation area under scrutiny, that in practical terms, numerous forms of intelligent management decision making were being applied by probation staff. The assertion within this study is that the practical application of the intelligence apparatus predates a formal intelligence system in terms of probation's strategic architecture and operational decision making. The main argument behind that assertion is that the system is tacit, and the scale and nature of any intelligence apparatus has been unknown before the findings of this study.

The above paradox was the effective starting point for this piece of research in that to some degree, probation outcomes with regards to re-offending appear to suggest an organisational framework which includes the tacit adoption of an intelligence-led approach. The system is tacit because of the absence of an

operational intelligence mandate at any level within IOM or the CRC. If the findings show that the organisation under investigation does exhibit the characteristics of an intelligence system, then the opportunity for further research presents itself. Further research could try to determine whether any intelligence system therein is an organic development born from operational pragmatism or is due to a more structured organisational approach dictated locally. To research these basic questions, this project has adopted a pragmatic approach to focus the study on an area of probation work known as Integrated Offender Management (IOM). The reason for that focus is that IOM is arguably the flagship for partnership working between police and probation and therefore more likely to adopt working practices already embedded in the police. Despite a relatively recent history where police were seen as “the enemy” (Mawby & Worrall 2011) and where co-operation was discouraged, the relationship between police and probation now appears to have become far closer. The two organisations now have to deliver similar goals such as reducing re-offending and managing criminals via separate missions (Mawby & Worrall 2011). The logic for using Integrated Offender Management is that it inherently incorporates a partnership approach between police and probation colleagues and therefore affords the most likely opportunity to uncover and observe an intelligence system in operation. Given the geographic split of the organisation under investigation, using IOM as a lens also offers the researcher the ability to examine the issue in six separate geographic locations which make up the probation region.

A review of contemporary literature undertaken during a preliminary research phase prior to this piece of research provides the assertion that the professionally mature approach to Police and Corrections Intelligence in other areas such as Australia, America and in the United Kingdom has not attracted academic scrutiny beyond the policing function. This lack of academic literature provides this study with an obvious and considerable challenge. The lack of specific available theory also offers the unique opportunity to explore the area in an academic context for the first time. By applying systems theory and business analysis process modelling to probation activity to find an intelligence system this study will provide new insight into an under theorised area of criminal justice. By adopting business analysis techniques to supplement research activity this study will establish the procedure for and carry out a Gap Analysis of any observed process. The GAP Analysis will be achieved by comparison of any observed process against the recognised component parts of an intelligence system derived from a review of the literature. It is hoped that the results of this study will inform offender management policy and practice in relation to intelligence activity as well as provide a “blueprint” for the Gap Analysis to be carried out in any probation area.

The thesis will now turn towards the literary heritage used as the foundation for this body of work.

Chapter two: A review of the relevant literature.

This study is indebted to the research that came before it and this the literature review chapter will provide a critical appreciation of that literary heritage. The previous chapter explained the scale and nature of this research and broadly set out the overall aims and objectives of the study. The purpose of this chapter is to position this research within the wider body of knowledge currently available to the researcher. To achieve the stated aim, the chapter will offer a critical review the relevant literature associated with this area of investigation. As well as positioning this work within a wider academic context, the review will provide further evidence, with which to expose the current academic gap outlined within the introductory chapter. This chapter will show how little academic attention has been paid to Intelligence in Probation and in doing so this study will firmly position itself within the vanguard of Intelligence related research in that setting.

The sections beyond this introduction provide a breakdown of literature covering the main research questions in context. Subsequent sections uncover the main, relevant themes and theories from the intelligence domain in a context relevant to this study. This chapter will compare, contrast, and provide critical evaluation of relevant contributors such as Gill and Phythian (2012, 2016) on intelligence systems, Flood (2004), and James (2013,2014) on the National Intelligence Model and Ratcliffe (2005,2007) on intelligence and the 3i Model amongst others.

This chapter will show how a review of the literature uncovered several models of intelligence in adjacent domains and how these were considered as

useful frameworks for this study before Ratcliffe's 3i model was chosen for that purpose. The chapter will also show how the component parts of other, established, intelligence and policing models were used to construct more granular avenues of enquiry beneath the 3i framework.

The literature review served this research in two major ways; it is Integrative in that it provides a summary of the themes and conclusions of relevant, previous work. Understanding the theoretical underpinning of previous work provides the researcher with the tools to analyse fieldwork data in the appropriate context. By reading associated literature the researcher was able to identify and consider methodological avenues of approach. This enabled the researcher to determine the methods outlined in the following chapter. Although this chapter is a stand-alone literature review, the material referred to here will be drawn upon during further chapters of this study.

The chapter will now turn towards the lack of academic attention to probation intelligence work before offering discussion and analysis on the main focus of intelligence literature in the associated domains.

As late as 2019, even after twenty years of implementation and scrutiny of Intelligence Led Investigation in Policing, Gemke *et al* (2019) put forward the view that even the literature on ILP in that area was small. The lack of academic coverage offers a conundrum to this study in that the literature review revealed no academic texts specifically pertaining to intelligence and probation. The literature reviewed here will show that many law enforcement agencies have or are in the process of becoming intelligence led organisations and the question of

whether the probation domain will follow this trend comes with levels of consideration. It is noted that there may be dissenting positions on how probation wants to be seen and there might not be a single view. However, given that the National Probation Service sought to introduce an intelligence mechanism into its organisational architecture in 2019 this would strongly suggest that on an organisational level, the NPS wishes to become intelligence led. Now that re-unification is underway, arguably this process will take longer due to a myriad of computer systems, processes, and procedures from twenty-one former contract package areas which will not be re-aligned until 2024 (HMPPS, 2022). Additionally, a philosophical question presents itself when one considers the nature of probation work and the idea of intelligence. It is entirely possible, given the history and nature of probation provided in this work that an intelligence process might be an uncomfortable addition to the existing operation. The literature reviewed here presents the rise of risk management in a universally negative light, commentary on its continued use in probation work is accompanied by commentary on the decline of traditional case management approaches (Fitzgibbon & Lea, 2014, p.27; Tidmarsh, 2020, p.103) . Intelligence, therefore, if defined carelessly, could be presented to those in the Probation domain as an infectious agent, a pathogen being forcefully or negligently introduced to an established organisation, as another ill-conceived, imagined-Taylorised addition to the creaking burden of the unpopular risk-management probation environment. However, this study posits, if purpose and position are clearly defined and change is managed appropriately, then the possibility exists to reveal the obvious

similarities between current tacit probation work regarding intelligence use and what constitutes a recognised intelligence led organisation (Younanzadeh,2021; Anderson,2022).

The en vogue topic of probation research during the time of this study appeared to be focussed on the “What Works” debate in relation to desistance from crime (Hofinger, 2019; Fox, 2016, Webster, 2013) a debate purported to be re-ignited by the Transforming Rehabilitation agenda. Commentators such as McNeill (2006,2007,2012) and Maruna (2004) Berman & Grimwood (2012) providing analysis for the desistance debate and neither the Ministry of Justice, the National Offender Management Service nor the newly created Probation Institute offering any direction with regards to the area of Intelligence during the period in which this research was underway. In the 2012 “What Works” research paper on reducing reoffending, Berman & Grimwood mention Intelligence once in the context of prison officer corruption and the efforts that should be made to stem the flow of drugs in prisons. Analysis of probation literature most cited in the last twelve months reveals the continued focus on familiar themes such as desistance (Morris et al, 2021), probation practitioner experience (Martin & Zettler, 2021; Gladfelter & Haggis, 2022; Shepherd, 2019) practice and offender supervision (Harding et al, 2022; Ruhland & Scheibler, 2021; Sanders et al, 2022), professionalism (Tidmarsh, 2022). These themes of Probation literature are important in that domain and have been examined in the appropriate context for this work. The contemporary probation literature of particular interest is the emergence of analysis on the re-unification and the specific work on IOM from

Cram (publication imminent). Cram has provided the researcher (via a third party) a proof copy of his forthcoming book on IOM which has provided a level of corroboration to this work regarding IOM. Cram has provided specific insights regarding police activity in that area which corroborate the findings of this study.

Given that research in the probation domain appears concentrated within aspects of its professional practice, it is worthwhile discussing the supervision aspect of probation work in the context of academic writing on intelligence. For instance, the human intelligence work provided by Gill and Phythian (2012, p.130) could arguably be considered alongside the supervision aspect of probation practice. Analysis of the two reveal similarities in method and practice. For instance, the interview between a probation officer and an offender shares similarities with a meeting between a police officer and a victim of crime or an informant. In both instances the meeting is carefully considered before, during and afterwards, the conversation is managed, and the results can affect not only the two parties involved in the interaction but the wider organisation as a whole.

Intelligence work within probation does not appear to have any cultural currency. The literature review reveals that probation is an organisation entrenched in debate surrounding what constitutes professional practice in probation. As probation literature currently does not concern itself with the emerging domain of intelligence one can deduce that intelligence work is outside what constitutes professional practice of those involved in face-to-face offender management.

Tidmarsh (2022) recently revisited professional practice in probation and provided academic insights on the operational activity of probation officers. The

work vindicates the outcome of the literature review here as it does not consider activities of wider probation staff. The contemporary insights provided by Tidmarsh are a continuation of many years of reflection and numerous reports on how probation officers operate (Larson, 1977; McWilliams, 1983; Abbott, 1988, May & Annison, 1988).

In view of the relatively new area being researched, the approach to the literature review was first to cast a wide net of journal articles, books by single authors, edited collections of essays, conference papers, online articles, trade publications and policy documentation published by relevant agencies. This wide net approach is not without precedent, even as late as 2011 Alach (2011, p.78) highlights the need to reference military texts when conducting an academic study surrounding police intelligence.

Although arguably a new area of study when considered in an academic context, the Intelligence arena has started to produce a body of knowledge relating to the topic of Intelligence itself and within the last twenty years of Intelligence-Led Policing. Combining intelligence literature with that of business and systems theory has provided the researcher with a strong foundation with which to position this research. Furthermore, the exercise has enabled the researcher to bolster the broad research questions with those that are more granular. As mentioned previously, the review found not one single piece of literature pertaining to Intelligence in a Probation setting, however, policy documentation from the Ministry of Justice, collated and analysed alongside local guidance on the integrated management of offenders did find that the term

“Intelligence” was used in a broad and sweeping sense. The review revealed a broad reference to the extended role of the police intelligence gathering and the use of this during targeting of certain offenders for specific interventions by Wong & Senior (2011) in their published review on five pioneer Integrated Offender Management Units.

A major theme uncovered within the literature is one in which the academic community has sought to review and analyse the uptake of Intelligence-Led Policing. Commentators such as Gill (1997) Ratcliffe (2005), Gul and Khule (2013) Darroch and Mazerolle (2012) have all conducted similarly themed studies into the emergence of Police intelligence units or to assess the implementation of Intelligence Led Policing (ILP). This research project differs from the implementation studies in the police, not just because it is set with in a probation environment but because of a fundamental difference in those environments. The literature shows that ILP is a mandated business system in UK where police forces must integrate the National Intelligence Model into their operation (James, 2013), whereas, Community Rehabilitation Companies have no such mandate.

Intelligence-Led Policing styles also developed in North America although the de-centralised nature of policing in the USA has produced some challenges to the implementation of ILP in the same way as the UK. However, there have been centrally agreed initiatives such as the criminal intelligence sharing plan (Carter & Carter 2009). Reviewing the literature on these implementation studies has enabled this research to assert that assessing implementation (Darroch & Mazerolle 2012) of such activity within the policing function is a relatively

straightforward endeavour because the organisations concerned are supposed to conduct intelligence led activities. Organisations with an intelligence mandate have policy documentation, training, and operational guides for researchers to refer to. Researching Intelligence systems in those areas has an academic map which a researcher can follow whereas in the UK, the Probation Service did not operate with an intelligence mandate at the time this research was carried out. This lack of mandate makes this research unique and partly explains the lack of academic scrutiny. It is also prudent to say that there was a lack of any grey literature on the subject.

Having exposed the lack of specific literature, the work of the aforementioned academics does present this research project with a broadly similar path to follow, albeit one adapted for the probation environment. Reviewing the available literature revealed that the central aims of this study and some of the methodological constructs mirror those of the early pioneers such as Godfrey and Harris (1971) who cover the police intelligence process in a largely pre-computer world. In addition to offering their insights into the intelligence process they Godfrey and Harris also provide guidance on the makeup of an intelligence unit. Many of the aforementioned books and articles also cover intelligence report writing, unit staffing and even their training.

Re-writing lessons previously learned is a particular theme within the literature and likely stems from the ad-hoc nature of training and writing on the subject. For instance, some of the ground covered by Godfrey and Harris (1971) was previously provided by Glass & Davidson (1948) and again many of those

lessons were effectively re-packaged by the International Association of Law Enforcement Intelligence Analysts (IALEIA, 2002) in a booklet sharing best practice on setting up an intelligence analysis unit. The aforementioned work of Godfrey and Harris is also referenced by Schneider (1995) whose seminal article presented his theory of a normative intelligence model. Schneider's (1995) model proposes four overarching phases and within these, nine separate stages. The staging of Schneider's work encouraged this researcher to split the broad research questions expressed in the first chapter into smaller and more distinct areas of investigation whilst still positioning the research beneath the broader framework of Ratcliffe's 3i model.

The rationale for adapting the 3i model to incorporate the work of Schneider and others is that this earlier work was by necessity more granular with regards to the activities carried out by officers conducting intelligence work. Ratcliffe, however, having written a large body of his work in an environment where Intelligence-Led Probation has already been established provides less detail in that area. The granularity comes from the timing and position of the early literature in that the writers were contributing to a relatively new field and appear to have been focussed on the operational practicalities of how to set up a working intelligence unit. Aligning the broad themes with the sub-themes sitting beneath was especially pertinent to this study in that it offered the researcher the opportunity to construct a layered set of research questions. This and the following chapter will show how these more granular questions are more focussed

and glean more detailed responses forming a direct route from Ratcliffe's broad 3i model down to Schneider's more granular nine stage approach.

Schneider's work was examined alongside more contemporary studies such as Ratcliffe's (2007) and James (2013) work on Intelligence Led Policing, however, rather than explore the Policing side of Intelligence as the above academics have done, as has been previously stated, this study used their work to glean an understanding of the methodology they used to see if it could be adapted to examine intelligence systems in the non-traditional area of CRC probation work.

This non-traditional notion is relevant because probation is a new area for intelligence study and this project will consider any collaborations and partnership activity undertaken by the CRC with regards to information sharing in context. As the following paragraph shows, the literature revealed that the police have an uneasy relationship when it comes to information sharing and the trust placed on outside agencies.

When considering organisational pathologies linked to information sharing difficulties Sheptycki (2004) offered eleven pathologies disrupting the movement of information across organisations, suggesting that it is an issue of institutional friction not confined to a lack of inter-agency co-operation but can also occur within a single agency. Bullock (2012) reported analysts in the police service avoided using partner data sets as a matter of routine, not because of the technical difficulties but the main reason given was that the data may not be subject to the same level of scrutiny as their own. Bullock's report of the police

not using partner data sets is a theme which will be explored in this research. Wong & Senior (2011, p.9) alluded to the need for the “rigour of multi-agency meetings to overcome the over-reliance on Police intelligence”. Bullock’s research is particularly telling in relation to the wider aspect of intelligence in that the “easy co-operation” between police and probation reported by Mawby & Worrall (2011, p.17) does not appear to extend from a general agreement to work more closely together to the actual sharing of intelligence data. Seba & Rowley (2010) note the importance of knowledge sharing with regards to police performance; the suggestion put forwards is that it is influenced by their occupational culture. Specifically, sighting team culture as a factor in this. Kleiven (2007) suggests a police rejection of community intelligence in favour of more recognisable information coming from police data. That particular aspect of Kleiven’s argument does not bare close scrutiny in that Kleiven includes informants and police data as one and the same when arguably informants are from the community. That point notwithstanding, the main thrust of Kleiven’s argument being a rejection of intelligence from outside sources does appear to corroborate the associated literature included in this study.

Understanding the sharing of data is a fundamental part of this research. Interpreting the environment and influencing decision makers (the first two research questions) arguably depend upon information sharing therefor the study considers data sharing and partnership. Gill (1997) found that informal contact between Police units sharing intelligence often transcended formal arrangements, this finding echoes earlier work by Godfrey and Harris who state the following:-

“External relations as practiced today by most intelligence units, are often characterized by mistrust or jealousy are frequently limited to informal conversations between longstanding professional intimates.” (Godfrey & Harris, 1971.p.51)

It is this idea of informal arrangements which was first identified during the exploratory research phase of this research project which surfaced further during fieldwork and will be discussed within the data analysis and findings in a later chapter.

The narrative provided by Godfrey and Harris went further and provided insight on the mistrust which may be experienced within the police when civilian intelligence workers carry out activities with uniformed colleagues which results in what they term “The Problem of the non-badged employee”.

“In some law enforcement agencies, where there is a longstanding bias against employing nonsworn personnel in other than administrative or housekeeping functions, the sudden arrival of “civilian” personnel may be resisted for some time. Resistance will not only come from badged personnel in the intelligence unit who may feel their temple has been desecrated, but also from higher command echelons suspicious of civil service employees diluting the discipline of the agencies sworn officer ranks.” (Godfrey & Harris, 1971.p.68)

Even though written in 1971, Godfrey and Harris’ findings parallel those of Mawby and Worrall (2011) who reported a history of animosity between police and probation, with the former having more authority or power, relative to the latter. The comments made by Wong and Senior as late as 2011 about an over-reliance on intelligence provided by the Police is another indication that the situation has not changed. Bullock (2013, p.137) adds to this in a study considering information derived from the community where although it is agreed in principle to use data derived from other agencies, the practice reported by police analysts was that they “did not routinely use data-sets generated from non-policing agencies”. The

literature review has provided multiple sources of evidence to suggest that in a partnership environment concerning crime control or the management of offenders, there could be a reliance on using police data and a rejection of probation (or other) data. As previously noted, the use of probation data in this context will be explored via fieldwork and reported on in the analysis chapter.

Due to a relatively sparse selection of focussed material (compared to more established academic endeavours such as medicine or law) this review has drawn upon a plurality of domains such as business analysis and the work of Yates, Cadle and Paul (2014) as well as the work of Eric Trist (1981), Von Bertalanffy as cited in Toft & Reynolds (1997, p.16) and Meadows (2008) on systems theory. The study will also make use of the material provided on Soft Systems Methodology as it is purported by exponents to be a learning system in itself, and therefore may offer this study with a framework to follow Checkland & Haynes (1994).

By casing the net wide and adopting a general approach from business intelligence and systems theory down to the more specific National Intelligence Model, the 3i Model and the work of Schneider, this chapter will not only position this study within the literature but will also signpost and provide context and meaning to the methodological framework employed to carry out the investigation. The final task undertaken during the literature review is to consider the probation perspective via the lens of Integrated Offender Management as it is mainly through this lens that the research project is to be seen. The next part of this

chapter will now provide a detailed exploration and analysis of the literature on Intelligence and Intelligence Systems.

Explaining the nature of Intelligence is essential in order to understand the context in which it is referred during this investigation. Intelligence serves as an aid to decision making and Kahn's (2008, pp.4-16) suggestion that the fundamental purpose or principle of intelligence is to optimise one's resources is a solid one. Unfortunately for Kahn, this revelatory principle is predated somewhat by the British Army Intelligence Corps motto "Manui Dat Cognitio Vires" which roughly translates as Knowledge Gives Strength To The Arm. Kahn asserts that intelligence is an auxiliary element in military campaigns however Kahn also posits the notion that battles are won by brains. What is it these brains are doing if not collating information, analysing it in the context of battle and planning the next intervention?

Despite some commentators such as Kahn (2008) arguing the contrary, the position of intelligence as a standalone subject has changed. Quoting Henderson's, *The Art of Reconnaissance* (1907) which plays down the role of intelligence saying that information is not in the same class as tactics, organization, numbers, or weapons because of a perceived indirect influence against the more direct influence of tactics etc. Henderson states that intelligence is a force multiplier and facilitator of command. At the time this was written, Intelligence was a service to the military, not an arm, at least in the United Kingdom, however as a later paragraph will show, this has now changed. By offering a theory of Intelligence Kahn opened several fascinating debates not

least is the assertion of Intelligence being separated into two distinct categories, physical (things such as vehicles which can be observed) and verbal (such as intercepted conversations which have intelligence worth to the listener), but this study asserts that the ill-defined explanation of these is closer to intelligence collection rather than types or categories of intelligence. The assertion by Kahn that verbal intelligence separates humans from animals suggests that animal alarm calls such as those made by Meerkats to warn of danger are not verbal (BBC, 2018).

Context is important here as Kahn quotes Henderson in an arguably early military text to bolster his claim of intelligence being an auxiliary function. As the earlier example of intelligence shows, it can have a direct influence on an area of intelligence interest. To suggest that it has no direct influence in the present time is to pre-suppose that armed conflict would start without any prior analysis. Henderson is arguably right to determine that Intelligence was an auxiliary function at the time of writing but by 2008 (the time of Kahn's article) the same cannot be said. The influence of intelligence in the military domain appears to have grown at least in Great Britain as on 01st February 1985 the Intelligence Corps of the British Army was officially declared an Arm which is a unit providing combat support rather than a Service which is a unit providing rear support (Army.MOD, 2020).

Kahn appears to suggest that military campaigns start without having first considered intelligence.

“An invading force can march about the countryside, imposing its will, without needing to know where the enemy is. If it learns that the enemy plans to counterattack, it shifts to a defensive mode – and then it requires intelligence.” (Kahn, 2008, p.10).

Kahn in this instance pre-supposes that aggressive action is undertaken without first engaging intelligence; a position which does not withstand close examination in the information age. Furthermore, the suggestion above is that seizing the initiative will only reduce uncertainty for the first aggressive act on the part of the military. After which intelligence becomes necessary. This study asserts that any modern military would consult intelligence before contemplating any aggressive action and the organisational restructuring to include The Intelligence Corps as an Arm strongly suggests that. The Intelligence Corps being designated as an Arm rather than a Service along with the changes to policing which now uses the “Intelligence-Led” prefix provides further substantiation that Intelligence has moved from the background to the forefront in these intelligence using domains.

Chapter one discussed the initial stages of the project where the need to distinguish between what is meant by information and what is meant by intelligence became apparent. The following paragraphs serve to telegraph the fundamental difference between the two. In terms of relevance, this study cannot hope to cover the rich history of Intelligence in anything but a brief fashion. Starting with the broad research questions, this chapter will now examine the literature pertinent to intelligence, and the environment in which this research is grounded.

Interpreting the Environment

When carried out in the business domain, environmental analysis is undertaken using a framework known as PESTLE (Yeats, 2008, p.43). Undertaking a PESTLE analysis comprises of activities which allow an organisation to better understand any Political, Economic, Sociocultural, Technological, Legal, and Environmental issues pertaining to the external business environment. The recognised formula to undertake such analysis is testament to the maturity of the domain and it is no surprise that such a framework does not exist in the Probation domain. Yeats goes on to describe that the Business domain offers further analytic avenues such as SWOT (Strengths, Weaknesses, Opportunities, Threats) with which to undertake strategic analysis of the environment and that PESTLE and SWOT can be combined. In the Business domain, it is the responsibility of the business analyst to undertake such activity (Rollason, 2008, p.19). As Bullock (2012) has stated, it is generally recognised that information about the environment circulates both formally and informally. This study asserts that this is similar to the tacit and explicit knowledge uncovered by Trist whilst studying sociotechnical systems at the Tavistock mining institute (Trist, 1981). A major endeavour of an intelligence system is to retrieve information for analysis, indeed the Intelligence Cycle as mentioned in the previous chapter is comprised of the functions Collection and Collation for this purpose (Gill, P & Phythian, 2012). As the literature has shown previously, an intelligence system has as a required step, the need to collect and collate types of information. Gill and Phythian (2012, p. 130) provide a list of different types of security related

intelligence in what they call “the Int’s”. The description of each source is obviously broad as to try and list every possible source of information would appear folly.

Table 1 – Gill & Phythian’s list of INT’s

Type	Name	Description
OSINT	Open Source	From open sources, news media and the internet.
PROTINT	Protected	Personal information in possession of states or companies.
HUMINT	Human	Obtained by informers, undercover officers and also from interrogation
SIGINT	Signals	From signals – interception of telephone calls, eavesdropping etc.
IMINT	Imagery	Photography and electronic imagery
MASINT	Measurement	From measurements and signatures such as sensors for detecting drugs or explosives.
SOCMINT	Social	Social Media such as Facebook and Twitter.
COMINT	Communications	Communication interception, internet, telephone data and call interception
TELINT	Telemetry	Vehicle performance
ELINT	Electromagnetic	Similar to measurement, concerning radiation

The information streams which make up the above list are entirely separate entities. One collection process and resulting intelligence derived from one type of information does not necessarily have a connection to another. One might consider that each of these streams is itself a separate intelligence system Sheptycki (2004).

The process of compiling a similar list of broad probation “INT’s” is appropriate for this study and the compilation of the list will be discussed in a later chapter. Although this study will consider the above list to determine something similar for this study, it should be noted at this stage that the above list is not probation centric, probation operations do not necessitate the use of trace detection machines for explosives for instance. In the Military domain, the intelligence cycle starts with an Intelligence Requirement which is given to the Intelligence Analyst by the Operational Commander who will articulate their requirements depending upon the area of their intelligence interest (MOD, 1991). In the Policing domain, criminal intelligence analysts now have a toolbox of products and processes which they can employ to undertake to interpret their environment. The NIM framework relies upon a formalised set of product types such as strategic and tactical assessments as well as target and problem profiles which provide intelligence on local issues, cross border issues and serious and organised crime (NCIS, 1999). As has been previously mentioned the literature could not find any reference to anything like this in relation to probation work however, that is not to say that the Probation domain does not plan, have key performance indicators or strategic objectives. Key indicators and performance

targets are outlined in the strategic plan of the Probation Trust being studied (CRC, 2015, p.6). A key concept found within the literature is the idea that intelligence analysts proceed in an environment where they do not have all of the data at their disposal (Phythian, 2017). The attempt made within this study to provide a list of probation intelligence sources is undertaken on the same understanding. The probation Int's for this study may be viable information sources which can be used as or further refined into intelligence, they may not neatly provide all of the data required to interpret the criminal environment and to influence decision makers. By way of contrast, Phythian (2017) also comments on experimental examples from Heuer (1999) which infer that an abundance of data is not always the route to stronger analytic outcomes.

Influencing Decision Makers

Ratcliffe (2004) explores this challenge of influencing decision makers, going as far as saying that managers often do not know what to do with an intelligence report. Further work by Ratcliffe (2005, p.448) reported a "Sisyphean" air from some Intelligence staff respondents who explained that their products were not often read or acted upon. James (2014) adds to this and offers that in the past, intelligence was not seen as a priority for managers and considers the difficulty an intelligence led concept had breaking through an entrenched reactive policing paradigm.

Ratcliffe & Giudetti (2008, p.122) are somewhat unclear on a particular aspect with regards to influencing decision makers and in order to alleviate any

confusion within this study it will be addressed here. When talking about influencing decision makers, the aforementioned text interchanges Intelligence Products with Intelligence Analysts leaving the reader in doubt as to the meaning. A statement in the lessons learned area of the above 2008 paper indicates that “intelligence products can influence the thinking of key decision makers” and under an area of the same paper exploring relationships with decision makers the text states “some analysts are still reticent about exercising their increased influence”. This study asserts that it is the intelligence product which is influential and not the intelligence analyst themselves. The distinction is an important one to make because Burcher & Whelan (2018) have interpreted Ratcliffe’s work as though it is the “*analyst that has influence over the decision makers*”. In earlier work when discussing where Intelligence fits in the 3i model, Ratcliffe’s (2003, p.4) thinking about where this influence comes from is clear “*An Intelligence product which is designed to shape the thinking of a decision maker*”. Ratcliffe’s position is again unclear when defining the analyst’s role Ratcliffe (2004, p.9) acknowledges the responsibility placed on an analyst “*to construct an image of the criminal environment and convey that picture to decision makers*”.

The view of this study is that the body of work provided by Ratcliffe does not clearly provide evidence of a change in the analyst role from an interpretive role to that of an influencer. Alach (2011, p.84) notes that the conflict over the role of the analyst is acknowledged by other commentators (Drell, 1993, Cope, 2004, Gordon 2007) although Alach suggests that the debate is over, and that the role of the analyst is not to provide suggestions for operational action. Alach quotes

Handel (1989) who when writing on the military domain concurred that it was not the business of an analyst to suggest actions to be carried out in relation to intelligence received. The idea expressed by Alach is entirely in keeping with the researchers own experience as an analyst in the military and the training provided by the Defence Intelligence and Security School (MOD,1991).

The lack of understanding over the role of the analyst in policing is noted in the literature above and is echoed by commentators such as Belur & Johnson (2018) who reported from their study that analysts working for the police would like to be more involved in the dissemination process of their intelligence products. Respondents to Belur & Johnson indicated that their reality was a case of just sending analytic products to those that might read them. Given the confusion outlined in the policing literature this study posits that there is a balance to be struck between the recognition of analytic capabilities and the presentation of analysis via intelligence products.

This study asserts that whilst undoubtedly, an analyst should be a skilled communicator where the need arises to explain the minutia of detail to a non-technical audience. However, it does not necessarily follow that the analyst themselves is the influential part of the information exchange. As an experienced intelligence analyst, the author maintains the position that it is the actual intelligence, the analysed information, presented within an intelligence product which should contain the influence and not the analyst themselves. For the analysts themselves to impart influence suggests to the author that the intelligence is second to personality and the style of delivery.

Given the work carried out by Probation Officers to assess the risk posed by offenders they are responsible for in the community the review found many references to defensible decision making. Tuddenham (2000) argues that public protection and risk assessment are central to everything that the probation service does. Essentially an individual Probation Officer will make decisions around supervision of offenders based upon the particulars of that individual on a case-by-case basis, should the worst happen, and a serious further offence occur then the supervision plan and decisions made around the offenders risk in the community will face scrutiny (Ansbro, 2006). Whilst this does not reflect the research question directly, the study suggests that it does provide insights into the decision-making process of Probation Officers and in the interests of an overlapping literature review it is important to explore the area. The National Offender Management intranet pages list the following practical steps to making defensible decisions: -

- Ensure decisions are grounded in the evidence.
- Use reliable risk assessment tools.
- Collect, verify and thoroughly evaluate information.
- Record and account for your decision making.
- Communicate with relevant others, seek information you do not have.
- Stay within agency policies and procedures.
- Take all reasonable steps.
- Match risk management interventions to risk factors.
- Maintain contact with offender at a level commensurate with the level of risk of harm.
- Respond to escalating risk, deteriorating behaviour, and non-compliance. (NOMS, 2011)

The literature shows that probation staff involved in offender management are decision makers in the sense of intelligence systems and that officers are aware of their accountability with regards to assessing the risk posed by offenders in their charge (Kemshall, 1998). The literature shows that there is a body of evidence suggesting that probation officer practice is evidence based (Viglione, 2017) which suggests that the day-to-day decision-making process of offender management would also involve evidence or in this case intelligence. Given the literature provides no direct commentary on probation analysis or intelligence, it is within the remit of this study to attempt to uncover to what degree probation staff are influenced by the intelligence they are provided with.

Impacting the Environment

The study by Ratcliffe (2005) considered the issue of “impact” by examining the perceived value of intelligence and in a later study, Ratcliffe and Giudetti (2007) used the 3i model and considered the impact of an intelligence led operation, in this case the impact was measured by arrests and incarceration. In testing the 3i model, Gul and Kule (2013) charted types of analytic product and the frequency of their use by various policing roles but did not actually test the last part of the 3i model. The literature provided by Ratcliffe (2005) states that all three stages of the model must be present for an intelligence led approach to policing, and that the model can be used to: -

“examine an intelligence system component by component, and in doing so sketch out an image of the functionality of the intelligence system as a whole.” (Ratcliffe, 2005, p.440)

The proposal for this study is to include all three areas of the 3i model and as IOM schemes do not have a centralised suite of KPI's regarding their impact on crime, to do so will require a bespoke data collection and analysis exercise. Similar schemes have nationally collated key performance indicators, general offending for instance, has the Local Adult Reoffending Measure which also reports on Prolific and Priority Offender cohorts. The methodology chapter will provide details of how the exercise adopted for this study will be carried out.

The chapter will now turn towards Integrated Offender Management and will discuss their inception, the collaborative approach and will discuss the early evaluations carried out in pioneer areas.

A brief introduction to Integrated Offender Management schemes

In its 2009 policy statement on IOM, the Ministry of Justice stated that IOM was the "Strategic Umbrella" that brought together agencies to manage a locally defined cohort of community-based offenders using "Pooled local resources" (Ministry of Justice, 2009). The Home Office sought to group together several existing schemes such as Prolific and Priority Offenders and the Drug Intervention Programme into a new approach to offender management which would be a less intensive approach providing for those offenders not yet suitable for PPO (MOJ, 2009). This strategic umbrella was designed to complement existing arrangements such as Drug Intervention Programme, PPO and MAPPA although in the area under scrutiny, MAPPA offenders were not included in the IOM cohort. Originally, arrests and convictions for offenders on the PPO scheme were

monitored using a joint police and probation system called JTRAK, however by the time this study came about JTRAK was not available to the probation service. The bespoke IOM tracking database IDIOM was not being used by the probation area at the time of this study and according to the recent thematic evaluation (HMIP, 2020) the system is still only being used in fourteen police force areas. The thematic evaluation uncovered that several IOM schemes were comparing reconviction rates before and after IOM scheme as an outcome measure. Beneath the heading of success criteria, the 2009 MOJ document states that the goals of IOM are to increase local co-ordination of offender management to reduce crime and reoffending. Unfortunately, the MOJ document does not offer guidance as to how local co-ordination might be achieved. The co-ordination goal itself bolsters the case for using IOM as a lens in this study. The guidance provided on implementing IOM appears to provide little in regard to its practical application. The seventeen-page (MOJ, 2009) policy statement provides little more than a direction to work together, encouraging probation partners to build on established management principles of MAPPA, Drug Intervention Programme and existing PPO schemes. With no legal requirement to adopt an IOM scheme, no standardised performance framework, no code of practice and no pressure to adhere to the principles of IOM, this study offers a useful way of uncovering the practice adopted and the opportunity to document any associated intelligence processes. The area under investigation for this study has six IOM schemes which are co-terminus with local authority boundaries. Staffing is separate from other probation teams but in most cases the staff occupy the same buildings. The

schemes undertake the supervision of offenders at a high risk of reoffending. Each scheme has a separate cohort of offenders which are managed on the scheme for twelve months with their offending closely monitored. Generally, the offenders engage in acquisitive crime but their inclusion on the scheme can be determined by additional local priorities (Wong and Senior, 2011). An offender can be re-selected for the IOM scheme even if they have just finished the previous scheme. IOM schemes and those like them appear an attractive tool with which to combat crime at least with regard to the use of resources. When one considers a prolific offender and the disproportionate affect that they have on crimes committed, dealing with that offender, and greatly reducing the number of crimes they commit is an obviously worthwhile tactic (Heaton 2000). Considering organisational culture and networks constructed from different organisations, IOM is a goal directed formal network Whelan (2016). The organisations primarily involved in IOM are police and probation (Hadfield *et al*, 2020) although other organisations are involved in the schemes. The primary organisations have goal consensus which is to reduce re-offending and they have shared control over the governance of the schemes (Whelan, 2016). Cram (2020) whilst exploring changes to police culture through an IOM lens found that the culture of officers working within IOM did not change. Although not the focus of Cram's study, Cram offered evidence that police culture was seen to influence probation officers. Cram suggested that a minority of probation officers used negative language to describe offenders; Cram did not provide evidence suggesting that this had always been the case for those officers. The absorption of police culture is also

noted by (Kemshall and Magure, 2001) in what they saw as the policification of probation, whilst Nash (1999) offered the term 'polibation' officer to describe the phenomenon of a probation officer allowing their role to become subsumed by actions associated with policing. Nash updated his position on this in 2008 arguing that the new Ministry of Justice would "decouple Police and Probation" a sentiment which is ratified by Vanstone (2018) who indicated a return to probation core values. Furthermore, Cram goes on to suggest that IOM is used by police merely to glean further intelligence on offenders, stating that they would accompany probation officers to appointments merely for this purpose.

Whelan (2016) notes the significance of organisational culture within networks and argues that it can be changed and shaped by working together in networks. If the findings for this study show that IOM staff engage in intelligence work more than their general offender management colleagues this may be an indication of cultural change due to working in close proximity to the police.

As the following paragraph will show, the idea for the IOM schemes is that they are jointly managed beneath an umbrella of local services, the major partners are the police and probation and in that respect the schemes exhibit a major principle of socio-technical systems in that workers are jointly responsible for the outcome of their work.

Process and thematic evaluations of IOM schemes.

The earlier comments in this chapter covering the non-statutory nature of IOM and about the 2009 MOJ policy statement being little more than a direction to work together are corroborated by reviews and evaluations. The process review by Wong and Senior published during 2011 in which no definitive model emerged across the five pioneer areas studied at the time. Further corroboration is found in a recent joint evaluation carried out by HM Inspectorate of Probation and HM Inspectorate of Constabulary and Fire & Rescue Services in 2020. In 2011, the evaluation of targeting practices revealed a wide and varied criterion, sometimes conflicting due to the weight given to certain crime types by IOM partners. The evaluation uncovered police intelligence and police led tasking meetings as common methods of selection amongst each of the five sites in the study. The report explains that the “rigour” of multi-agency meetings was useful to counteract any the over-reliance on police intelligence and that these meetings included intelligence from wider scheme partners such as the VCS (Wong and Senior, 2011). The 2020 thematic inspection indicated that there still exists a overreliance on the core agencies (probation and police) to deliver the scheme, stating that there was limited involvement with other agencies at an operational level. The thematic inspection uncovered that full co-location was only achieved in one of the seven areas inspected and that this co-location aspect was key to quality delivery. The report indicated that the lack of co-location impacted on the quality of cross-agency relationships and information sharing; this point will be explored during this study when considering any partnership approach taken with regards

to the sharing of intelligence. A data collection mechanism to be used within this study is the IOM cohort allocation process as this is indicative of how the probation service gains an understanding of the criminal environment with which it is faced. The thematic inspection found that in the IOM areas under inspection, the allocation practices were inconsistent, recording allocation decisions was inconsistent and therefore the reasons for allocation were unclear. The thematic report also provides commentary on a study carried out by Annison *et al* (2015) in which the police officers involved with IOM found that their role had changed requiring them to carry out home visits, take offenders to appointments. Annison found that police saw many tasks as probation activities which took them (the police) away from more important intelligence work. It is apparent that partnership is key to the success of IOM schemes and the study will consider whether culture and mission help or hinder that success. Similar tensions dogged Crime and Disorder Reduction Partnerships, an early evaluation reported tension between statutory and non-statutory members regarding power differentials in the partnership (Home Office, 2002).

Before turning towards Intelligence systems, the chapter will briefly discuss two other significant policing models initially explored as possible frameworks for this study.

Emerging policing models, COMPSTAT, Community and Problem Orientated Policing

The introduction to this research alluded to a plethora of policing models purporting to contain some semblance of being “Intelligence-Led”. The purpose

of the next few paragraphs is to introduce and examine these other relevant, major achievements of the last twenty years and place them in the context of this study. Problem Oriented Policing or “POP” as it is commonly known was founded by Professor Herman Goldstein and is a proactive, preventative system designed to tackle specific, discrete crime and disorder problems (Goldstein 2001). The first POP guide was introduced in 2001 along with a practice related website. The University of Albany established the centre for Problem Orientated Policing in 1999. The evaluative nature of POP warrants its inclusion here in that after attempting to tackle a particular crime problem, practitioners evaluate the project’s success or failure and feed that knowledge into new strategies. The isomorphic, cyclical process is clearly intelligence led. The localised, crime-specific nature of POP denotes it as less of a model or system than a collection of discrete, situational activities. POP activities are a particularly strong draw for Community Disorder Reduction Partnerships (CDRP) as they encompass the widely used “Victim, Offender, Location” aspects of the problem analysis triangle (NCSN, 2010). A later section in this chapter will telegraph how the problem-solving approach was incorporated into the National Intelligence Model. Community Policing is the broader paradigm in which CDRP’s exist. At its broadest sense, Community Policing is the bridge between the insular world of the police service and the actual people it is there to serve (Walsh & Vito, 2004). The general ethos is to have a partnership between those in the community and the beat officers on patrol in the hope that it will foster trust and understanding. In terms of transparency, community policing is evident in the region in which this study takes

place, the police service website includes pictures and contact details for the local inspectors in each area.

Another high-profile system, CompStat, (computer / comparison statistics) was introduced in New York in the 1990's by the then Police Commissioner William J Bratton. CompStat was first used as an operational tool within the Transit Police. An accountability process is at the centre of CompStat (Walsh & Vito, 2004) the process mandates the attendance of police officials to regular meetings to discuss area crime levels and thus expose that information to their peers. The overall process then involves specific targeting of crime spikes and continued follow up which clearly compliments the problem-solving approach as Weisburd (2003). The history of CompStat from its origins charting Transit Police crime to the accountability meetings and complimentary problem-solving practice appear to this study as little more in practice as a re-invention and upscaling of the work of August Vollmer. Whilst CompStat is credited to a considerable lowering of crime (NY Mag, 2018) it is the view of this study that CompStat is really just the addition of crime statistics to better direct ongoing police activity. CompStat does have an additional accent on accountability for those high-level Police officials who would otherwise not have to justify their operational decisions using data.

The chapter will now turn towards intelligence systems, the reason to draw from this literature serves two purposes, the first is to introduce the concept and origins of Intelligence as an emerging academic subject and the second was to establish the context which would frame the concept of Intelligence within the

unique confines of this piece of research. As the title suggests, central to this investigation is to uncover an “Intelligence System”, therefore a natural progression for the literature review was then to consider material pertaining to systems design, in particular business and socio-technical systems.

Literature used to introduce intelligence systems.

The study posits that there are two broad organisational aspects to the domain of intelligence. The first aspect concerns the realisation that intelligence is useful and should be sought out, the second aspect is the prescribed, systematic production of intelligence. Literature covering the history of Intelligence such as the work of Flood (2004) and Jefferey (2010) provides insight into the realisation by different domains that obtaining intelligence is useful to their endeavours. Subsequent literature, for example the work of Luhn (1958) and Schneider (1985) is focussed on the operationalisation of the intelligence process. Christopher (2004, p.184) rightly describes Brian Flood as a primary architect of the National Intelligence Model, Flood having moved from Kent Police to NCIS (National Criminal Intelligence Service) to develop the model and add a strategic element. However, it is Flood’s (2004, p.38) own chapter in the same volume which gives a plotted history of the different styles of policing which were trialled since the 1960’s, these, including ‘Team Policing’, ‘Unit Beat Policing’, ‘Policing by Objectives’ and ‘Problem Orientated Policing’ to name a few, conceptualise the early thinking during which time the prevalent policing paradigm of officers on foot patrol was fundamentally challenged. Despite what Flood (2004, p.37) describes

as an 'Era of change and innovation' he maintains that the pace of change was slow and that it was not until the Baumber report of 1975 that the Association of Chief Police Officers brought about a force intelligence bureau in each police force and the Pearce report of 1978 which promoted inter-force intelligence capability. The two reports, Baumber establishing an intelligence unit in each area and then Pearce who effectively called for a joined-up system of intelligence exchange demonstrate the early building blocks of what would become a national model. This study will show that organisational capability and culture are factors in implementing any new system and that this is evident when introducing knowledge-based systems. Luen *et al* (2001) when considering knowledge management in the Singapore Police Force argued that the key to knowledge management within an organisation is to enhance the organisational culture so that staff recognise the value of knowledge management and will participate in the aspects of knowledge transfer.

The following paragraphs will explain the formalisation of an intelligence system not only as a method of investigative analysis and enquiry but as an organisational business model. The business model contains strategic business drivers, the formulation and standardisation of analytic products, a tactical decision-making process which leads to operational tasking and in theory, controlled crime and managed criminals. This is extremely important to this study because it demonstrates the theoretical framework for the production of Intelligence which is essentially the backbone of the thesis and informs the gap analysis process which is used during the penultimate data analysis chapter.

Intelligence systems in different domains.

Intelligence is an entity which exists independently of any particular domain. The separation from domain may be clearly understood by some practitioners this understanding is not clearly telegraphed within the literature. The independent distinction is an important one to make as some commentators appear confused, Burcher and Whelan (2018, p.140) for instance assert criticism of the Intelligence Cycle as being an isolated entity “not considering the broader law enforcement environment in which it sits”, seemingly unaware that the Intelligence Cycle was at first, documented from within the Military and that the cycle is nothing more than a staged process to be used in any environment. The intelligence pre/postfix such as “Military Intelligence”, “Business Intelligence”, “Intelligence-Led Policing” which appears before or after the domain indicates the independent nature of intelligence. This study suggests that Intelligence systems perform the same function as Decision Support Systems (DSS) which are referenced in the Business domain although DSS are almost exclusively described as computerised systems (Business.com, 2020). The application of technology with regards to decision support is not new, an early example can also be found in the probation domain, Mceachem and Newman (1969) mapped the decision options available to probation officers at a juvenile offenders first referral to them. The work was with the juvenile probation process in several California counties and resulted in the SIMBAD system which was able to analyse past data and provide treatment advice based upon probability predictions made about the individuals likelihood of reoffending and behavioural change. Arguably, the current Offender

Assessment System (OASys) referenced within this study is a technical descendent of the earlier SIMBAD system and understanding its position as an intelligence tool will form part of this enquiry.

The need to provide exact definitions of intelligence persists with Alach (2011) covering the ground again without success. The military, certainly in the UK does not appear mired in any controversy about the definition of intelligence and supplement their standard definition which was included in the introduction chapter with a commander's area of intelligence interest (MOD, 1991). This area of intelligence interest is whatever that person is responsible for, therefore in crime, it could be burglary or robbery, in business the sale of computers or the trends associated with a particular brand. The study suggests that recognising Intelligence as an independent area of business would greatly benefit the different domains in which it is practiced. A major benefit to this realisation would be the ability to cross-fertilise one organisation with the lessons learned in another. The findings from this thesis will provide that cross-fertilisation from traditional intelligence domains into the probation domain.

Intelligence as a business model

With various domains having established intelligence production as a broadly standardised, functional process, arguably the obvious next step has been for them to operationalise it. With regards to operationalising an intelligence model, the position taken in this study is that Intelligence Systems are nothing more than a business model, a system of integrated activities aligned to achieve an agreed

goal (Flood, 2003). Thierauf (2001, p.7) credits the move from information to intelligence as the need to provide decision makers with something beyond an understanding of what has happened in their business and towards an understanding of what will happen next. In the same text, Thierauf (2001, p.8) also states that in addition to the five major resources available to managers (people, machines, money, material, and management) information has become the sixth major resource. This study would assert that whilst information is a resource, intelligence is an asset.

The paragraph above is arguably the description given to any socio-technical (Trist, 1981) business system where the social (actor) achieves their operational goal using technical (processes) means. The earliest mention of Business Intelligence, in the literature is by R M Devens (1865) who credits the trader, Sir Henry Furnese, with keeping a stream of intelligence allowing him to profit during European conflict. The recognition of knowledge providing a competitive advantage remains the subject of academic enquiry (Seba & Rowley, 2010). In reviewing the literature, this study argues that this term “Business Intelligence” has been usurped somewhat by those for whom business intelligence only actually started with the emergence of computational power. The article creating the furore by then IBM employee H. P. Luhn (1958) detailed an automated system of information capture, analysis and dissemination which is relevant to an intelligence system but was not new at the time. The Intelligence Cycle covered broadly similar ground, ten years earlier, albeit without any mention of computer power and that was published by Glass and Davidson in 1948. Luhn’s

attributed accolade as the father of business intelligence could equally be levelled at Glass and Davidson. The pertinent point being made here is that this is one example of the same intelligence related lessons being learned independently in different domains. As a probation centric supplement to the ground breaking literature and thinking which has evolved in the military (Glass and Davidson, 1948) in business (Luhn, 1958; Devens 1865) and in various police services (Flood, 2003; Schneider, 1985; Godfrey & Harris 1971) this study has gone some way to uncover the lessons learned which could be applied in the probation environment.

Analysis as a fundamental component of intelligence

The activity of information analysis is fundamentally linked to the first and second research questions of what information and techniques officers use to interpret the criminal environment (Heldon, 2004, p. 99). The analyst or rather the products produced by the analysis activity is at the heart of policing intelligence (Belur & Johnson, 2018; Duthel, 2014). Criminal intelligence analysis has a series of prescribed analytic techniques originally known as the Trevi definitions (Read and Oldfield, 1995) with which to carry out specific tasks, these original definitions have grown considerably and are bolstered by a growing host of essential skills (Bruce, 2004). The techniques and definitions of intelligence analysis are a science of their own (Innes *et al*, 2005) therefore this study will attempt to uncover the types of intelligence available and what, if any, type of informal analysis is performed by probation staff. The hypothesis regarding analysis derived from the literature review is that when information is collated then an interpretive activity

required to analyse data and information before it can be considered as intelligence. A combination of structured and non-structured techniques are used by analysts to interpret the data they are given (Marrin, 2007), non-structured techniques include the people applying intuitive logic to a given problem.

With analysis positioned by the intelligence related literature as an integral part of an intelligence system, a natural assumption presents itself in that analytic activity is a well-established and understood activity. However, there are also elements within the literature to indicate that analysis occupies a precarious position in ILP. Ratcliffe (2005) commented that criminal intelligence analysis suffers from a lack of appropriate training for specific environments. Additionally, commentators such as Atkinson (2013, p.160) argue that uniformed police officers engage in the infantilisation of civilian intelligence analysts. Atkinson's commentary alluding towards cultural barriers being in place. This study cannot comment on the lack of analytic training or cultural barriers in relation to probation intelligence as neither are formally in place. However, rather like intelligence itself, the comments from Ratcliffe and Atkinson provide forewarning to any future probation analysts of cultural and professional pitfalls to avoid.

Intelligence led Policing.

In addition to the relatively broad literature covering intelligence and systems which has been examined for this review, this chapter will now provide insight into what is arguably the biggest change in policing systems during the last thirty years (Grieve, 2004), the introduction and implementation of Intelligence Led Policing.

The main reason for the inclusion of this literature, is that it offers insight into the current state of intelligence architecture in probation's closest partner agency. Maguire (2000, p.316) provides comments indicating that the common thread within intelligence led policing strategies are that they are "future oriented and targeted approach(es) to crime control". These approaches bring with them an evolving skills set or what Maguire describes as a "growing armoury of information-gathering analytical and investigative tools and techniques.....most of them rare or non-existent 20 years ago".

The National Intelligence Model (NIM) will be discussed in the next paragraph; however, its examination would be incomplete without reference to the main policing development which lead towards the system on which the NIM was based, namely, the Kent Policing Model. Christopher (2004) rightly describes Brian Flood as a primary architect of the National Intelligence Model, having moved from Kent to NCIS (National Criminal Intelligence Service) to develop the model and eventually to add a strategic element to it. Flood (2004. p.38) gives a plotted history of the different styles of policing which were trialled since the 1960's, these, including 'Team Policing', 'Unit Beat Policing', 'Policing by Objectives', 'Sector Policing' and 'Problem Orientated Policing' to name a few, conceptualise the early thinking during which time the prevalent, reactive policing paradigm of officers on foot patrol was fundamentally challenged. Despite what Flood (2004) describes as an 'Era of change and innovation' he maintains that the pace of change was slow and that it was the publication of the Baumber report of 1975 when things started to change. The Baumber report was published by the

Association of Chief Police Officers of England and Wales (ACPO) and brought about a force intelligence bureau in each police force. Subsequently, another ACPO report, the Pearce report of 1978 promoted inter-force intelligence capability. The two reports, Baumber establishing an intelligence unit in each area and then Pearce who effectively called for a joined-up system of intelligence exchange demonstrate the early building blocks of what would become the national model. The importance of the Kent model cannot be downplayed as it signalled the change from reactive to proactive policing in a macro sense and as such it is extremely valuable to the introduction of intelligence led policing in the United Kingdom.

As Flood (2004) explains, the National Intelligence Model (NIM) was the conduit which was introduced to bring about Intelligence Led Policing in England and Wales. Considering the cultural change it would involve, the path to Intelligence Led Policing from the Kent constabulary model to a mandated national system was not a foregone conclusion. Sir David Phillips, the then President of the Association of Chief Police Officers of England and Wales had to provide the necessary impetus to market the new model to a reluctant audience (James, 2013). The model is complex and concerns about its initial implementation led observers to note that it would most likely fail (James, 2013). The response to similar feelings put forward at the time of implementation was for Sir David Phillips to push forward the implementation with a financial boost of around £8 million. This boost allowed the National Criminal Intelligence Service (NCIS) to maintain a team to work on the implementation full time rather than just

rely on local support. To enable transition, the implementation team visited each force and carried out a compliance audit, the results of which showed that force compliance with the NIM had gained momentum. Despite the implementation team reporting gains, it was thought that further intervention at the highest level was required, and Sir David Phillips had to write to chief officers asking about the progress they had made. James records a number of issues barring progress, not least is one of cultural change towards the police becoming Intelligence Led. A further, more fundamental implementation issue was that NCIS did not issue any prescriptive guidelines on what compliance with the NIM actually looked like.

The importance of NIM implementation is highlighted with its inclusion in the National Policing Plan along with a direction to have it implemented to commonly accepted standards by April 2004. In fact, this did not happen and a revised set of principles and a NIM code were re-issued with the deadline for implementation set at 2005 (ACPO, 2005, p8). James describes some of the early failings and gaps which were also observed by John and Maguire in their (2004) evaluation of the NIM implementation. John and Maguire indicated inadequate commitment of local commanders, lack of input from partners, lack of appropriate training for example. James argues that these failings should have provided the impetus for the NIM implementation team to re-think the approach because he concluded ultimately that the failings were not resolved by a maturity model and that they still persist. The difficulties described above to adopt an Intelligence-Led approach in a policing environment provide an indication of how difficult this would be in a non-traditional area such as probation.

In addition to the organisational obstacles of implementing a major initiative, Schneider (1995) notes that there is a need to legitimise the Intelligence function in the policing environment to ease its implementation. To legitimise a new business function would be to have it understood, accepted, and ultimately, engaged with. The need for this acceptance echoes the reluctance of police officers to work with non-police staff (Godfrey and Harris 1971).

Not without its detractors, James (2014) for instance cites his own findings that the model has had little meaningful impact on operational policing. Alach (2011) suggests that police practitioners along with police academics have accepted the validity of ILP uncritically which seems somewhat erroneous when Alach actually quotes James (2003) who has offered extensive critical examination of the NIM and ILP. The literature provides suggestions that the component parts of the NIM along with the philosophy behind them bare little difference to what the police have done all along (Guidetti & Martinelli, 2010). Christopher (2004, pp.177-193) offers further critique of the NIM from the perspective of a practitioner. The NIM schematic reproduced below lists business drivers, analytic products and the tasking and co-ordination process and the flow of how they lead onto the deliverable outputs of crime control and managed criminals. The bespoke, complex nature of the model is evident from Figure 3 below (NCIS, 1999, p.12). The application of the NIM at different policing levels such as cross border crime and serious and organised crime are too police centric to be adapted easily for this study. The prescribed analytic products which sit beneath the general headings of systems, intelligence and knowledge are

complex and have been refined over the past twenty years. The complexity of the NIM did not lend itself to the methodology of this study in a practical way.

Figure 3 - The National Intelligence Model



Considering the NIM literature alongside the “Intelligence System” theory put forward by Gill (1997) offers direction to the primary research objective within this study which is to uncover an intelligence system. Although the reason to include systems theory in a literature review of intelligence has already been signposted throughout this chapter, it is worthy of note that this study agrees with Heldon (2004, p.99) who, concurring with Checkland and Haynes (1994), offers the notion that systems thinking, and process mapping are viable analytic techniques which reside at the heart of the intelligence process. As this study seeks to identify an

intelligence model within a non-traditional environment and as this “model” has already been identified as a business model, a sociotechnical system, then it is necessary to position the framework for this study within the literature surrounding sociotechnical systems and business process models. The ideal literature for such an exploration is provided by Paul, Yeats & Cadle (2015) as their text on business analysis effectively provides the BCS (British Computer Society, The Chartered Institute for IT) blueprint for conducting a business process model exercise and is the method adopted by this study to map the intelligence process within a probation environment. This mapping activity will be explored further in the next chapter on methodology and methods. This business analysis literature was explored alongside that of Trist (1981) and Von Betallanfy (in Toft and Reynolds, 1997, p.16) whose work on systems theory inspired the researcher to consider the possibility of an intelligence system developing tacitly.

The introduction to this research alluded to a plethora of policing models purporting to contain some semblance of being “Intelligence-Led”, the previous paragraphs explained the complex nature of the National Intelligence Model enabled the researcher to discount that model as a framework for this study. It is worthy to note that the paradigm shift noted as the move to intelligence-led policing is reflected more widely in other domains with a general acceptance of the increase in knowledge-based industries. The reflection is made alongside a general acceptance of the decline in labour intensive industries (Jashapara, 2007).

The purpose of the next few paragraphs is to conduct an exercise to uncover the component parts of relevant, major intelligence or policing models of the last twenty years so that they may be used to inform the granular questions needed to fully explore the 3i model.

Starting with Community and Problem Oriented Policing. Problem Oriented Policing or POP as it is commonly known, was founded by Professor Herman Goldstein and is a proactive, preventative system designed to tackle specific, discrete crime and disorder problems (Goldstein, 2001). The POP centre was originally funded as a non-profit organisation in 1999 and produced its first guide in 2001. A practice related website was introduced in 2003 and in 2015 POP became a centre at Arizona State University (Popcentre, 2021). POP activities are a particularly strong draw for Community Safety Partnerships as they encompass the widely used “Victim, Offender, Location” aspects of the problem analysis triangle (NCSN, 2010). The evaluative nature of POP warrants its inclusion here in that after attempting to tackle a particular crime problem, practitioners evaluate the project’s success or failure and feed that knowledge into new strategies. Whilst an argument could be made to suggest that this approach is intelligence led, particularly when combined with another commonly used problem-solving model SARA (Scanning, Analysis, Response, Assessment) the focus of POP is providing interventions to specific crime and disorder problems (Popcentre, 2021) rather than intelligence which is why it too was discounted. The Scanning and Analysis properties of the SARA model, are by their nature response centric which shows that it is less an intelligence system

and like the POP model is more of a collection of discrete, situational crime reduction activities. The SARA model includes a section to consider interventions, drawing up a response plan and stating specific objectives to be carried out as interventions (Popcentre, 2021). Intervention activity is outside of the intelligence system remit. This dependency on interventions was the reason the SARA model was discounted as a possible overarching framework to be used to assist this study.

As figure four in the next section will show, the literature review has uncovered six intelligence frameworks, which had the potential for use as an overarching framework for this study. Those models which are actively in use such as the National Intelligence Model and Problem Oriented Policing, have undergone closer examination within this chapter. As figure four below shows, the component parts of theoretical models such as Schneider's Normative Model, and Luhn's Business Intelligence System were examined alongside those in use. None of the models provided an appropriate fit to the granular aspect of this study and a hybrid, theoretical model was constructed using component parts. The National Intelligence Model in particular, reflects the area of enquiry within this study and therefore could have been adapted for research purposes as a blueprint to find an intelligence system within probation. However as previously mentioned, the complexity of the NIM was a contributing factor against its practical application as a research tool.

The literature review revealed the 3i model which found favour as an overarching framework because it provides a simple, scalable blueprint which can

be adapted from its use within the police to the probation environment. Developed by Ratcliffe (2003) this simple, broad model provides the ideal framework with which to explore an intelligence system. The principles of Ratcliffe's 3i model underpin the theoretical thrust of the study and will guide fieldwork aspect of data collection to determine whether the organisation interprets the criminal environment, influences decision makers and subsequently impacts the criminal environment (Ratcliffe, 2003). Although developed with the policing function in mind, this model provides a blueprint which allows the investigation of intelligence within the probation sphere of integrated offender management. The first phase concerns the organisations interpretation of the criminal environment which in the policing environment, essentially outlines those analysis techniques employed to profile crime types, geography, frequency etc; the system was used by Ratcliffe himself in 2005 and later by Gul and Kule (2013). Whilst both of those studies offer a blueprint to follow, the model as it stands required some simple adaptations for use within probation. Having studied the simple nature of the model and the two instances it has been used to map intelligence apparatus in the policing environment, this review reveals that the methods used to study the probation environment could remain the same, the variables would differ to suit probation activity. This study would differ from the two mentioned here by collecting data on the intelligence techniques used to profile individual offenders as suitable for the Integrated Offender Management (IOM) scheme. This is a departure from the current use cases which focus on officers using intelligence to combat the crime types they are responsible for managing.

The second phase of the 3i model involves whether intelligence influences the decision makers, which, in the studies carried out by Ratcliffe (2005) and by Gul and Kule (2013) in the policing environment, count the type of intelligence used (i.e. patrol report) against the role type (i.e. detective). This study would differ from that model by collecting data on what types of information available to the probation decision makers has the most influence against probation role type. For example which role more prominently uses arrest and conviction data, or which role more often uses Offender Assessment System (OASys) data.

The third phase concerns the impact on the criminal environment, at the time of writing, there are two published academic studies which follow the 3i system to measure the effectiveness of police intelligence, the first by Ratcliffe himself, published in 2005 and the second by Gul and Kule published in 2013.

The two published studies provide an academic precedent for the use of the 3i system as a method of measuring police intelligence system effectiveness, however the 3i system has never been used to effectively *prove* the existence of an intelligence system and has never been used to consider the use of an intelligence system outside of the policing function.

Similar Component Parts Within Intelligence Models

Analysis of the literature has revealed a number of different models which have been developed over many years and in different domains. What is apparent from the literature review is that many of the models have similar components. Figure

four below shows each of the models looked at in depth for this study and cross-references by colour code the component parts which feature in another model.

Figure 4 - Component Comparison of Intelligence Models

Intelligence Cycle	Schneider's Normative Model	3i	NIM	POP	Luhn	
Direction	Planning	Interpret	Business Drivers	Scanning	Action Points	
Collection	Collection	Influence	Business Planning	Analysis	Document Input	
Collation	Assessment of Information Validity	Impact	Level of Impact	Response	Action Point Profiles	
Analysis	Collation of Information		Prioritisation of Intelligence work	Assessment - measuring the impact	Selective Dissemination	
Dissemination	Analysis of Information		Intelligence Products	Tasking & Co-ordination		Selective Acceptance
	Assessment of Analytical Rigor and Value					
	Dissemination of Intelligence					
	Application of Intelligence					
	Review					

Figure 4 above indicates the varying levels of complexity within each of the models. Schneider's Normative Model and the NIM have more stages whereas Ratcliffe's 3i has the least. The broad nature of Ratcliffe's 3i along with its lack of granular specificity enable a flexible application to this study that the other models do not. Literature on each of the above models was considered which allowed this study to draw out the points of commonality, many of which align themselves with the broad sides of the 3i framework. It is this commonality which will form the basis for a hybrid model to be used in this study. An exercise to adapt and merge the common components is outlined in the methodology chapter.

As the colours on the figure above shows, many of the systems contain elements which appear in others. Schneider's Normative Model for instance specifically notes the Assessment of Information Validity, however this is also part of the Intelligence Cycle and is carried out using an evaluation matrix known as the 5X5X5 which would assess the validity of the information as well as the source and provide a handling code. A refined version 3x5x2 (College of Policing, 2021) is in place in the NIM although neither of these systems specifically call out the use of the matrix as a top-level component even though both systems would employ it. In the Business Intelligence domain, the work of HP Luhn uses different language for top level components of his system however, further reading reveals the purpose therein. Luhn (1958, p. 316) refers to "Action Points" and the need for intelligence to address these, he is clearly referring to Intelligence Requirements which form part of the Direction/Planning/Interpret/Scanning phases of the other systems in the

table. A further point to note are those systems which identify the application of intelligence such as the POP and NIM which are an indication that the systems are not pure Intelligence Systems and are combined with interventions carried out by other parts of the organisation.

The following paragraphs will explain the three I's which make up Ratcliffe's model and the literature used to explore the concepts therein. Incorporating the work of Schneider (1995) into the review is equally important to that of Ratcliffe because as previously stated, Ratcliffe does not provide a more granular pathway with which to explore an intelligence system. Schneider provides several steps which this project can adapt for instance the environmental scan.

Probation Intelligence Literature

As previously mentioned, as well as analysis of source data covering intelligence and systems, the literature review activity included a search to discover a body of academic literature covering Probation and Intelligence. The conclusion of the search is that such a body of knowledge does not yet exist. There is not (at the time of writing) an academic push to create a body of knowledge on the subject. Initial investigations into intelligence related literature from North America hinted towards a mature understanding in an academic sense which it was believed would greatly inform this study. The review uncovered the disjointed nature of probation provision in North America and that there are more than two thousand independent probation agencies in the United States which operate under different state and federal laws

(Teague, 2011, p. 319). Probation as an organisational entity is arguably more complex in the United States than in England and Wales as probation there consists of six separate systems: juvenile probation, municipal probation, county probation, state probation, state combined probation and parole and federal probation (Teague, 2011). Each state has more than one of these systems in operation simultaneously which is administered either by a single, central agency, a variety of local agencies or even a combination of the two (Hanser, 2014, p. 30). Further complexity surrounds the delivery of probation as this can belong to either the executive or judiciary branch of government. When administration is via the executive branch it may form part of the larger state correctional system or may exist entirely separate. Those administered via the judicial branch work within the court system itself. Whether judicial or executive, the probation agency still oversees offender compliance with conditions of supervision (Labercque, 2017). Initial searches uncovered articles pertaining to corrections intelligence which it was hoped would also cover the domain of Probation. Having undertaken a literature review and considered the available literature more fully, this study can conclude that the corrections intelligence literature does not extend towards probation in a meaningful way and is instead focussed on the efforts to collect intelligence from within the prison system. Prison intelligence pertaining to gangs and the efforts needed to stem the flow of contraband onto the site. The lack of uniformity may be an indication as to why there is relatively little specific academic scrutiny of probation and intelligence. Despite the lack of writing on probation and intelligence, Howard (2017) hints towards the role of the probation/parole officer in intelligence gathering:

“They have all of the offender’s information, which can include addresses, phone numbers, employment information, people they are residing with, people they are associating with and what their schedule is.” (Howard, 2017, para. 25)

Howard goes on to explain the unique position of the probation officer in relation to home visits:

“Probation/ Parole officers regularly conduct home visits on offenders. This allows the probation/parole officer to go into the residence and identify possible problems that would be difficult for a law enforcement officer to have easy access to.” (Howard, 2017, para. 26)

The lack of academic scrutiny and absence of organisational capability are contributing factors to the absence of specific literature. Additionally, the organisational culture within probation was arguably far closer to the social aspects of helping people (Mawby & Worrall, 2011, p.11) than the catch and convict culture observed within the police (Gabriel, 2007). Providing pro-social modelling and relationship skills over an extended time is arguably an intimate and shared experience. Whether that shared experience does not lend itself to the perceived purpose of intelligence work in the crime domain, suggests an interesting topic for further research. Some respondents to Mawby and Worrall having started work prior to 2003 when the National Offender Management Service (NOMS) was created even disliked the new term Offender Manager and preferred to be called Probation Officers. The term was introduced as part of the end-to-end sentence management initiatives which saw prison and probation come together as an executive agency of the Ministry of Justice. The study posits that given the history of probation work and the lack of available literature, the fieldwork is more likely to encounter intelligence activity in a collaborative setting. The main lens through which this

research has approached the investigation into intelligence is Integrated Offender Management and these IOM schemes rely heavily on probation and police co-operation. Mawby and Worrall (2011, p.17) found that this relationship had transformed during the working lives of the probation personnel they interviewed, the description given is a change from “mutual suspicion and hostility” to one of “easy co-operation”. Despite a direction to work closer together in relation to public protection Mawby and Worrall found that divisions along cultural lines still existed between probation and police services.

The operational lens which has been adopted to view this study is Integrated Offender Management, as explained in the introductory chapter. A major factor in this decision is because the IOM schemes operating closely with the Police are, according to the preliminary research, the most likely avenue to have adopted observable intelligence activities. With IOM acting as a lens for the study it was necessary to collect and analyse source material surrounding IOM schemes.

In its 2009 policy statement on IOM, the Ministry of Justice introduced IOM as a strategic framework that brought together agencies to manage a locally defined cohort of community-based offenders using their combined resources (MOJ, 2009). The document lists five outputs and processes under the heading of success criteria for IOM, one of which is an “improved level of information exchange between agencies” (MOJ, 2009, p.7) although it does not offer guidance as to how this might be achieved. Rather like the implementation of the early Crime Reduction Partnerships the non-statutory nature of IOM, the seventeen-page document provides little more than a

direction to work together, encouraging probation partners to build on established management principles of MAPPA, Drug Intervention Programme and existing PPO schemes. Despite the rather shallow direction offered by the 2009 policy statement, the literature review confirms this studies position that due to its collaborative aspects, the machinery of an IOM scheme is the most likely place to observe an intelligence system in place.

The earlier comments in this chapter covering the non-statutory nature of IOM and about the policy statement being little more than a direction to work together appear to have been borne out by the process review published during 2011 in which no definitive model emerged across the five pioneer areas (Wong and Senior, 2011). The evaluation of targeting practices across the five areas revealed a wide and varied criterion, sometimes conflicting due to the weight given to certain crime types by partners. Additionally, the evaluation uncovered police intelligence and police led tasking meetings as common selection favourites amongst each of the five sites. The report explains that the “rigour” of the multi-agency meetings was useful to counteract the over-reliance on police intelligence and that these meetings included intelligence from wider scheme partners such as the VCS (Wong & Senior, 2011).

It is worthy of note that the fieldwork for this study took place just prior to the changes to probation provision brought about by Transforming Rehabilitation and that towards the end of this study (after the fieldwork had been completed) the National Offender Management Service announced the commencement of a new initiative regarding Intelligence. The new initiative has two objectives; the first to develop an Agency Intelligence Model and the

second to develop what it terms 'a Professional Intelligence presence' within the new National Probation Service (HMPPS, 2018). Mining contemporary literature for the appearance of intelligence articles with a focus on probation does not reveal a single academic article giving analysis of the 2019 probation instruction to implement intelligence infrastructure into what was then, the National Probation Service. Whilst the 2019 instruction is a clear indication of a service willing to implement such a structure there has been no academic attention paid to this directly. Additionally, the 2019 instruction outlined a commitment to the appropriate workforce change to upskill those staff members associated with an intelligence process; on this too, academia is silent. One possible reason for the lack of academic scrutiny is that the process could be seen as largely administrative and separate from offender management. Many of the staff implementing and acting within the new probation intelligence apparatus will come from the back room rather than being offender facing. Traditionally, as the literature review has shown, academia has concentrated upon the offender facing aspects of probation work. It is possible that the lack of academic attention is a reflection and extension of the "non-badged employee" (Godfrey & Harris, 1971.p.68). This phenomenon was experienced by intelligence workers in the policing domain who were effectively relegated to a status below that of the sworn officers because they were civilians. Whether the issue of a non-badged employee remains today is immaterial as the growth in intelligence work within organisations has led to specific career pathways (COP, 2023; PHIA, 2019).

The implications for this study and the fledgling initiative will be covered in the discussion chapter.

Literature review conclusion

The purpose of this chapter has been to collate relevant literature which would help to discover the current position in relation to the proposed research questions. The chapter included an examination of peer-reviewed articles, books, course materials and grey literature which have provided commentary and analysis on intelligence in the policing, military and business environments.

This review has confirmed the statement made during the introduction and has exposed the deficit in academic literature regarding the use of intelligence within the probation domain. The literature review also provided an indication that the IOM schemes are an appropriate avenue to use as a lens through which this study will search for intelligence activity. By providing a precis of the contextualised history of intelligence alongside that of the probation service the literature has telegraphed the reasons of how an intelligence system has flourished the police despite longstanding cultural issues inhibiting change but was not a mandated activity in the CRC.

As well as presenting intelligence in a historic context, the review was able to identify a number of key current issues that remain unresolved within the intelligence domain such as the function and role of the analyst.

The literature review outlined an important part the research project as it explained the specific meaning of "Intelligence" within the framework of the study. Explaining the distinction between intelligence and information was found to be a prevailing theme within the literature. Positioning Intelligence within the parameters of this study uncovered a prevailing debate concerning the definition of intelligence, a debate which still stifles the criminal intelligence

domain. The review found that domains adopt a silo approach to intelligence, each domain seemingly claiming this independent speciality for itself. The review found that although the origins of intelligence as a domain are well-documented, different fields seek to define the specialism in their own terms. The debates uncovered in this chapter surrounding domain definitions of intelligence cloud the basic position of this thesis that it (intelligence) is analysed information (in any field).

The review posits that clarity is required regarding the task of analysis and the position of the analyst within the intelligence debate. There appears to be some misunderstanding about the influence intelligence has on decision makers and how that influence comes about (Burcher & Whelan, 2018; Alach 2011; Ratcliffe 2004).

With regards to operating with their police partners, the review was able to show via the work of Mawby and Worrall (2011) a cultural shift in probation and furthermore via Wong and Senior (2011) a coming together of sorts between probation and police under the guise of IOM. This partnership would appear to defy the odds in some quarters with regards to police culture and the sharing of information. As the literature review uncovered a further debate where police are seen as brokers of information and as data owners some might consider that it is the police who hold the source of the truth. On one hand a broker and on another an unwilling partner, this provides the literature review with an unresolved dichotomy which will be examined via field work for this study.

The review showed that the prevailing current debate within probation at the time sustained the “What Works” debate about reducing re-offending

and that this had re-emerged due to the Transforming Rehabilitation project (Webster, 2013). This examination along with the introduction chapter set the context for probation as an organisational entity and allowed the review to consider the partnership approach adopted by probation and police in the Integrated Offender Management (IOM) units. Data on the operational aspects of these IOM units will be presented in the next chapter and will be used as a lens through which this study will explore intelligence as a business system. The review was then able to surface and analyse research conducted by Wong and Senior (2011) which, although it alluded to the sharing of information between police and probation during evaluation studies did not provide any specific insight.

As the introductory chapter explained, there exists the need to examine the organisational capability required of an intelligence system, in view of this need, the literature review also took direction from theorists within the fields of systems theory, soft systems methodology and business analysis. Analysing systems theory allowed the study concurrently review the early organisational capability work on police intelligence units provided by Godfrey *et al* (1971) alongside the specific business analysis methods of Paul *et al* (2014). The results of that concurrent review enabled the researcher to construct a bespoke methodology. Additionally, supplementing systems theory with business analysis methods, enabled the researcher to construct and carry out a gap analysis using the data collected for this study against the expected organisational artefacts commonly found in recognised intelligence systems. This Gap Analysis technique is entirely in keeping with the work of Soft Systems Methodology in which pre-determined models of system activity are

compared with actual operational activity observed in situ as described by Checkland and Haynes (1994) and by Burge, Hughes & Walsh (2015). The methodology chapter will consider the Gap Analysis technique further and provide commentary on how this is positioned within the principles of Soft Systems Methodology and how it will be used within this study.

With reference to the understanding and pursuit of intelligence systems as both an professionally applicable tool and an area for academic study, the literature shows that lessons learned by organisations are subsequently forgotten. The formation and subsequent disbandment of military intelligence units between wars and the relatively slow pace of change experienced in the police means that similar commentary on intelligence has emerged to reinvent the same paradigms with seemingly relative inevitability. Whether Devens in 1857, Glass & Davidson in 1948, Schneider in 1995, NCIS 1999, Ratcliffe in 2004 or Phythian in 2012, the commentary is familiar, with a general concentration on the adoption and use of intelligence units. This review enables this study to assert that only when paradigm change is achieved by the introduction of national systems such as the NIM does the domain of Intelligence achieve some form of stability on which to develop.

This chapter has served to position this study within the associated literature, it provides a bridge between the introduction and the methodology chapter and has proven the claim made in the introduction that the focus of this study is entirely under researched. The researcher's critical examination of the literature has uncovered several opportunities to refine the research questions from Ratcliffe's broad 3i model which was introduced in the first chapter towards a more granular and analytic model of an intelligence system.

As the literature does not provide an exact framework to examine intelligence in a probation setting a new, theoretical model has been constructed for this study. This granular model will be explored further in the next chapter and employed to analyse the data in chapter five.

Having reviewed the literature of intelligence within several domains and in uncovering the mechanics therein, the study suggests a new theory of intelligence. In that when all of the available intelligence has been provided to a decision maker this is known as a “state of intelligence”. This state is obtained by the Intelligence Cycle process of direction, collection, collation, analysis and dissemination (Fuentes, 2006; Schneider, 1995; Glass & Davidson, 1948) but is fleeting. This study posits that only a “state of intelligence” is achieved given that analysis of new information can drastically change the understanding of a given situation and that the new information, once analysed could alter the position for any decision maker.

This chapter also promotes the general argument that an organised intelligence system is a natural progression within an intelligence consuming organisation. From the first production of an intelligence product, the organisation would instinctively seek to obtain or produce more intelligence in a more organised way to provide for a more productive operational experience. This operational realisation would lead an organisation into developing socio-technical models for continuous production of intelligence. Extending this theory to incorporate Turner’s (in Toft & Reynolds, 1997) disaster sequence modelling posits another theory. The theory dictates that if the intelligence system is not followed in IOM then this would result in a poor interpretation of

the criminal environment resulting in the wrong people being selected for the IOM cohort.

The literature went on to provide several overlapping theories which contribute to broadly similar systems narratives. Frameworks and component parts of recognised intelligence systems such as the intelligence cycle, the 3i model, the normative model etc, provide this study with the basis to consider broad methodological approaches and to construct granular research questions in the next chapter.

The literature review has uncovered several academic gaps. The literature does not provide evidence of academic or practice related knowledge pertaining to an intelligence system being used in probation. The literature does not specifically contribute anything to show what an intelligence cycle might look like in the context of probation. There exists no literature on specific types of information which might be cultivated into intelligence for use within the probation operation at any level (Strategic, Tactical, and Operational).

The author accepts that there are a several adjacent domains included within this literature review and posits that this is by necessity given the lack of academic scrutiny of the core research questions. Probation practice literature provides a president for obtaining viewpoints from associated stakeholders. McNeil *et al* (2012, p.54) in a reflective examination of evidence-based practice in community corrections, supports the fusion of ideas from different domains. In a conclusion which calls for the rejection of "a confined view" and offers that the co-production of knowledge avoids the errors which may otherwise surface from affording "privilege to one's own perspective". The

study posits that by seeking out a mixture of literature from different domains the discussion, findings and arguments will be strengthened by the viewpoints obtained from a varied selection of stakeholders.

By reviewing the relevant literature this study now has a stronger appreciation of its literary heritage. The study now has several academic avenues to pursue in order to answer the research questions. The next chapter will exploit the avenues of approach taken by previous studies when considering which methods to employ. The next chapter will explain in detail the methodology and methods which will be applied to carry out the fieldwork necessary to obtain appropriate data for this study.

Chapter three: Methodology and Methods used.

The previous two chapters have provided the context and parameters of this investigation and have provided an examination of the historic and contemporary thinking on the issues therein. Chapter two demonstrated via an analysis of the literature, an academic gap in the body of knowledge surrounding intelligence systems and their use in the probation service. Analysis of the literature covering police intelligence systems and business analysis models appear to offer this study several adaptable, practical opportunities with which to explore intelligence in a probation service organisation. By comparing different intelligence models, the literature review also served to provide this study with a set of concise, granular, research questions, the answers to which, will uncover the scale and nature of any intelligence system either in use within the CRC or that could be applied therein.

This chapter is organised into four main sections, the first introduces the fieldwork, confirms the broad research aims and objectives as well as providing a view of the researcher's own view on Ontology and Epistemology and methods. In the second section there is a detailed explanation of how existing theory has informed the methodology and methods. Specific detail is provided on how this study has adapted the 3i model to accommodate the probation environment in each of the 3i's. The chapter then turns to the research design, providing commentary on the use of a mixed methods approach and the choice of methods employed. The methods include the sample selection process, the interview and observation processes, the data collection and processing activity. Additionally, the chapter outlines how the

findings obtained using this mixture of methods offer a strong element of triangulation (Gray, 2004) to the research. Finally, this chapter will also explain how the researcher uncovered and overcame some ethical and practical issues that arose during the research process.

A summary of fieldwork undertaken.

The fieldwork for this study included observation at six cohort allocation meetings between police and probation. One meeting in each of the six areas making up the CRC region. The first three meetings included police and probation officers; the final three cohort allocation meetings went ahead with only the IOM manager. The researcher found that the final three areas were without co-located police officers and were struggling to maintain a partnership approach.

Discussions during all cohort allocation meetings were recorded producing approximately twelve hours of material. The researcher also undertook observation visits lasting on average one hour, to each of the six IOM offices. Observation visits were conducted directly before or after the cohort allocation meetings. The researcher also attended IOM manager meetings held at probation head office where the team leaders from each of the six schemes would come together along with the senior IOM police officer (Chief Inspector) and the Director of Offender Management from the Probation Service. The IOM manager meetings convened bi-monthly with all managers in attendance. The researcher also undertook three subsequent data collection meetings where the researcher attended the same office in Area E

in order to obtain conviction data. These subsequent meetings were held when the researcher had left the Probation Service.

In broad terms, this piece of research uses four repeatable data collection methods:-

1) Interviews and observation, to determine how the probation service interprets the criminal environment. The logic for using interviews and observations was in some respects, dictated by the existing operational process. Partners convening to undertake cohort allocation discussions provided the opportunity to undertake observations. The researcher theorised that the closest thing to this for those IOM schemes operating cohort allocation without partners, was to conduct face to face interviews with the IOM team manager.

2) An electronic survey to determine whether the decisions made by probation service staff are influenced by the information at their disposal.

3) Analysis of raw data on conviction rates for offenders under the supervision of Integrated Offender Management units to ascertain if the work carried out by IOM units reports an impact on re-offending figures.

4) Operational observation and business process analysis of the actors and activities contributing to the work of IOM teams.

The basic research position for this study is the hypothesis that an intelligence system does exist and can be uncovered using a documented model adapted to suit the probation environment. This chapter will show how the 3i model (Ratcliffe, 2004) became the practical framework beneath which the research methods sat. As well as offering an explanation and justification

of the research path taken during this study, this chapter will outline any limitations of the research methods chosen and offer solid academic reasons for their inclusion. With a brief overview of the research methods established, it is perhaps first prudent to provide insight into the researcher's theoretical standpoint.

The Theoretical Framework

The researcher's journey towards a philosophical direction for this piece of work did not conclude with another round in a paradigm war (Alise & Teddlie, 2010), nor did it suffer any strong ontological or epistemological struggles. Guided by the work of Crotty (2008) and Gray (2004), and with reflections on the work of Pawson and Tilley (1997), this research project follows a relatively straightforward direction from Ontology to methods. A path which is entrenched in the researcher's informed understanding based upon the literature about the nature of what is real and what can be observed and measured. When considering the nature of reality, the researcher conforms to the view of a realist ontology in that social entities exist independently and are external to the researcher (Mingers, 2014).

During this enquiry, the researcher believed that they, as the researcher, did not affect the outcomes or bias the results. The researcher recognises that being a former probation staff member has inherent strengths and weaknesses to this project. Strengths include first-hand knowledge of the probation operation, information gatekeepers and the practicalities of data collection. Weaknesses include familiarity on the part of the researcher and any data subjects approached as respondents and the avoidance of bias within a familiar business environment. The informed view held by the

researcher is that they are making sense of the reality being studied; the reality would exist without the study, however, it is for the researcher to make sense of it (Crotty, 2008).

How the theoretical framework informs the analysis for this study

The theoretical framework combines existing formal theory with the practical application of methodology and methods along with the researcher's position on knowledge acquisition (Collins & Stockton, 2018). Recognising that constructing and then analysing a conceptual framework is an iterative process (Jabareen, 2009), this study is guided by a number of existing intelligence models. Existing formal theory enabled the researcher to examine established Intelligence models such as the Intelligence Cycle from the military, the National Intelligence Model from policing, a Business Intelligence system published by IBM. Examination of the models informed this study by providing the building blocks for a theoretical intelligence model. Component parts making up the theoretical model enabled the researcher to frame the analysis of probation activity in the context of an intelligence system.

The theoretical model included existing research on what information can become intelligence, this informed the researcher to compose granular research questions of indicative probation-centric INT's. Systems theory informed this study by providing the theory on what constitutes a system, this was bolstered with the theory of socio-technical systems. The theory on systems was used to analyse the actors and actions involved in the probation process. By combining the available theory on intelligence with the theory of systems this study was able to produce an analytic framework which is

explained in the methodology chapter, depicted in figure eleven and referenced in the results chapter.

Theory is applied at various stages within this piece of research. The overarching theoretical framework constructed for this study provides a logical process for the researcher to follow. The concepts and terms are clearly defined in the introduction chapter, they are explored in the literature review and their use is explained in the methodology chapter (Nguyen, Whitehead et al, 2021). The theoretical framework is revisited in the analysis chapter when discussing findings to the research questions. The logical process enabled the researcher to construct a robust methodology in chapter three. The granular research questions informed the overall analysis by adapting the study to be more probation centric. The complex social phenomena explored within this study is informed by multiple bodies of knowledge (Jabareen, 2009). The study consistently references the theoretical framework when introducing methods or providing analysis on findings. Central to the theoretical framework for this study is the literature surrounding intelligence models. The literature review uncovered several different intelligence models which provided the basis to construct a skeletal framework for this study (Jabareen, 2009). The intelligence models were deconstructed to identify their main attributes and a comparison of each main attribute was undertaken. By comparing the main attributes of several different intelligence models this study was able to identify and define the component parts of a theoretical intelligence model. This process of theorisation enabled the researcher to construct the main concepts and component parts of an intelligence model which is probation centric whilst also following the broad outline of previously established intelligence models.

One particular model provided an appropriate fit for this study to follow. The broad outline of the 3i model was followed because it offered a level of flexibility which is not available in other models. The lack of flexibility was either due to the complexity of the model itself or the dependency on the domain in which the model sat.

The methods for this study were adopted after consideration of the research questions. Face to face interviews and attendance at police & probation meetings were considered as a viable approach to answering the first of the broad research questions. Observation of probation and police interaction informs the analysis by uncovering what information and intelligence each group shares, how they share it, the openness of discourse and the type of language being used.

A social survey was considered a viable way of ascertaining the use of intelligence by probation staff across a range of geographies and at different grades. Observation of staff in their working environment was considered a viable method of understanding the intelligence activities being carried out and the staff members involved. This enabled the study to uncover the organisational context so that it could be incorporated into the systems aspects of this study.

The authors experiential knowledge gained in employment within probation and intelligence environments informed the analysis by providing a starting point for the study.

The complexity within the theoretical framework is both uncovered and explained as the granular research questions are nested beneath one of the three clearly defined aspects of the overarching 3i framework.

Constructing a list of Probation INT's and asking staff about their use of these informs the analysis by uncovering information on which staff groups use intelligence more readily, what types of intelligence they use more often, if they are more likely to use internal intelligence. The third of the broad research questions concerns the impact that an intelligence system has on the criminal environment. The precedent set for this within the operational environment is to monitor criminal convictions and the study collected data to do this. Conviction data informs the analysis in two ways. The first is to provide proof that some form of measurement takes place. The second is to show if convictions actually drop for the offender groups being monitored. The analytic effort for this study does not concern itself with cause and effect. The purpose of this study is to determine whether a system is in place and by finding a monitoring mechanism in situ in each of the six areas, this satisfies that requirement.

Epistemology

With regards to an Epistemological viewpoint, when considering knowledge acquisition and what it means to know something, the practical answer to that question in the context of this study, lies within the 3i system itself. As the Ontological perspective described above effectively dictates that factual knowledge can be observed and measured, the 3i model as a framework offers a systematic way to test whether an intelligence system exists.

Essentially, the 3i model is being used within this study as a framework to uncover an explanatory mechanism (Pawson & Tilley 1997, Bhaskar 2008, Mingers 2014) or a hidden structure (Williams & Dyer, 2004). When discussing explanatory mechanisms, Mingers adopts the position that a mechanism is just an alternative word for a system (Mingers 2014). Therefore, within the context of this study, if the business process being examined exhibits all three pieces of 3i model, the hypothesis is correct, is proven and an intelligence system exists within the operation. This is perhaps a rather broad epistemological stance, however, academic precedence for this test exists in that the 3i system was designed to evaluate intelligence processes and has been used by Ratcliffe himself (2005) and Gul & Kule (2013) albeit in policing environments and not in a probation environment. This study asserts the 3i system is an appropriate epistemological device that provides a legitimate and adequate (Crotty, 1998, Gray, 2004) pathway to acquire the knowledge needed to answer the fundamental research questions.

Realism

With Ontological and Epistemological standpoints established, the philosophical approach to flow from this is one entrenched in Realism. The philosophical approach dictates that factual knowledge can be obtained by observation and measurement and that once found, truth could be generalised and used in other situations. The latter is effectively what this study is about; put simply, as the 3i system is used to evaluate intelligence models in the police it can be used to find intelligence models in a probation environment.

Although the study follows a Realist philosophy, it would be folly to suggest that it is a rejection of Positivism or Objectivism as all three of these approaches share common values, however, as Pawson suggests, “Realism avoids the traditional poles of positivism and relativism” (Pawson & Tilley 1997) a position which comfortably allows the researcher to employ a mixture of methods. In addition, a core feature of Realism is to stress the mechanics of explanation, which compliments the central aim of this research to explore and explain a Probation business process in the belief that it contains an intelligence system. Finally, Realism’s other core feature which is to constantly revise theory and its assertion that scientific methods are not perfect were great influences on the in the decision process which cemented the mixed methods position for this researcher. Having established the researcher’s philosophical standpoint, the chapter will now explain how the researcher obtained access to data gatekeepers, probation and police staff and the operational environment.

Positionality, insider / outsider status

Positionality is determined by where a researcher stands in relation to the participants in their study and the social world being investigated (Komil-Burley, 2021; Holmes, 2020). To engage in a critical reflection of this work, the researcher employed Gibbs (1988) model. Further models such as Jasper’s ERA Cycle (2013) and Driscoll’s What Model (2007) were also considered although Gibbs model provided an accessible process which the researcher found easy to follow. Reflecting upon positionality required the researcher to critically evaluate their place in the process and the actions they planned and

undertook. Reflecting upon the process enabled the researcher to consider the project from a different perspective. The reflective process required the researcher to effectively step back or rather step outside of the process undertaken.

The researcher acknowledges that their prior training and experience could have an impact or influence on the methods chosen and therefore the insights gleaned from this research. Specifically considering the researchers history in intelligence roles. Although employed as an analyst in several organisations, the researcher received formal training on only one intelligence system. The researcher attended training at the Defence Intelligence and Security School where training was given on the Intelligence Cycle. Whilst this training forms part of the researchers understanding of intelligence systems, the cycle itself is only one of six separate models examined in this work. Information on each model was obtained by the researcher during the literature review. The methods employed within this study were informed by the literature review rather than anything from the researcher's background in intelligence. The researcher subsequently received training in intelligence analysis techniques in a criminal justice environment, the techniques were at that time tied to the Trevi definitions of intelligence analysis which are now superseded by the techniques used in the National Intelligence Model. As previously mentioned, the TR process saw the researcher made redundant from the Probation Service and re-training as a Business Analyst and then Data Architect. Moving into the Business Intelligence environment saw the researcher conduct analysis in a 'Big Data' environment. Big Data involves harvesting and transforming terabytes of raw data into a suitable cloud-based

environment where it can be visualised for use in intelligence products. Given that the researcher has spent time in intelligence roles, the need to address confirmation and cultural bias were carefully considered. A conceptual intelligence model constructed from several adjacent domains was used to ensure that the researcher was not merely presenting something that they already knew or that they were following a belief system regarding data collection and methods. The conceptual model constructed for this research is bespoke. The bespoke nature of the model is important here because the model itself would not be found in any existing domain or any intelligence literature. Beneath the conceptual model are granular questions specific to the probation domain. This specificity beneath the model is important because none of the granular questions or granular methods therein have featured in any of the models unpacked in the literature review chapter. The model and methods used here are a bespoke amalgam drawn from existing literature created for the non-traditional environment being studied.

However, the transparency of the methods employed here and their repeatable nature would enable other researchers without that background to reach the same conclusions. By exploring the relationship between a number of different intelligence systems from adjacent domains to the one most known to the researcher, this study has been able to construct a completely new conceptual model which draws from existing theoretical systems but is devoid of their domain constraints. The activity undertaken during the literature review to compare and contrast existing intelligence systems aided this process. The addition of a conceptual model here serves to remove the potential for bias associated with domains familiar to the researcher.

For the early part of this study, the researcher occupied the Insider status. The researcher was employed in a head office position which required a professional relationship with some of the participants. Although formally employed by the organisation, the researcher was not a team member in any of the six geographic areas being studied. Given the different working environments, even as an insider, this might be regarded as only partial and more a 'Inbetweener' (Barnes, 2021, Milligan, 2014).

The researcher recognised that obtaining high level acceptance did not necessarily mean that gatekeepers in local teams would offer assistance to the study (Rowe, 2007, p. 39). In the case of this study, the local team leaders were present when the research was announced. Announcing the intention to carry out this research during an IOM management meeting enabled team leaders to ask questions at an early stage. Team managers subsequently became participants in the research and also provided access to their team areas and explanations of team procedures. The researcher adopted an overt approach for reasons of transparency.

The probation region chosen for this study was done so for reasons of practicality. The researcher was member of probation staff during the early part of this project. The researcher's operational observations led to the initial hypothesis and the construction of a research proposal.

The author acknowledges that there are pros and cons to being an insider researcher. Several years as an employee of the organisation provided some knowledge of the probation mission, its geography, personnel, and systems which was a great boon to this project. Having a professional relationship with some of the gatekeepers enabled early conversations about

access to staff and operational areas. In terms of disadvantages, the author was aware to avoid bias when interpreting results and the potential for respondents to feel obliged to provide data.

The position surrounding access changed considerably during this project. As an insider, working as for the probation service as a data analyst, the researcher was well acquainted with many of the gatekeepers, some of those in key roles pertaining to the research proposal and some members of the senior management team. The researcher had informally approached director level members of the senior management team well before the research proposal was submitted to the university and had received verbal assurances that the research would receive favourable support from the probation service. Despite these assurances, the researcher still had to negotiate with hard pressed managers and staff to give up their time for interviews and to allow access to their decision-making meetings. Although these assurances with regards to access had been given, the Transforming Rehabilitation agenda along with the changes to policing structure made an obvious impact on personnel and procedure as meetings were cancelled amidst uncertainty in relation to staffing levels and both organisations undertook a restructure. The researcher's role within the organisation was re-located and the researcher took severance. The obvious difference regarding the research process as an outsider was that it became more difficult to access raw data. As an outsider, the researcher had to re-negotiate a new access agreement with what was now a private enterprise conducting public business. A new formal agreement was obtained from the Chief Executive of the

probation organisation. The agreement secured the researcher with supervised, on-site access to spreadsheets holding arrest and conviction data.

The following sections cover the research design including the overall framework, rationale for a mixed methods approach, how staff in key roles were approached for the study and the rationale for adapting the 3i model are presented here.

Research Design

Making probation centric additions to the 3i model for use in this study does not change the three broad aims research questions:-

1) To examine the process by which officers interpret the criminal environment to assess offenders for inclusion into the Integrated Offender Management (IOM) Scheme.

2) To uncover how (or indeed whether) the relevant information obtained during the interpretation actually influences those involved in making decisions surrounding scheme inclusion. The opportunity was taken to widen this to include all offender management staff.

3) After the offenders are placed onto an IOM scheme, to monitor and document any observable impact in terms of their subsequent arrests and convictions within a twelve-month period.

As this is a correlational rather than an experimental study, there is no control group. Manipulation of an independent variable to determine relationship or change of a dependent variable does not have a place in this here. As the literature review has shown, previous studies using the 3I model followed the same path and did not have a control group either. Having

captured appropriate data, this study was able to provide a mechanism for comparison between staff grades and working environments. Using data from six different teams enables a comparison based on teams in different geographies. Using data on the second research question from General offender management as well as IOM staff at varying grades also enables role-based comparison.

Reflecting upon the time delay between conducting this research and its submission uncovers several factors beyond the control of the researcher. The first major factor is that the researcher became unemployed due to the Transforming Rehabilitation process, five different roles in various parts of England during the following years compounded the difficulty of part-time research. The TR process itself meant that the research plan had to be re-worked and the fieldwork for the first research question was carried out before the literature review was finished. The second major factor during the last year of the research period was the COVID pandemic which caused delays in obtaining a research space and library materials. The third major factor was that the University was subject to a major cyber-attack leading to months of not being able to access documents residing on university servers.

Several factors demonstrate the contemporary relevance of this study. Just as societies relate to their own past through the mechanisms of memory, organisational culture is based upon processes, both tacit and explicit which form the operational architecture and working lives of those in the present (Keszei, 2017, p. 804). Contemporary relevance therefore is demonstrated in the processes of today as reflections of the past. The position adopted by Keszei is directly relevant to this study as the data obtained during fieldwork

continues to form part of the organisational culture of the new probation organisation; it is likely to have come from the previous incarnation of the CRC which itself was a product of when probation provision was provided by a Probation Trust and is likely to remain in the new organisation going forward. There is a precedent for this within contemporary probation literature, despite decades of change within the probation arena, the literature review has shown that commentators (Mawby & Worrall, 2011; Tidmarsh, 2020; Cram, 2023) are convinced that core activities of probation work remain the same. As the re-unification of probation services continues and will not conclude until at least 2024 (HMPPS, 2022) the contemporary relevance of this study is assured. In a broader sense, Jaffel & Larsson (2022) argue that in a post, cold war, post 9-11 context, 'everything became intelligence' and that 'intelligence became the everyday'. The position adopted by Jaffel & Larsson is similar to that previously taken by Brodeur (2007) that intelligence has moved from its place within state security and high policing, essentially corroborating the introduction to this study and is a further example of contemporary relevance. Marrin (2018, p.483) notes the lack of intelligence theory being developed centrally and references that intelligence theories are being developed within decision making and security studies literature. Given that this study is being conducted in a non-traditional domain, it goes some way to answer Marrin's call.

Additionally, regarding the contemporary relevance of this research, the passage of time has, along with organisational change, (re-unification) elevated the relevance of this work. Most notably now that re-unification is announced the intelligence structures proposed in the 2019 Probation

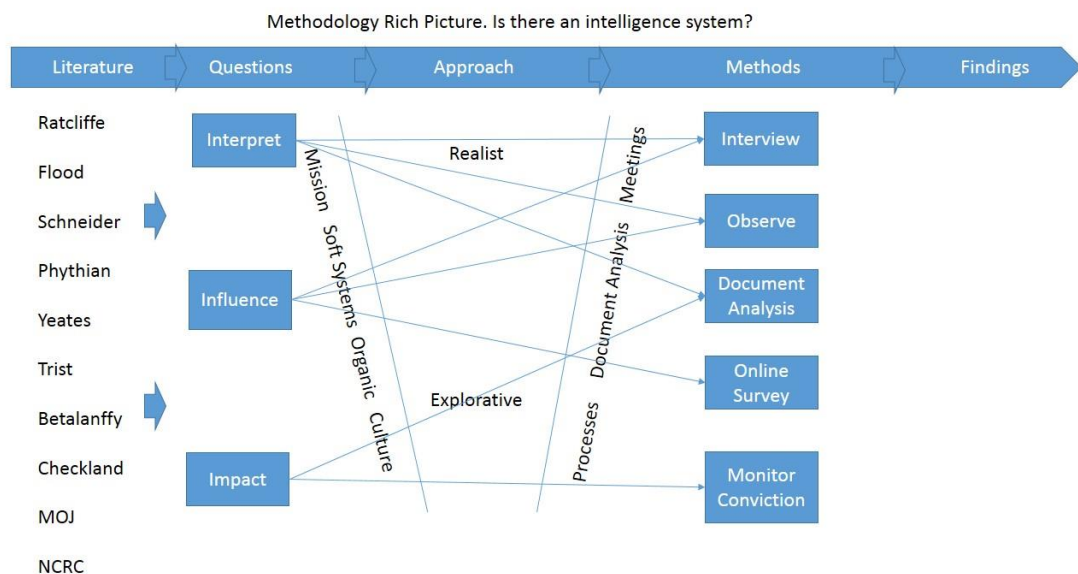
Instruction may well now extend to the emerging national probation organisation. A review of contemporary literature reveals no academic studies regarding intelligence systems outside of familiar environments. Additionally, as the emergence of intelligence theory is in its infancy (Kahn, 2008; Alach, 2011; Marrin, 2016, 2017, 2018) this study demonstrates contemporary relevance both in Intelligence and Probation domains.

The chapter will now turn towards an appreciation of the overall research design and how it further incorporates the lessons learned from the literature review. Additionally, it will reveal how previous, associated works enable the study to consider a more granular level than that afforded by the 3i model. The chapter will go on to explain how these more granular avenues are incorporated into layers of data collection. Finally the chapter will outline the practical steps taken to carry out the research.

The Figure five below depicts the visual narrative of how the research route, questions, methodology and methods evolved from a basic idea, were subsequently informed by the literature and were then employed to investigate intelligence systems in place within the chosen organisation. The title of the diagram below poses the main question for the research project, namely, *is there a tacit intelligence system?* Beneath the title sits a large blue arrowed band. The large blue band identifies the main avenues of approach (Literature, Questions, Theoretical Approach, Methods and finally, Findings) which were undertaken during the research process. The band in which the avenues of approach sit shows the general direction of travel from left to right. Beneath

the general headings sit the influential literature along with the three general research questions. which came from discovering the 3i model during the literature review. The diagram then indicates the theoretical approach to the research methodology, which was also informed by the literature review. The methods employed for this study are then outlined towards the right-hand side of the rich picture leading to the findings. The diagram also shows a series of blue arrows between the questions and methods, this indicates which methods were employed to answer the question posed, for example, Interviews, Observation and Document Analysis were the methods employed during this research project to answer the question surrounding how the probation service would interpret the criminal environment.

Figure 5 – Methodology rich picture



As the figure above shows the research design uses a mixture of methods to collect data which is both qualitative and quantitative in nature. The theoretical underpinnings of this research were provided at the beginning of the chapter and the researcher conforms to Denscombe's (2002) assertion

that divisions between positivism and interpretivism exist more in principle than in practice, a position, when considered in the context of the research questions, bolstered the reasoning for a mixture of methodologies.

When considering the epistemology of this piece of research, the stance taken draws again upon Cresswell (2003) in that the methodological constructs were required to address a basic question of knowledge acquisition. The question being, how can one be certain that the approach and methods chosen will provide the knowledge to address the aforementioned academic gap? Rather than providing considered opinions, the research methods were chosen because of the belief that the data they will offer, when analysed, a measurable, justifiable version of the findings in a probation setting. With regards to ontology, this chapter will show that the methods chosen are pragmatic and realistic enough in that they asked enough of the right questions to enough of the right people.

In broad terms, the epistemological standpoint for this research is steeped in realism (Gray, 2004), is both inductive and exploratory; the main reasons for this standpoint were explained in the chapter one narrative which outlined the relatively sparse treatment given to the subject matter by academia thus far (exploratory). Re-using the established 3i framework which is borrowed here from the policing environment (inductive). Although broadly interpretive, this exploration is supported by frameworks introduced further in chapter two such as Von Bertalanffy's (1968) thoughts on systems theory as well as the theory behind business process models presented by (Paul, Yeates & Cadle, 2015).

Using the 3i model as a “blueprint” has uncovered supplementary avenues for investigation, for instance, guiding the literature review chapter to explore the strategic building blocks of a business system (TOGAF 9.1, 2016). Using previously researched phenomenon such as the 3i system as a blueprint for this investigation will also add an inductive element to the project because as the methodology will show, the research activity will mine the probation process to uncover probation staff undertaking intelligence activities.

This exploratory project is interpretive in nature and the overarching theoretical perspective adopted for the research approach is a realist one entrenched in the philosophical orientation most often associated with mixed methodology which is pragmatism (Tashakkori & Teddlie 1998). The study employs a mixture of methods, both qualitative and quantitative which have been designed into a single, coherent methodology, used to triangulate results and compliment the strengths and weaknesses of each distinct method. All of which will be covered in detail in this chapter.

As the methods consist of a combination of secondary data, interviews, observation and process mapping, the researcher will use this chapter to provide a rationale for this mixed-methods approach and will explain why semi structured interviews are better suited to an enquiry exploring socio-technical systems (Trist 1981). This chapter will also explain the use of organisational systems theory and how that contributes to the methodologies overarching framework in terms of providing a map of the information flow. The second stage of fieldwork employed an online survey, and this chapter will explain how

survey questions were formulated after collating information from stage one fieldwork into themes.

Rational for a mixed methods approach

Although arguably still in the shadow of qualitative and quantitative research paradigms mixed methods research is recognised by some as the as the third major research approach (Johnson, Onwuegbuzie, Turner, 2007). This study conforms to the idea that methods are not wholly anchored to a particular research philosophy and that they are chosen for reasons of research pragmatism. The idea of the paradigm not being held to a particular philosophy or set of methods is a view long held by mixed methods researchers (Maxwell & Mittapalli, 2010; Teddlie & Tashakkori, 2009).

The research questions formulated during the literature review process proposed a series of specific research challenges. Conducting observations at meetings required an pseudo-ethnographic approach, the data collated during observations required statistical analysis and understanding the flow of information from the field to the cohort allocation meetings required a process mapping exercise. Additionally, researching probation archives for the meetings of minutes, official Probation Instructions, project initiation documentation and associated organisational material required research and critical reading skills. This approach adopted here to answer research questions with both narrative and numerical information is wholly supported by Mixed Methods theory (Teddlie & Tashakkori, 2009). Considering the sub-types of Mixed Methods research presented by Johnson *et al* (2007) this study falls into the Qualitative Dominant side of the Mixed Methods continuum. When

the above methods were considered during the rich picture analysis (shown in Figure five) by placing potential methods alongside the research questions, the mixture of methods were found to be a mutually supportive way of collecting data (Denscombe, 2003). The approach has the added benefit of being able to connect research elements to provide a level of triangulation. On examination, the research questions could not be answered solely by collecting either qualitative or quantitative data in isolation therefore and the mixed methods approach was confirmed. The plurality of paradigms and methodologies sits comfortably within realist research (Gray, 2004).

Choosing Appropriate Methods

A number of investigation techniques were considered at the outset of this project. Some techniques, a full-blown ethnography for instance, were discounted relatively early in the process due to combinations of their fit with the research questions, time constraints and the level of access required. Conducting observations and interviews however, appeared to hold a number of advantages. The ability to create rapport and to build an ongoing relationship with each subject, and the opportunity to engage in semi structured discussions were amongst the leading reasons why face to face interviews came to the fore. The relatively small sample of staff in key roles (n6 IOM Team Managers) led the researcher to consider face to face interviews and small focus groups for the first phase of fieldwork which it was hoped would elicit specialist knowledge from IOM teams. Geographic considerations meant that the researcher could travel to the subject's place of work to conduct interviews which proved favourable and allowed each subject

to be interviewed in the comfort of their own working environment. Interviewing team managers allowed the researcher to gain their stakeholder views and to plot the process being carried out. This exercise also allowed the researcher to document and map the process (Hindle, 2015) for tasks undertaken to provide the arrest and conviction data to probation officers.

When considering data collection for the second of the 3i's the author considered that this would require asking for responses from the whole offender management population within the probation region. As one of the most widely used methods of collecting data (Rowley, 2014) the questionnaire was considered as a possible data collection method for this purpose. A questionnaire is an efficient way of collecting data which was necessary due to the time constraints for the fieldwork in this study. A questionnaire is a good way of collecting data on sensitive subjects Patten (2011). There existed the possibility that answering questions on their probation work at this particular time might provoke negative responses given the proposals for staffing changes. Additionally, as the respondent can answer questions on their own and in an environment they control, an online, self-completion questionnaire was considered the most appropriate way forward to elicit responses.

When considering online surveying the researcher had to consider the relatively secure electronic environment in use within the probation service. Initial investigations indicated that the popular BOS survey method provided by the University of Bristol would not satisfy the firewall surrounding the Government Secure Intranet and could not be accessed by probation staff. In view of this, the researcher conducted a small number of experiments with other online survey tools and found that they could take advantage of the free

online survey provided by Survey Monkey. Disadvantages to using the free online tool include a limited number of questions and the lack of data manipulation options. The conclusion drawn was that enough information could be sought within the ten question limit and Microsoft Excel could be used to calculate and tabulate the responses provided.

Using Integrated Offender Management as a methodological lens

It is important to outline the decision process behind the reasoning to focus on IOM rather than other offender groups or working practices being carried out by staff in the CRC. For example those engaged in Community Payback or Cognitive Behavioural Therapy groups might have provided an equally rich research environment. The process to provide pre-sentence reports to courts may also have provided an avenue of investigation, however the remit for court reporting remained in the National Probation Service rather than the CRC. The general area of research interest stems from a longstanding professional association with intelligence activity in the public and private sectors. However, as chapter one explained, the researcher developed the nucleus of an idea whilst employed as an information analyst with the Probation Service. Whilst employed the researcher read various texts on intelligence models in policing and considered whether intelligence systems had been adapted and applied in a probation setting. This idea led the researcher to conduct preliminary enquiries which revealed a longstanding process of information exchange in relation to individual offenders between their offender managers and various partners. These enquiries also revealed that there appeared to be no organised, strategic driver and that the level of partnership working was

entirely at the offender manager's discretion and always directed towards micro level objectives associated with a particular offender's needs. For example, if someone needed a place to stay then the offender manager might contact a local housing provider or charity but this level of activity is optional unless related to an identified criminogenic need. Information exchange appeared piecemeal and self-directed on the part of the manager and the needs they encountered when interviewing offenders. The preliminary research alluded to in the previous chapters then revealed a specific offender management paradigm called Integrated Offender Management (IOM). IOM a specific collaboration between associated agencies, primarily Police and Probation which seeks to identify and intervene with the most prolific and priority offenders in a co-ordinated approach. When considering this area amongst others such as Community Punishment, the IOM area of work with its focus on collaboration appeared to be the strongest natural contender within which to apply the 3i model as a blueprint. With police units operating co-terminus with the six local authority boundaries that make up the probation area, using IOM as a lens offered the researcher the opportunity to look at each of the six separately and to report on findings for all six as a collective; these advantages were not present in either Community Payback or Group-work teams because they are controlled and administered centrally from head office and did not contain the collaborative element attached to IOM.

The IOM teams were structured similarly in terms of personnel and did, in theory, operate in a broadly similar fashion to one another according to MOJ guidelines. Despite the police/probation collaboration and local nuances in crime prioritisation; it was felt that the similarities would allow the researcher

an amount of re-usable methodology such as using the same questionnaires or observation techniques and therefore save time.

Using the IOM environment as a lens allowed the researcher to effectively map the base elements of the 3i model against the socio technical systems being used within the probation setting.

What also occurred to the researcher was that there were a myriad of texts on business and police intelligence but the lack of that specific focus in the Probation environment had left the area entirely under theorised. These gaps found during preliminary research concerning which area of Probation to concentrate on and the relative scarcity of research on probation and intelligence led the researcher to include document and discourse analysis of the IOM process.

Using the IOM group has two distinct advantages, it appears to be the optimum place to observe the collaborative intelligence effort between police and probation, and it allows the study to focus observations on semi-autonomous groups of probation officers. By using the IOM group as a lens to observe the socio-technical systems therein, the study will mirror the practice established by the Tavistock institute which observed workers in the mining environment (Trist, 1981).

The sampling process; Key Roles

The probation organisation used within this study is one of the largest in England and Wales. Serving a population of one and a half million people and located within North East England, the probation area is split into six separate organisational teams. The observation and interview activities of this

qualitative study used the whole population in a non-probability sample of people, chosen from the personnel who occupy key roles within IOM teams (Ritchie, Lewis *et al*, 2003). Using purposive sampling the personnel were chosen because of their responsibilities as IOM team managers (Oliver, 2013). It was hoped that this set of managers will be able to provide a clear idea of operationalized activities employed by probation to interpret the criminal environment. Although a small sample of six managers in total, this represents all of the IOM managers within the probation area, each responsible for a team of staff, a cohort of IOM offenders from a geography co-terminus with a local authority area.

The initial decision to interview members of staff in key IOM roles was made during the initial, exploratory research which included attendance at various probation team meetings and examination of organisational charts. The decision to include these key role staff in interviews and observations did not change during the life of the project.

The primary reason for choosing these key roles from the sample of personnel is because they interpret the information provided from the field before collaborating on a cohort allocation decision with partners. After collation and analysis of fieldwork data for the first research question and a further exercise to analyse the information to produce themed questions the sample of participants was widened. Widening the sample of participants to all CRC decision makers engaged in offender management was enabled by the use of an online survey which is discussed in a later section.

Rationale for using the 3i model as an overarching framework.

The 3i system was uncovered during the literature review which revealed a series of articles on police intelligence such as those by Ratcliffe (2008, 2016). Although the focus of his body of work is more strategic in nature than the positioning of this study, the research undertaken by Ratcliffe allowed the reader great insight into the use of intelligence in the UK, Australia and the USA. Alongside articles and texts on intelligence strategy, Ratcliffe devised a three-pronged (3i) model with which to examine an intelligence system in practice. Ratcliffe considers the 3i to be a simplified conceptual framework when compared to others such as the intelligence cycle or the NIM (Ratcliffe, 2008). Ratcliffe explains that the interpretation phase will differ depending on the organisational mission, giving the example that an analyst within a large federal agency will have a different mission to one working in a smaller more rural police department. However, Ratcliffe does not present any restrictions on organisational size when using the 3i model as a research tool. The 3i model provides a “blueprint” which this study has adapted for use to explore how the probation service interprets the criminal environment, how (or indeed if) decision makers are influenced by the intelligence they receive and finally what impact is achieved in terms of reoffending of the chosen cohorts. The literature review showed that the 3i model was considered alongside the more famous intelligence system, the National Intelligence Model, developed in the late 1990’s and still in use with the UK police. For this project, the relatively simple nature of the 3i was considered more adaptable to the probation setting and more practical for the framework of this research project. A significant bonus to having such a broad overarching framework is that it can be adapted

at a lower level. By demonstrating such a broad adherence to the three main themes of the 3i intelligence system, means that the functional (lower level) aspects of the system can reflect the socio-technical reality of the environment concerned. In this case the model does not have to identify with or follow the rigid structural nuances which are attached to mandated systems such as the NIM and its named intelligence products, structured meetings etc, a criticism of which was explored during the literature review in chapter two.

Using the 3i model has enabled this research to split the fieldwork into three main areas and then to consider what methods were appropriate for data collection. To enable data collection activity though, the study had to consider each of the three areas in a probation environment to understand what operational activities might glean appropriate data for fieldwork activity.

Adapting the 3i to interpret the probation environment.

There are several differences with regards to this study and those that have gone before it. The data used in previous studies, the cultural environment, the staff, and their respective missions are all different when compared to this study. As the 3i model was designed to examine intelligence in use within the police service its use within this research project is within its broadest possible sense. Interpretation of the three main aspects therein have been adapted to the probation environment. A clear example of this is that police intelligence analysts interpret the criminal environment using an array of pre-determined techniques such as geographic profiling. Geographic profiling requires an expert knowledge of computerised geographic information systems and data

manipulation. The origins of the technique arguably belong to the Scoutmaster role and military map marking or intelligence preparation of the battlefield (IPB) where analysts would mark the position, strength and likely direction of enemy units in the field (Parritt, 2011). The point to note here is that this skill has evolved from the military to the police and is now a regular feature of local investigation teams. The modern probation officer requires the same product, interpretation of the criminal environment, but does not have access to techniques derived from this “investigative history” but has to conduct an interpretation all the same. In view of the differences and the research objectives of this study, the 3i system has had to undergo some subtle adaptations to fit the environment.

The first adaption to the model concerns the way probation interprets their criminal environment. The probation environment under scrutiny differs from police in that their objective is to look at individual offenders and decide if they are suitable candidates for the IOM schemes, this is different to the police activity within a 3i context which generally looks at crime types committed within a timeframe or geographic area. Both organisations interpret the criminal environment but in different ways. Interpretation in this study does not therefore include the traditional police definitions of criminal intelligence analysis commonly known as the Trevi definitions (Read and Oldfield, 1995). Excluding the Trevi definitions of analysis is appropriate here because the probation service under scrutiny did not employ criminal intelligence analysts. Ratcliffe (2004) describes interpretation tasks as a “pull model” of information collection where intelligence officers are required to seek out and extract information from investigation officers and debriefing handlers of confidential

informants. Although the tasks may differ depending upon the domain in which they are practiced, the assertion of this study is that the overall objective is the same. Probation staff, just like their police counterparts are also required to seek out information from a variety of sources. This operational difference had a direct effect on the methods used during fieldwork because the adaption undertaken included the requirement to uncover not only if probation staff actually interpreted the criminal environment but if they used specific, as yet unknown techniques with which to carry out the task. In the context of this piece of research interpreting the criminal environment is how the probation service considers offenders for inclusion onto the IOM scheme. In the literature review, Ratcliffe (2003) specifically mentions analysis and prediction alongside, data storage and access to information sources as the building blocks in this part of the process. In order to examine if and how this is carried out in the probation domain, the research methods required data collection from the cohort allocation process because this is the activity undertaken to ascertain an offender's suitability for inclusion on the IOM scheme.

In the context of this piece of research, the criminal environment which an IOM scheme is concerned with is the pool of offenders available for inclusion onto the scheme. In terms of how the 3i model has been used previously this is different to the police analysts' activities which (amongst others) involve the analysis of types of crimes being committed. The environment in this case is the group of people committing the crime; there is a difference in the central focus here. Broadly speaking, Probation can focus upon the actual offender when interpreting the criminal environment because

they know who the offender is and are charged with managing the community sentence. Interpreting the criminal environment in a policing sense has a different focus because the crimes committed are understood but the offenders are not. In the policing environment, the offenders may not even be known.

Observation of cohort allocation meetings

The group of offenders on an IOM scheme is collectively termed the cohort. There are six separate schemes within the Probation region being studied and the intention was to observe the process in each area. The cohort allocation meetings convene to determine each service users' suitability for scheme inclusion and mirrors the 3i intelligence system as this is where, in terms of the IOM scheme, the organisation interprets the criminal environment. Under normal circumstances this is a partnership activity with Police and Probation officers attending the meetings. Permission to attend was sought prior to attending the meetings via the Director of Offender Management with responsibility for the IOM schemes. In addition to this the Police Officers attending were provided with written explanations of what the research was hoping to achieve, and each attendee gave permission for the researcher to attend, take notes and to record the meeting. In addition to notes, the researcher completed a five-bar gate counting the number of times a key topic was mentioned during the meeting. Locations varied from scheme to scheme with meetings either taking place at probation or police buildings. The primary objective for the observation part of the project was to explore the first part of the 3i model and to ascertain whether attendees carried out activity to interpret the criminal environment in order to choose suitable members for the IOM

scheme in their area. In addition to the primary objective to collect data on interpreting the environment it was believed that observing these meetings would also provide insights into 1) how the organisations work in partnership 2) whether there are any discernible dependencies in the process 3) if there are any obvious capability deficiencies 4) the language used with regards to intelligence and information and 5) the actual organisational processes being followed. During the meetings, the researcher took notes; tape recorded the proceedings and collated copies of anonymised paperwork. During this part of the fieldwork it was found that three of the six areas were unable to carry out cohort allocation meetings with their police counterparts. A recent change in police resourcing removed officers from IOM schemes and placed them into Neighbourhood teams.

Using semi-structured interviews in addition to the Cohort Allocation Meetings

Face to face interviews were necessary in three of the six probation areas within the region. The interviews were carried out in the three areas which did not carry out cohort allocation meetings with their police counterparts. The cohort allocation activity was carried out, but unlike the three other areas the allocation process only involved the IOM team manager in each area. Using interviews allowed the researcher to capture a mixture of closed and open responses from participants (Jupp, 1999). Whilst relatively straightforward questions could be answered with a closed question, the open option allowed respondents to consider their answers in more depth and allowed the researcher to probe for more searching explanations of participants' behaviour

and attitudes. This technique helped to elicit further responses depending on the respondents replies and to be a great advantage over the closed questions used in the wider sample during phase two fieldwork (Denscombe 2003). The PEACE (BA Training, 2001) interviewing technique was used as a rough guide to enable planning each interview beforehand (Heydon, 2012). The use of structured interviewing techniques is not limited to investigative interviewing in a policing environment, it is regularly used within project management and during the requirements elicitation phase of business analysis (Paul, Cadle & Yeates, 2015, p.74; Hutchinson, 2020). Although described as a highly adaptable and non-coercive method used to elicit an accurate account from the interviewee (Hutchison, 2020, Akca, Lariviere & Eastwood, 2021; PICA, 2022) the elicitation part is arguably contained within the 'Account' phase of the process which can be managed using any number of techniques. The PEACE model was used here as a framework to manage aspects of the interviews other than to elicit the account itself. The account portion of the interviews was straightforward as the longstanding team leaders interviewed were acutely aware of the cohort allocation process that they controlled. The interviews therefore did not require any memory enhancing techniques, such as guided retrieval, associated with the Cognitive Interview (Akca, Lariviere & Eastwood, 2021; Fisher & Geiselman, 1992, p. 15). The researcher found that nothing more than asking the interviewees how the cohort allocation process worked was enough to initiate a free-flowing account (McLeod, 2014; Pollock, 2020) from interviewees. Where necessary, probing enquiries using Kipling's well established 'W & H' questions were used to draw out detail.

The stages include engaging the interviewee and explaining the purpose and process of the interview. Socratic questioning was used to enable the interviewee to give their account via semi structured questions. Following the PEACE stages interviews were closed with the opportunity to re-engage before conducting a post interview evaluation to note lessons learned and to collate interview data.

The PEACE interviewing technique is one familiar to the researcher. Having interviewed stakeholders for many years as a probation analyst and as a business analyst in the private sector, the researcher was comfortable that this technique would prove useful for this piece of research. The researcher was originally taught the PEACE interviewing technique whilst serving as a reservist with the Intelligence Corps. Further training was received when the researcher was employed as an Intelligence Officer working in a counter fraud area for the National Intelligence Unit.

The technique breaks the framework of the interview down to simple stages. Preparation and Plan is first in which the interviewer would consider who they were going to meet with, where they would meet and what approach the conversation would take. Planning the interview beforehand provided the researcher with a sense of confidence about the process. Engage and Explain, is the process by which the interviewer creates a rapport with their interviewee and re-iterates the reason for the research and the interview process. The Account stage of the process is the interviewee providing their answers to the interview questions. For the Account aspect, the researcher used a combination of Socratic questions to enable a cognitive interview where the

interviewee could provide their answers. Supplemental and clarification questions were used where necessary. The Closure part of the framework is used to clarify any answers, ask supporting questions and generally bring the interview session to an end. The evaluation portion of the process is used to consider the data obtained and determine if more is required. Participants were not made aware that the researcher was using a formally recognised interview technique and although participants may have recognised the framework, none of them mentioned it.

Although observations and interviews were agreed and eventually undertaken, they came with practical considerations involving access, time, and geography (Jupp, 1999). Despite assurances, access was the most challenging aspect; however, this was due to the challenging times brought about by organisational changes. Police staff were undergoing a reorganisation and probation had embarked upon staffing reductions due to TR. Anecdotal evidence from police colleagues at the time suggested an increased remit and probation colleagues effectively faced re-deployment rather than redundancy. The immediate risk for this project was that respondents would have far less time to accommodate outside research interests. A further risk was that responses would be influenced by the changing environment. The responses received during interviews did not appear to be tainted by the changes. Similar to the cohort allocation meetings, during the interviews the researcher, took notes and the interviews themselves were recorded on tape.

Adapting the second of the 3i's – Influencing the decision makers

The second adaptation or diversion from the documented model is that Ratcliffe's vision for the Influence part of the 3i system involves the analyst being able to sway the decision makers due to their analytical products and skills. This study maintains a different position to Ratcliffe in that the analyst is absent in a probation environment and it is the intelligence itself which is the influencing factor with regards to the decision makers in the key roles involved in this study. Ratcliffe (2009) goes on to recount analysts making recommendations as a hotly debated topic during his tenure as academic coordinator of Australia's National Strategic Course where he details the differences in analytical provision between the police and the military. Military decision makers receive extensive training in the interpretation of intelligence data which is in stark contrast to the police who rely upon interpretation and recommendation from their analysts. The study will follow and then add to Ratcliffe's model to answer this question around influencing decision makers. The 3i model essentially lists types of intelligence products and then asks police officers which types of intelligence product they use to carry out their tasks. This study will follow the 3i model to uncover if probation officers actually consider any intelligence whilst making operational decisions, the study will also uncover if particular types of intelligence are more likely to be used by officers working in IOM teams than they would be by those working as general offender managers. The study asserts that probation staff in IOM teams and probation staff in general offender management teams are comparable units of analysis. The data obtained in this part of the study may uncover a subculture in relation to intelligence. If the use of intelligence by IOM staff is markedly higher than that of their colleagues conducting general offender

management then an organisational subculture may be in place. The rationale for the influence question is the same here as in Ratcliffe's model in that there are some specific decision makers in the probation domain whose decisions may or may not be influenced by any intelligence they receive. As the literature review has shown, previous studies did not set a precedence on the kinds of decisions being made and how they were influenced, instead the previous studies focussed on staff at different levels and in different roles within the police service and the general decisions they make day to day. This study is fortunate in that the process could accommodate asking probation staff in IOM teams and in General Offender Management teams about influences on the day-to-day decisions they make. The study was also fortunate in that it was able to approach staff at different grades in the probation organisation.

The sampling process and access to staff is covered in a separate section in this chapter. In addition to asking general questions to probation staff, this chapter will show that this study will surpass the previous model and specifically explore a particular decision surrounding IOM inclusion and any intelligence process involved in the making of that decision. The next part of this chapter will offer an indicative view of the types of intelligence are made available to Probation Officers.

Establishing types of probation intelligence

As the previous two chapters have shown, a formal intelligence system did not, at the time of writing, exist within the CRC. Unlike their counterparts in the police, military and business environments the CRC does not, according to the available literature, have formally agreed and regularly delivered intelligence products. In view of the lack of recognised intelligence products, this study has

followed the example provided by Gill and Phythian (2012, p.130) and has compiled a list of analysed information which is to be used within this study as the probation “INTs”. This list of “INTs” or intelligence types was collated during the fieldwork part of this study. The list comprises of analysed information or information they (probation officers) themselves analyse which is regularly made available to their organisation. The list forms the basis for the questions of an online survey, the construction of which is covered in a later paragraph in this chapter. This thesis has previously recognised that any piece of information has the potential to become intelligence, therefore the INT’s proposed here are indicative and warrant further research and definition. The “INTs” for this study include arrest and conviction data, priorities provided by Crime and Disorder Reduction Partnerships, Probation National Guidelines, score and bands from the Offender Group Reconviction Scale, Police intelligence, Offender Risk of Harm Scores, Drug Test Scores, Alcohol Test Scores, Accredited Programme Scores. These Probation “INTs” replaced those uncovered in the literature review. As part of this study the list was put forward to probation staff in the form of an online questionnaire. Questions available using the online service were limited. The questionnaire asked each respondent to what degree would each type of intelligence influence their day-to-day decision making. The questionnaire responses will be presented in the next chapter with analysis provided in chapter five. This chapter will now turn towards which probation staff were considered as decision makers for this study.

Establishing the probation decision makers

In previous studies detectives, patrol officers and senior managers were considered to be decision makers (Gul and Kule, 2013; Ratcliffe, 2005). This study considered who in terms of probation staff would be appropriate respondents to be approached during the fieldwork part of the process. The probation region being studied has a relatively straightforward organisational structure with the main body of staff engaged in offender management activity. This study required the input of staff who engage in offender management where a proportion of their operational activity involves decision making. This could be operational decisions regarding offender management or tactical decision-making managing teams of staff or strategic decision making with regards to programme level decisions within the region. When considering decision making in Offender Management this research has sought opinion from those at operational offender managers (probation officers) in IOM teams and those in general teams. Additionally, tactical team managers and strategic level members of the senior management team were asked to respond in the context of their own day to day responsibilities. Given the perceived limited offender management decisions taken by staff within Community Payback (Unpaid Work) teams, the study did not approach staff in these areas. The study did not approach staff in administrative areas.

The Electronic Survey

The data gathered from the interviews, observations and attendance at IOM management meetings, was collected, collated and analysed to ascertain the way in which the probation staff interpreted the criminal environment under

their remit. Analysis of the information obtained during the first part of fieldwork uncovered several avenues of intelligence which probation officers had available to them. The data derived from the first part of fieldwork, was then grouped into themed questions alluded to earlier in the chapter as the Probation “INTs”. These “INTs” were then used for the second part of the fieldwork which sought to ascertain whether intelligence (analysed information) was used to influence decisions made by probation offender management staff. Considering the number of staff available (n280), a survey using non-probability sampling was generally regarded as the most practical way to survey a relatively large group of people quickly and cheaply (Arber, 1993; Newell, 1993). With reference to conducting the survey “quickly”, it is worth noting again that timing played a part in this process. Staff job cuts had already been announced due to the Transforming Rehabilitation agenda which posed the questions of morale and whether anyone would actually be motivated to fill in a survey. The study was faced with the further practical consideration of having to survey a rapidly diminishing pool of staff. A survey was constructed in order to gain the opinions of probation staff in the three key roles that had the opportunity to use the “INTs” to make operational or strategic case management decisions. The survey was constructed using the free online tool Survey Monkey which enabled the researcher to quickly construct the necessary forms and obtain a link to be provided to participants. In order to reach as many probation staff as possible, the researcher used different avenues of approach to publicise the survey. Using different avenues resulted in the survey being promoted by the Probation Service Communication unit, the Probation Institute and the popular “On Probation” blog. An advantage to

using the online survey tool was that it would also collate the answers into charts or tables which are presented in the next chapter.

Adapting the third of the 3i's - Impact in the context of this study

With regards to adapting the final part of the 3i model, Ratcliffe (2005, p.440) asserts that for true intelligence led policing to occur all three elements of the model must be present. In Ratcliffe's opinion, for Intelligence-led Policing to occur, the decisions undertaken during the process must make a subsequent impact on the criminal environment. Impact, in the context of the 2005 case study means arrests (Ratcliffe, 2005, p.448). This study concurs with the assertion around impact. Probation and police missions in this regard are the same for the IOM scheme and for that reason the study proposed to monitor the impact on re-conviction totals. For this to be incorporated in the study it was clear that probation data relating to impact needed to be identified and collected.

In terms of method, it is an established practice for probation IOM teams to regard success by the reduction of re-convictions. By monitoring and reporting on re-conviction for the impact phase, the study is reflective of the wider way in which the impact of offender management was monitored using the local adult re-offending measure (MOJ, 2014). The recent thematic inspection (HMIP, 2020) of IOM reported that many of the IOM schemes monitored their impact in the same way, by comparing convictions before and after IOM registration. The thematic report also provided evidence from Dawson and Cuppleditch who in 2007 reported on a national evaluation of the PPO scheme which revealed a 43% reduction in reoffending for the PPO

cohort using the same before and after method. The literature suggests that comparison of convictions before and after scheme start is a relatively common way to assess overall effectiveness of schemes (Johnson *et al*, 2004). The study does not suggest that the offender supervision of the IOM scheme is the reason for a reduction or an increase in convictions, it is merely searching for the component parts of the intelligence system. Gul and Kule (2013) failed to obtain data with which to test the final part (Impact) of the 3i system. In terms of impact, this study has collected the conviction information for each offender in all six IOM cohorts, a cohort is determined by geography and is co-terminus with a local authority boundary. The study broadly follows the established process used by the Ministry of Justice to monitor and report on the success of offender management schemes with regards to further offending.

This study conducted monitoring activity on all offenders placed on the six separate IOM schemes during the cohort allocation meetings. The monitoring activity started with a baseline of the number of convictions for each offender in the twelve-month period prior to them being put onto the IOM scheme. The study went on to collect the same data for the same offenders for the next twelve months of that IOM scheme. If an offender was taken off the scheme for any reason, then the monitoring data was adjusted to reflect an equal period either side of scheme inclusion. Reflecting upon the use of conviction data to answer the third research question, the researcher ultimately supports the stance taken as previous studies (Ratliffe, 2005; Khul & Gul, 2013; Wong & Senior, 2011) none of which have a control sample therefore the study posits that the method followed here is a legitimate avenue

of enquiry. This study could have approached the third research question in a different way; instead of monitoring arrests and convictions, the intelligence system could have been examined by counting the type and number of intelligence products produced by the organisation. By monitoring intelligence products, “Impact” could have been considered in an organisational sense rather than a crime control sense. Future studies could avoid using conviction data and re-structure a study to show impact via intelligence products - should they become available in the future.

The chapter will now turn towards research design. It is important, in this chapter to define the terms of the research aims and objectives. Chapters one and two defined the broad research questions and it is important here in the methodology chapter to explain in more granular terms how those questions were framed for research purposes so that the study may be replicated without any ambiguity. This explanation is especially important if the reader is familiar with the 3i model and its use to examine intelligence systems in a policing environment because the probation environment is different.

The chapter will now turn towards the framework for data collection beneath each of the three main research questions of the 3i model.

Layered data collection

The study thus far has extolled the virtues of the 3i system and its inclusion here as a framework is at the centre of the methodology. However, the 3i model by itself is a blunt tool. Neither of the studies mentioned earlier that have used the 3i model, actually provides a more granular framework to follow with

regards to examining an organisations operational activity beneath each of the 3i's. Therefore although the framework for data collection starts with the three major themes of the 3i model more is required to understand operational activity.

This study has constructed a layered approach to data collection using relevant aspects of the more granular intelligence systems uncovered by the literature review. The literature review chapter revealed the correlation of themes within different Intelligence systems and the table below shows how those themes have been positioned by this study beneath each of the three aspects of Ratcliffe's 3i. For example, the Interpret phase of the 3i incorporates the Direction phase of the Intelligence Cycle, the Environmental Scan of Shneider's normative model and the Scanning Phase of the SARA model used in Problem Orientated Policing. The influence phase of the 3i incorporates the Analysis phase which appears in some form of every model encountered in the literature review.

Table 2 - Granular components of the 3i

Interpret	Influence	Impact
Intelligence Cycle Planning / Direction	NIM – 5x5x5 (2x4x3)	NIM – Controlled Crime
Schneider - Environmental Scan	NIM Intelligence Products	Probation – Local Adult Re-offending
Intelligence Cycle Collection	Schneider - Assessment of Information Validity	POP – Assessment – Measuring the Impact
Intelligence Cycle - Collation	Intelligence Cycle - Analysis	Schneider - Review
NIM – Business Drivers	POP - Analysis	

NIM – Business Planning		
Schneider - Collation		
POP - Scanning		

As table two above shows, this study has used established theory from the literature review, to inform the analysis throughout the study. By aligning the component parts of more granular systems beneath the 3i, this study was able to complement that broad framework. Breaking down the intelligence system to its component parts enables this study to document the necessary capabilities required by an organisation to carry out the required activities. This capability mapping, will be carried out as part of the business analysis tasks and will be presented in the analysis chapter. Jashapara (2007, p.762) proposed a new paradigm in relation to tacit organisational knowledge. Jashapara furthermore considers that the collective consciousness of organisations is based upon dialogue, discussion, and interactions between individuals and that shared meanings are established in the collective psyche (2007, p.759). Organisational culture or sub-cultures shape the collective consciousness and provide a symbolic representation of norms and values through which new situations are addressed. The subsequent actions and behaviours of individuals manifest as organisational capabilities and core competencies.

There is dual purpose in separating out the component parts in the table above as it enables this study to recognise the capabilities needed within the intelligence system. Additionally it has enabled this study to position the more defined parts of one system in place of the vaguer aspects of other systems.

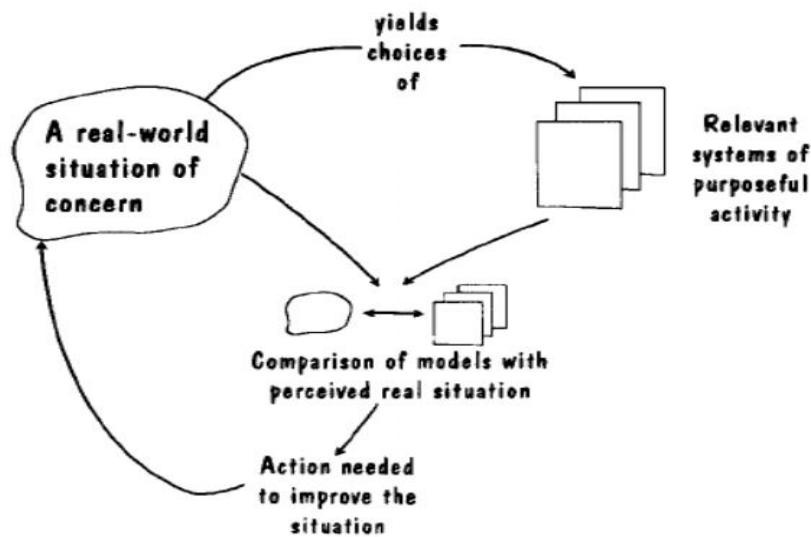
The method employed in the analysis chapter is to analyse fieldwork data and then map it against the elements within the above theoretical framework by way of gap analysis. If the data obtained for this study is sufficient to satisfy the gap analysis process showing that relevant operational activity is in place in each of the three I's, then the study can conclude that an intelligence system is present.

Using Systems Theory to understand business processes

By taking an intelligence model developed for the policing function and looking for its existence within probation; an organisation not directly associated with intelligence, this study is effectively conducting an exploration of general systems theory (Skyttner, 1996; Von Betalanffy, 1968). As previous chapters have explained, in order to understand if a system is in place, it is necessary to use methods which enable the study to examine how an organisation works. When the study has uncovered the component parts of the actual operational activities then the study can match these to the recognised components of established Intelligence systems. The literature review outlined and socio-technical systems underpin business models (Trist, 1981). Rather like achieving a state of intelligence itself, without a system, a process, or a series of contributory processes, whether dictated or inherent, it seems that any desired outcome is arguably unlikely to be achieved without an immense dose of good fortune. Therefore, in order to engineer a desired outcome an organisation would put in place actors and actions to “manage” the enterprise from start to finish. The methodology used to explore the and uncover the system being used within probation incorporates standard business analysis

activities. Techniques conforming to Yeats (2015) such as process mapping swim lane diagrams were used to depict actors and the actions they perform. The diagrams enabled the study to understand the whole IOM process from the offender being nominated for the scheme and any key milestones during the time the offender was on the scheme. Conducting a GAP Analysis is an part of this study; as the literature review has shown, GAP analysis forms part of systems thinking, in particular, Soft Systems Methodology (SSM). Where SSM is viewed as a learning system and during the process of SSM comparison is made between observed processes in a real-world environment with pre-defined processes from recognised systems. Figure 6 below provided by Checkland and Haynes depicts the process.

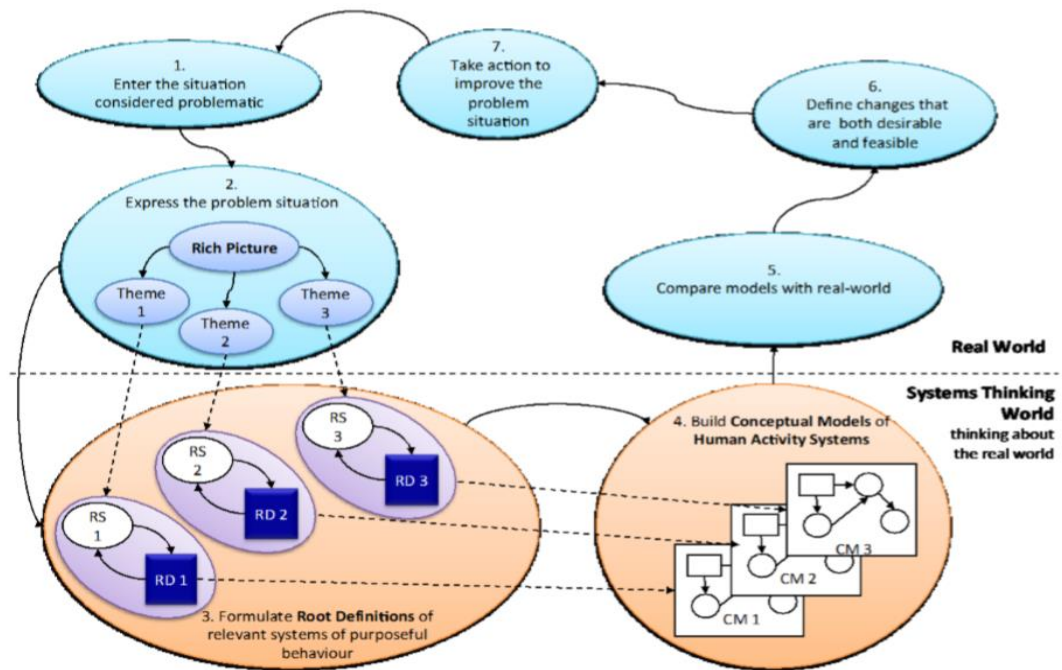
Figure 6 – Checkland and Haynes Soft Systems Methodology diagram



(Checkland & Haynes, 2001, p. A9)

The same comparison process is described by Burge who again used a rich picture diagram (Figure 7 below) to depict the steps of Soft Systems Methodology.

Figure 7 Burge, Hughes & Walsh Soft Systems Methodology diagram



(Burge, Hughes & Walsh, 2015, p.1)

This study posits that the GAP Analysis described as the comparison step in the figures above is a crucial part of SSM and is a technique which will be used in the analysis chapter of this study.

Although not a necessary requirement within the researcher development scheme undertaken during this study, the researcher was also able to undertake industry standard Business Analyst and Systems Architecture qualifications. The accreditations are from the British Computer Society and The Open Group Architecture Foundation respectively, which provided the researcher with the skills to carry out the completion of these tasks. The methods also included compiling user and system stories to breakdown the component parts of the IOM Scheme. Additionally the researcher undertook document analysis of associated grey literature on the objectives of the IOM Scheme which were produced by the Probation Service within the Region.

Process mapping

A business processes is the means by which an organisation would undertake its activities (Hindle, 2015). The methodology followed in this study uses an established Business Analysis Process Model (Paul, 2015). The technique enabled the researcher to explore and document the end-to-end process in operation within each of the six IOM schemes. Process mapping is a widely used approach to knowledge acquisition in organisational research (White & Cicmil, 2015). Modelling the end-to-end process was achieved by combining the observation and interview fieldwork with document analysis of functional and organisational papers. The papers uncovered the as-is process within each IOM scheme and the process enabled the production of a process diagram. The process diagram was then mapped against organisational capabilities to produce a swim lane diagram using unified modelling language. The documents used to carry out this analysis included IOM Practice Guidance (NOMS, 2015) and IOM Principles (NOMS, 2015) local grey literature and a high-level process map provided by the probation area being studied. By observing the administrative activity in each of the six IOM scheme areas and combining this with observation at cohort allocation meetings, interviews and process mapping, the study was able to build up a picture of the organisational apparatus. The literature review set a precedent for this to be carried out in that much of the early writing on the intelligence function included guidance on staffing and activity.

Attending IOM Management Meetings

The researcher attended the bi-monthly meetings during the twelve-month monitoring period. One meeting every two months involving managers from all IOM the schemes. Given that the timings were arranged in accordance with operational calendars, the researcher could not attend each one. The meetings were envisaged to be an important source of information. The perception of importance came about as terms of reverence for the meetings include reporting on scheme progress and agreeing upon actions to define and decided upon tactical and strategic direction. The meetings also served to bring police and probation colleagues together at Senior and Operational management level. The management meetings were structured to an agenda which is issued in advance and the meetings themselves are chaired by the probation Director with overall responsibility for Integrated Offender Management. The meetings were always held at the probation head office and were attended by each IOM manager from probation. The police presence at each meeting was restricted to the IOM strategic lead which was a uniformed officer of Superintendent rank. However, the actual person holding the police role changed three times during the course of the research. The meetings themselves gave the researcher the opportunity to obtain buy in from each of the areas at the same time. The researcher was given time to comment on progress being made and to discuss the practical aspects of data collection at the end of the meeting during any other business.

Conducting the Gap Analysis

The mixed methods approach to gathering data for the research questions has generated a myriad of data streams (Checkland 1999), each of which will be presented in the next chapter. The results of the analysis of that data will be presented in chapter six. The rationale for the Gap Analysis is that the three broad research themes and their granular questions provide a picture of organisational activity. This activity will be matched against the components of the theoretical intelligence system. If the analysed data can be matched to a component part of the theoretical system then there is no observed gap, and therefore, an intelligence system is in place.

The final part of data analysis concerns analysing the statistics compiled on the offenders' conviction history prior to and during the IOM scheme. The practical steps used to collect this data involved establishing its existence and obtaining copies of the analysis which was carried out routinely by probation staff. In terms of the gap analysis, a matching exercise was carried out. Benchmarking the activity carried out to collate and analyse conviction data was matched against similar monitoring activity undertaken in previous studies. and the component parts of intelligence systems.

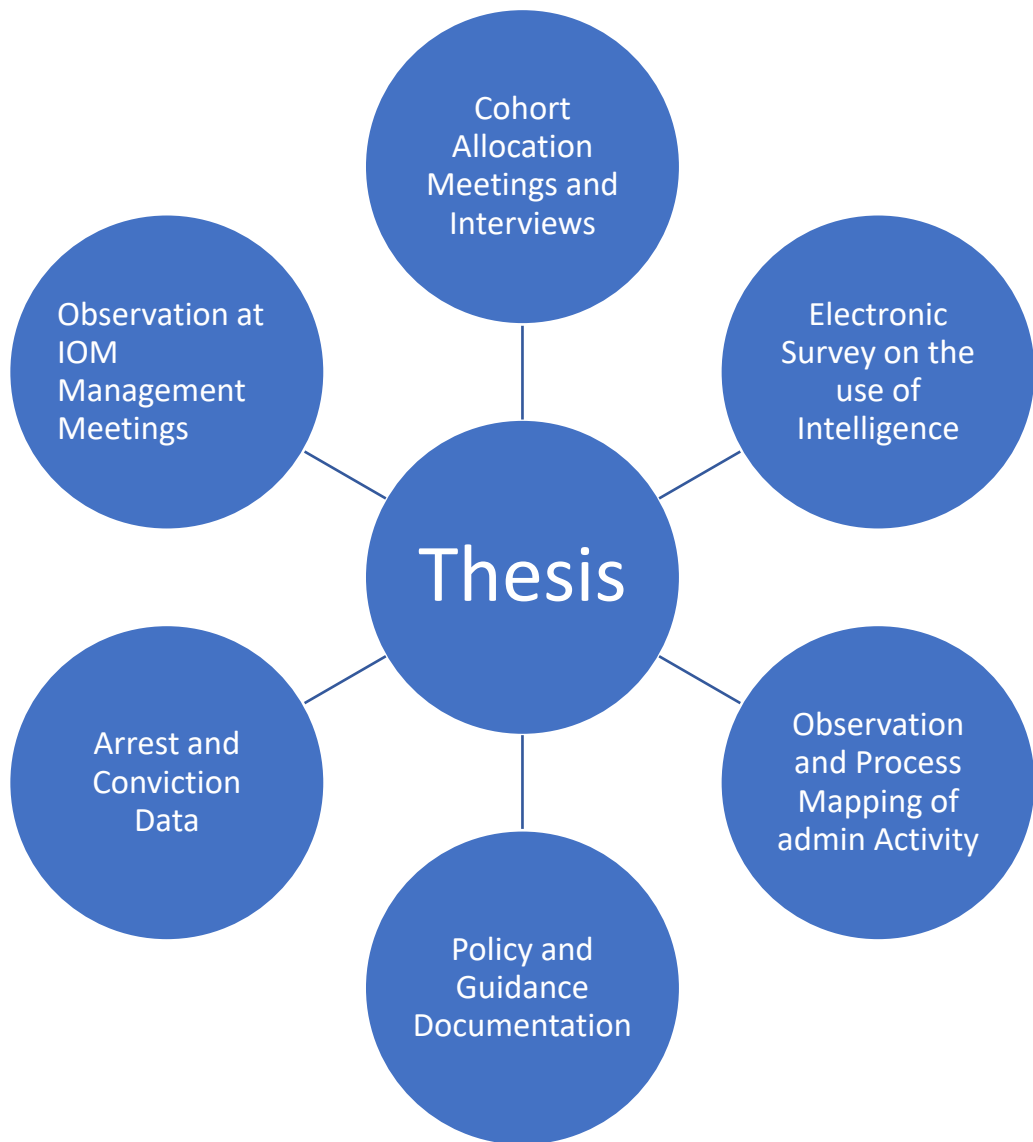
It is prudent to reiterate that the organisation in question does not have a mandate to carry out intelligence activities; a gap analysis is usually carried out within an organisation to compare the current "as-is" operational experience to that which is desired "to-be" (Rollason, 2015). When gaps uncovered by the analysis are then addressed, this will allow the organisation to achieve its objectives more effectively. The focus of this study however, is

testing the hypothesis that a system exists, albeit a tacit one, and a gap analysis presents a credible method to carry this out. This study asserts that it is extremely unusual to carry out a gap analysis on an organisation which does not have a mandate to carry out the actual activity which the gap analysis is looking to identify. With regards to outcomes, the gap analysis process adopted for this study provides for differing levels of success (IS, 2021). An aid to modelling business activity is to conduct a gap analysis and label processes and activities into the following three categories (IS, 2021): -

1. *Operating Satisfactorily – no immediate action required*
2. *Some issues to be addressed – action required*
3. *Not in place – urgent consideration required*

The study suggests that the data streams in the diagram below are readily available to researchers in other probation areas. Therefore, the bespoke theoretical framework constructed for this piece of research is repeatable. Having a repeatable methodology presents the opportunity for it to be used in other probation areas where an intelligence system is not mandated but may be carried out in a tacit way.

Figure 8 Data Streams Diagram



This study shows that the data streams above are readily available to researchers in other probation areas and that the bespoke framework constructed for this piece of research is repeatable. The methodology constructed for this study can be used in other probation areas where an intelligence system is not mandated but may be carried out in a tacit way.

Ethical and Practical issues

The researcher's ethical standpoint was steered by the guidance provided by Northumbria University's ethics committee and the Research Ethics and Governance Handbook along with that provided by the British Society of Criminology in their Code of Ethics. The guidance received led the researcher to approach the idea of informed consent during the early stages of the project. The path taken was to use the standard informed consent form provided by the Northumbria University. The consent form was provided to each potential participant along with a statement about the research being carried out. Where this was not possible, for instance when meeting attendees were unknown prior to the meeting convening, the researcher gained verbal consent at that time. The researcher was careful not to apply any pressure during the initial approach to each potential participant and made each person aware of the withdrawal mechanism should they wish to withdraw from the project. The researcher, as a probation employee could have manifested ethical concerns over those participating. As an insider researcher, some of the participants were known to the researcher in a professional capacity. It did not appear to the researcher that participants were obliged to participate because of that professional relationship. It did not appear to the researcher that participants withheld information due to their professional relationship with the researcher. There were no issues concerning safety for the researcher or any of the participants.

Methodology Conclusion

This chapter has mapped out the pragmatic, repeatable series of steps which have been taken to collect and analyse data which would ultimately enable the completion of this piece of research. By providing a positioning statement on Ontology and Epistemology the chapter has provided the researcher's worldview and how that worldview contributes to the acquisition of new knowledge in the context of this project. The chapter has charted the decision-making journey which guided the researcher as to which methods would be used in the pursuit of that new knowledge. The chapter explained how the methodology to be employed for this piece of research was, in a broad sense, informed by the literature that preceded it. Key to the literature was the 3i model provided by Ratcliffe (2003) and this chapter explained how the model was to be used as a broad framework of three themes with more granular research questions or sub-themes situated beneath it. The chapter provided a rationale for amalgamating the 3i framework with the component parts of other recognised intelligence systems in order to uncover a deeper understanding of any intelligence activities taking place. The chapter also provided an explanation of which parts of other intelligence systems were used, where they sit within this research and how they will contribute to the process. It is believed that the proposed granularity obtained by using these sub-themes will bring more depth and understanding to an otherwise unknown and unexplored academic area.

When considering validity, the research design for the first research question enables the collection of data on the same issue but from six different geographies. Each geography is independent, the IOM teams have their own

perspective, and each collection exercise involved having different personalities in attendance on the side of probation and where possible the police. Attending the cohort allocation meetings one after the other also provided the researcher with the ability to gauge saturation in relation to the data being collected which also promoted a sense of research design validity. The chapter also provided several illustrations, the first showing a holistic view of the bespoke research design, the second showing how the granular research questions sit beneath the overall framework and their correlation to the major themes of the 3i model. The chapter included illustrations showing where the GAP analysis technique sits within the Soft Systems Methodology which is broadly followed within this study. Precedence for adapting methodology to particular situations is provided in the case of SSM by Checkland and Haynes (1994) themselves and the chapter has shown how this researcher has made their own judgement as to what methods will be used and how. The final illustration provided in the chapter shows each of the data collection streams.

The chapter then provided an explanation of how the mixture of methods can be combined to provide the study with a repeatable gap analysis mechanism with which to answer the research questions and map out the organisational activity. The study suggests that the process could be used to come to conclusions about the existence of an intelligence system in any probation region and this will be discussed further in subsequent chapters. Finally, the chapter provided an understanding of any ethical and practical issues which were encountered during this study.

The next chapter will consider each of the data streams introduced in this chapter and will present the raw data which was obtained using the methods proposed in this chapter.

Chapter four: Data Collected for this thesis.

Introduction

This chapter will examine and present the data collected for this study. The purpose of the chapter is to demonstrate that the data collected using the methods described in chapter three have yielded sufficient and appropriate data with which to answer the research questions which have been outlined in the introduction to this thesis. In terms of structure, this chapter will briefly re-iterate the method and circumstances of data collection before describing the actual type of data collected and why this data, when analysed, will answer the research questions. The structure of the chapter follows the theoretical framework and will present data applicable to each of the 3i areas (Interpret, Influence, Impact) in sequence. The 3i data will be presented in broad themes and will allude to the relevance of the data with regards to the research questions. The chapter will also present and comment on data obtained with regards to organisational process and functional mapping which was conducted during the fieldwork period. The chapter is descriptive in nature and will state what has been collected. The analysis of data is presented in Chapter Five.

Research question 1 Interpreting the environment.

The broad research question surrounding the interpretation of the environment contains further sub questions which this data was collected to address. Broadly, the data would be examined to reveal if the probation service employs any mechanism at all to interpret their IOM environment.

Additionally, what mechanisms are actually used, if any, who are the actors and what actions and intelligence they use.

Interpreting the environment is the starting point of the conceptual model used in this study. This step essentially means “target selection”; terminology aside, understanding or “interpreting” the environment and choosing which aspects to “target”. As discussed in previous chapters, in a policing environment, the National Intelligence Model (NIM) is used to enable this target selection process and integral to the NIM are Tasking and Coordination (T&C) meetings. Convened to achieve this initial “target” selection, the T&C meetings are supported by Intelligence products which provide a picture of the problem being addressed. As discussed in the methodology section this research project transposes policing “targets” with the probation problem of prolific offenders. In view of this difference, the researcher conducted a series of fact-finding conversations with IOM team leaders to understand what the probation service did to determine which offenders should be allocated to their IOM schemes. Although not prescribed or mandated in any way, unlike their Policing counterparts, the Probation Service did carry out a similar series of meetings to determine which offenders were the best fit for the IOM schemes. The Probation Service did not have a collective term for the meetings and the researcher coined the phrase Cohort Allocation for ease of reference because the group of offenders placed onto IOM schemes was collectively termed “the cohort”. Researcher notes during observations and interviews show three of the six schemes in the probation area being studied conducted their interpretation activity (Cohort Allocation Meetings) in a very similar fashion, the remaining three schemes differed in

the process they undertook and in the organisational elements involved. The data collected to understand the Interpretation step in each scheme was qualitative in nature. In each area, the allocation process took place in March to enable the scheme start in April. In three of the areas, the process took place during a bespoke meeting arranged between police and probation solely for that purpose and during these meetings. The researcher took part in meetings as a non-participant observer. In the remaining three areas, the Probation staff conducted the process in absence of their Police counterparts and the researcher conducted semi structured interviews with the IOM Manager to capture and document the process. All the meetings in this phase were tape recorded and contemporaneous notes were taken.

Observation of Cohort Allocation

With regards to the Probation Sample for this data collection activity, three from the total of the six areas were involved in cohort allocation meetings with their police counterparts. In each case an IOM manager attended the meeting and in one area the IOM manager was accompanied by a Probation Officer attached to the IOM team. The remaining three Probation areas did not have initial cohort allocation meetings with their police counterparts but instead went through the process of allocation with the researcher present.

With regards to the Police Sample, as is mentioned above, three of the areas were directly involved in cohort allocation meetings. The first police area sent a Chief Inspector, the second a Chief Inspector oversaw the process but sent two Police Officers whilst the third area was represented by a Chief

Inspector along with a police representative from each of their sub-areas and a civilian intelligence officer.

In terms of Location, the meetings took place either at police or probation offices, there was no set precedent as to the location.

With regards to the availability of technology used and information provided during the meeting. The second area convened their meeting in a location where police and probation were co-located. Although co-located in a probation office, meeting attendees were able to obtain relevant information from the Police National Computer from an installed terminal during the meeting. This had also been the case for another of the areas, however the practice had recently ended with the police re-organisation. In all other meetings, people brought with them lists of offenders and printed intelligence material which were shared with the group beforehand.

The meeting procedure in each of the three "partnership" areas followed a structured pattern and operated in what could be described as a case conference manner. Participants that attended provided evidence and opinion on why an offender should be placed on the IOM scheme or why they should be removed from the scheme. The meetings in each of these "partnership" areas (A, B and C) were generally informal, Area B was the most formal with the Chief Inspector acting as the meeting chair. The remaining three (D, E and F) areas did not have a police presence during the cohort allocation process; this was due in part to re-organisation of the police at the time. In the case of Area F the allocation of offenders to the scheme was

always carried out by the IOM manager and then signed off by their police counterpart.

Given that there are twelve hours of data recorded this has produced many pages of transcripts which cannot be reproduced in full here. The data presented is a representation of the key themes discussed during cohort allocation. The data has been collated into themes which provide insights into how each area approached the allocation task.

The remainder of this part of the chapter will separate the excerpts of data for the first of the 3i's into broad themes and will offer a descriptive appreciation of the data. The chapter will also present a rationale as to why further analysis of the captured data will provide answers to the research questions in the next chapter.

Some of the meetings started with a statement which served to establish purpose and common ground. The initial exchange from area A is typical of this and important, firstly because the police officer chairing the meeting gives a statement which establishes that common understanding between the two organisations. Secondly, both parties then move straight into the business of the meeting and offer an opinion on the first offender on their list. The IOM Manager provides an update on the offender and although they do not cite an intelligence source, they clearly know the offender and have an opinion on how his current behaviour makes him unsuitable for the scheme. The matter is quickly agreed upon and the attendees then go on to choose another offender from the list for consideration to replace the one they just removed.

Police Inspector - So the cohort that is being monitored is a bit of a mish-mash of 50 odd people which is too big to be monitored and we were not monitoring actively those 50 odd people so what I want to do today is get that cohort down to a manageable set amount of people that we can agree between us who will be monitored for the next twelve months

Probation IOM Manager – (Pointing at the list) He's been on the list for over a year, he's working, he has no issues

Police Inspector - I've got no issue with that, the inspector has seen him

Probation IOM Manager - Right, are you happy with that?

Police Inspector - Absolutely, we've had very little to do with him, he's co-operating with probation, he used to be prolific, could go that way again, but he's not offending at the moment.

Police Inspector - Fab, so we can give his space to someone else

The above exchange also serves to demonstrate a common style of discourse which is to the point, it is somewhat business like. The exchange infers a sense of professional co-operation which was also observed in the later exchanges between different areas. Analysis of examples such as this reflect the findings of the literature review in which police and probation operate within the easy co-operation noted by Mawby and Worrall (2011). Additionally, the transcript above provides an indication of the relatively large amount of information that each IOM group has to analyse during the allocation. The cohort allocation groups approached the task efficiently and attendees appear to be proficient knowledge workers (Dean, et al., 2006, p. 424).

Another example of this indicative scene setting was recorded in the following initial exchange from area B.

Police Inspector - It's my first time of doing this meeting. I came to the last meeting where (Police Inspector name) handed over to me. I used to have ownership of IOM/PPO in the old world erm but obviously as (Probation Team Manager) and I discussed, I really am just trying to get back up to speed. Erm so what I'm going to do in the future is come with a bit of an agenda, but I wanted to see how this flowed at the start of the new year we're probably a bit out of kilter with what we're going to do. If we start with some introductions first, then we can talk about what we want to try and achieve this year.

Police Inspector - So I think, (Probation IOM Manager) has sent some documentation over which is the current cohort, an idea is to go through that and clear the ground from our feet. I think we've got some coverage from each of the areas. Apart from 7. I'll represent 7. Just to try and identify who is worthy of remaining and who might not fit the bill and we can take it from there. So has everyone got a copy of the cohort list?

The above exchanges which are important because they demonstrate how the two groups establish or re-establish the order for the proceedings. The data also serves to confirm the relatively non-prescribed nature of the meetings in which both organisations have come together but require some re-assurance as to what they are hoping to achieve. The exchanges indicate a level of partnership working which will enable the next chapter to construct the actors and actions involved in the system. The example data provided above indicates a loosely prescribed process, which, when discussed during

the next chapter is likely to inform the tacit nature of the intelligence system which is directly relevant to the research questions.

As the above exchanges have mentioned, the process relies on lists of offenders being provided for consideration at the meetings. This shows a level of preparedness and an understanding of what kind of offender is likely to appear on the list when it is presented. It is important to understand where some of these nominations come from and it is explained by IOM team manager from area E below.

This data came from a semi structured interview with a manager from an IOM area who no longer had co-located police officers within the probation office. The IOM Manager describes the different mechanisms for nominating offenders to the scheme. As the cohort allocation meetings which involved police and probation officers did not include such a granular explanation of their background, the researcher took the opportunity to draw out this information during the face-to-face interview.

Probation IOM Manager - I would tend to put an email out to my colleagues in the probation teams to see if they had any nominations or suggestions for suitable offender; they would submit those and last time we had a PPO officer (Police Officer) in the team and basically what we would do is look at the nominations and the names on the top 100 list erm to see if they were actually erm current or in the criminal justice system and we could do all of that from here because the police officer had the PNC (Police National Computer).

The above data confirms the partnership approach to the interpretive effort in another of the six areas. Additionally, it indicates the introduction of technology which was used during the interpretive discussion to provide intelligence.

The following data, again from Area E, provides evidence as to the analytical approach undertaken to make the decision. In this example it includes the number and type of offences over time as well as an appreciation of priority over certain types of offences.

Probation IOM Manager - We would then come down to a manageable list of names and would look at the in two bits as potential IOM cases and the PPO threshold which would be 6 convictions in the last 12 months. Basically, what we would do is that the police officer would run a matrix of certain offences, so basically burglary would attract a certain score erm theft a lesser score assaults a lesser score. Generally, what we were looking for were not violent offenders, the whole thing was geared towards acquisitive offending erm basically were committing lots of multiple offences who were not adjusting their behaviour so typically what we were looking at were people doing a lot of shop thefts or breaking into cars or burglary, there is a priority in relation to that

The following transcript excerpt from the same interview gives further detail on how the interpretation of the criminal environment can be dependent upon local priorities.

Probation IOM Manager - What the police would do is they would have their top ten lists which they had for each area, we would consider them but what we would tend to find is that tend to have erm the police would tend to have blitzes on certain types of crime so the list would change from top ten shop-lifters to top ten criminal damage so we looked at it but we were not unduly influenced by it erm what as I say we tended to keep focus on is acquisitive crime such as burglary or shop theft.

The explanation above indicates that whilst probation managers would be furnished with police intelligence on groups of offenders, they were not bound by the names provided by police. The explanation gives a fair representation of how nominations are received. The response alludes to the subtle difference in the approach to targeting offenders which is further demonstrated in the following exchanges by two other areas.

The differences in approach are demonstrated in the next exchange from Area A which provides an example of when the two parties have differing opinions on when an offender should stay on the scheme. In this case the probation manager refers to guidance which in fact is guidance for a Prolific and Priority Offenders Scheme and not for IOM. In this instance, the police Inspector did not offer a further objection.

Police Inspector - Yes, we've got that one

Probation IOM Manager - Is on the IOM caseload.

Police Inspector - I want to remove as no arrests in four months

Probation IOM Manager - That's not long enough really, to take her off wait until I get my guidance, (Researcher name) likes it when I get my guidance out don't you?

Police Inspector - Oh Yes

Probation IOM Manager - Because it looks like I know what I'm doing

Probation IOM Manager - Six months, yes we need to keep her on

The next exchange again from Area A further demonstrates differences in approach which surface during the joint meeting. The position from the policing perspective is that the offender will be in prison for most of the monitoring year and their job is done. The probation perspective differs from that of the police. The probation view is that the intervention can continue whilst the offender is in prison. What is not covered during the discussion is the perverse incentive to keeping a prisoner on the IOM scheme. Whilst they are in prison, they (the offender) may be less likely to commit another offence which, for a prolific offender is likely to suppress arrest and conviction statistics.

Police Inspector - (Offender name)

Probation IOM Manager - Yes he's on the probation list and not one we want to take off

Police Inspector - Well from our point of view he's in prison for 876 days in terms of for us and I know you work to different things but he's not somebody I'm interested in at all, from our point of view, intervention wise,

there's not a lot we can do with (offender name) because he'll come out of prison and he'll offend again and in terms of is he causing a problem here and how, you might be, but for me, I'm not interested in (offender name) he's a serial horrible offender and he will do it again and again. I think he's been subject to interventions in the past and they haven't been successful and we've got nowhere and time might be better spent somewhere else. Plus, from a police perspective I am uninterested with him when he is in jail.

Probation IOM Manager - He's due out in February but that's not to say he won't be out before that.

Police Inspector - And at that point I'd become interested in him

Probation IOM Manager - This is our cohort for the year, so he's either IOM or he's not, in terms of monitoring.

Police Inspector - I just think what are you going to do with him while his in custody?

Probation IOM Manager - We'll go in and he might do accredited programmes, but I couldn't give you a set answer as to what we're doing but we'll have a release plan....

Police Inspector - The point is, if we're putting something in place for next Feb, that's right at the end of the monitoring period for the year, what's the point in keeping him in.

Police Inspector - The only issue I would have is if we take him off and I've got no one to give him to again if we'll list him as a IOM (on release)

Probation IOM Manager - I'm just thinking that there's people here and now by Feb we might generate something. It seems to me to keep someone on

for a ten-month period that we're not going to do much with it seems like a waste of a space. When we can re-prioritise in Feb for him coming out, if we say (pointing at list) that one there hasn't offended for six month, they'll drop off. I just think to hold him on the scheme when there's nothing going to happen with him....

Probation IOM Manager - But part of the IOM work is about consistency, so if somebody stops working with him now, then maybe we might have a chance when he comes out, it's not a short-term thing, it's a long term thing.

Police Inspector - But we've already tried those interventions with him and it hasn't worked, what makes you think that it's going to work this time

Probation IOM Manager - Because it can if someone's at the right stage of their life and it's the right time

Police Inspector - I mean for you it's a matter of

Probation IOM Manager - The short-term interventions, if someone is causing problems and they're a nightmare

Police Inspector - They're the ones I'm more interested in

Probation IOM Manager - I appreciate that sometimes it takes time and investment

Police Inspector - Well

Probation IOM Manager - If we take him off then he won't get the long-term investment from my staff and it's that balance and I appreciate what you are saying but part of me is like, if he's already on the scheme, he knows he's a PPO, then he gets more of our resource and its new staff and a fresh pair of eyes and somebody trying something anew, otherwise he will consistently come back and come back

Police Inspector - I just think though, it's so far in advance before he comes out, there might be people more worthy, that would be my view but I won't die in a ditch about it, if you think there are things you can do with him but if you go out and he won't engage then I would be looking to pull the plug on him

Probation IOM Manager - All I'm thinking is

Police Inspector - If he's coming out in feb when was he sentenced and what will we do with him up to this point

Probation IOM Manager - I'd have to check

Police Inspector - Because for me we'll not have time to check whether he's engaging or he isn't, if he's been visited and things are working then fine but if he hasn't then there are people more worthy

(phone rings police officer takes it)

(probation officer calls the office to check on information for the current offender)

Probation IOM Manager - Right, it's your lucky day, I'm not fighting my corner anymore, he's coming out in Feb next year but will be coming out on nothing (no licence) so we can get him off the list

Police Inspector - Right

The above is a lengthy but necessary example which demonstrates the difference in approach from one organisation to another. It, along with the earlier example, demonstrates the professional confidence of both organisations alongside their willingness to work together. The literature review uncovered several past examples where the police were either unlikely

to use other organisations data or where other organisations had an over reliance on data obtained from the police (Wong and Senior, 2011). The clarity of mission exhibited by probation officers in the transcripts along with their willingness to challenge their police colleagues will form part of the discussion on organisational in the next chapter.

The data does show a contrast in approach within the Probation organisation. The following exchange from area C demonstrates the different approach taken from within the Probation Service. The Probation IOM Manager in the exchange above indicated they would keep an offender on the scheme if they were in prison, the next exchange area c shows that the IOM Manager there would rather not work with an offender whilst they are in prison.

Police Officer - (offender name)

Probation IOM Manager - From a probation point of view, he hasn't been involved for some considerable time

Police Officer - He is erm, shoplifting in Feb/Jan a warrant, prolific shop lifter.

Probation IOM Manager - Can we keep him on the basis of that, I'm a bit concerned that we'll have trouble engaging him. We might struggle but what we know is (offender name) and (offender name) are very active

Police Officer (Checking the PNC) Ah, hang on, he's remanded

Probation IOM Manager - Ah what is he remanded for

Police Officer - A robbery, ah right (looking at the screen).

Probation IOM Manager - When is he up for that?

Police Officer - There's no date yet.

Probation IOM – Manager - What I'm going to do

Police Officer - I think he will get sentenced (custodial) for it

Probation IOM Manager - I think on that basis then we'll take him off

The above exchanges encouraged the researcher to ask specific questions during face-to-face interviews. Participants engaged in cohort allocation without police colleagues were asked about differences of opinion. Specifically, whether they thought either agency had more sway. The responses below from areas E and D provide some insight.

Probation IOM Manager Area E - I was going to say, if I had to answer honestly on that, I would say that we did because I've had to say that the final decision rests with me and I've had to say that.

Probation IOM Manager Area D - Initially some of the inspectors were keen to erm but when you took the time to explain what it was about and we also certainly the last chief inspector who was linked with this I kind of had the final say in relation to that. It worked reasonably well.

The example data above provides an understanding of the effort made to interpret the environment beneath this IOM lens. It seems clear that there is an agreed objective which requires preparation beforehand and that a partnership approach is (or was) in place to bring parties together for the decision-making process.

Some of the exchanges made direct reference to the intelligence they had obtained on the individuals being considered. In the following exchange. The data from Area A below demonstrates the level of intelligence the parties can bring to the meeting. The exchange covers who the offender is in a relationship with and the fact that they are trying to detox at the moment. The discussion clearly demonstrates that allocating offenders to the scheme is more than the binary decision which sat at the core of the PPO schemes. Typically carrying out a particular number of a particular type of crime would automatically place an offender onto the PPO scheme.

Police Inspector - He're we go, right, (offender name) now living in Charlie one (sub-area) but we might still want him because he's horrible him, so I would say in relation to (offender name)...

Probation IOM Manager - He's in a relationship with (offender name – also on list)

Police Inspector - I think we can stop there

Probation IOM Manager - They were doing their own detox the other week to try and get off the gear (drugs) but they were both off their face when I spoke to them so I can imagine that they both need to remain

The above exchange is indicative of the human intelligence which can be derived from the relational aspect of offender supervision. It is clear that the probation staff involved have collated extensive knowledge about the offender and their environment. Although not referred to as such, this type of knowledge is human intelligence as noted by Gill and Phythian (2012).

The next exchange from Area A further supports the one above in that the level of intelligence each side can bring to the meeting. In this instance, the IOM manager is considering the resources at their disposal and which member of staff they would use to manage and support the offender whilst they are on the scheme.

Probation IOM Manager - (offender name), I recently recalled him from 28 days.

Police Inspector - For Charlie five (sub-area), there is only these two in the community, both of them I would be looking to retain and then Charlie six (sub-area) (offender name) I would like to keep him but I don't know if he will remain within your criteria or go onto non-stat (non-statutory – voluntary supervision).

Probation IOM Manager No (not non stat) he's allocated to (officer name) he has family in (name of town), he's a drug dealer and all the rest.

Police Inspector - We'll he's a horrible burglar and has been into people's houses with knives, off his face and we nearly got somewhere with him a while ago and he was sleeping rough and was committing a load of crimes er, and we tried to keep the neighbourhood team intervened with him, the neighbourhood team even drove him to the housing office and we thought we were going to get somewhere with him but I think with him, there are some opportunities whilst he is in custody to really work with him and get something in place for him when he comes out would be great

Probation IOM Manager - I've got (officer) for him, he'll be well supported

The following exchange from the same area indicates that even when current intelligence is lacking, intuitive logic contributes to the decision-making process.

Police Inspector - The people we've got to consider (offender names), he's quite a character

Probation IOM Manager - What do you mean by character?

Police Inspector - He's got some medical issues which stop him offending sometimes but when he starts, he's absolutely prolific. We haven't got any current arrests or intelligence around him but that's not to say you don't have something on him and when he gets going he's prolific. But you know he's almost a likeable rogue, he bumped into our chief constable coming out of the nick one day and introduced himself and had a chat with him.

Probation IOM Manager - Ha, I like him. (offender name)

The next exchange demonstrates the probation information which is brought to the meeting and also gives an indication of how the general offender management teams would offer their offenders as nominees for the scheme.

Police Inspector - (offender name)

Probation IOM Manager - He is a nomination on my list

Police Inspector - Right

Probation IOM Manager - He was a PPO and, it says on here (probation paperwork) we were due to take him off but was not de-registered and is currently bailed for further offences, including burglary non dwelling due to appear at Area A magistrates on 17th April, So he was a nomination that came from the team (general offender management team) as well.

Police Inspector - We'll go with him then

Probation IOM Manager - He seems to tick the boxes in relation to the crimes

Police Inspector - The burglary (looking at police paperwork) was of a Jewish primary school it wasn't hate related could have been any primary school. I think it was computers he went for.

Probation IOM Manager - Right we were going to de-register him but we'll keep him on.

Police Inspector - What is his address, Charlie one seemed to have him (checking paperwork) (address given)

Probation IOM Manager - So we'll put him on for monitoring and pick him up

Police Inspector - I'll put him out (to the team)

The next exchange from Area B directly references the intelligence available to Police and Probation at the allocation meetings.

Police Inspector - Right at the bottom of the page we've got (offender name). Is he alpha 1 or alpha 2

Police Officer - Alpha 1,

Police Inspector - What have you got on him

Police Officer - The last bit of intelligence on the 8th we stopped him getting onto a ferry in Amsterdam. It was the eldest 40th birthday party so a load of them went over to Amsterdam, he is on bail until the 7th may

Police Inspector - Was that on the way there or on the way back

Police Officer - It was on the way back

Police Inspector - I would say put him on the watch list because he has things pending see where that goes

The following exchange again from Area B demonstrates the transparency with which attendees share information on the offenders on the list. This data serves to demonstrate once more the partnership approach to offender management.

Police Inspector - Alpha 2, she went to alpha 7 but from there she went to her partners address (name)

Probation IOM Manager - He's a proper DV (Domestic Violence)

Police Inspector - They're a DV couple, always having a go at each other

Probation IOM Manager - I think (officer) contacted them because we had information that they she was going around to his address to drink and when they do that they just kick off all the time. Three weekends in the row we attended the address. Until she moved to (area) in (area), I don't know where it is, I don't know why she's there.

Muffled

Police Officer - Her last arrest was January. That was for shoplifting.

There's a DV assault on her as well

Police Officer - I've not had any direct dealings with her but my colleague things she's so vulnerable and especially when with him, we thought we'd keep her around just to keep an eye on her.

Probation IOM Manager - He gets targeted by us because we know about the DV

Probation IOM Manager - She's always between high and medium (Risk of Harm)

Police Inspector - So it's like a two-pronged attack there

Probation IOM Manager I think it was agreed by (former IOM police head) that even if she moves around she is allocated the same officer for consistency

Police Inspector - Yes the officer has gone on long term sick so I've allocated one of mine.

IOM Manager, It was more, the discussion I had with (Manager) was if she gets killed by him or if he kills her, what are your defensible decisions

Yes, right ok where we can do that we will

The next exchange from the same area again demonstrates the intelligence shared within the meeting and the far-reaching nature of community policing. The data mentions obtaining intelligence from security personnel at a supermarket being targeted by an IOM offender.

Police Inspector – (Offender Name)

Police Officer - He was in our area, pinched a hoover from Sainsburys and he's been locked up for that but came back out. The intel from the security guards is that he's been in three or four times trying to do the same thing.

Police Officer - We're checking his mams address because lots of people tell us he is staying there but we haven't found him there. He said his mam would kick him out if police came to the door so maybe that is what has happened.

Police Officer - So what are we doing with him

Probation IOM Manager - He's staying on.

The data obtained in the following exchange from Area A which again demonstrates that intelligence from systems is mixed with that obtained whilst on offender management visits to offenders in their homes.

Police Inspector – ok next one (offender name)

Police Officer - He had a visit last week which was very positive, we had intel that he was getting into an address in (area) which had a few undesirables. No recent arrests, very quiet. Personally I think there are more important people.

Police Inspector - Views from Probation?

Probation IOM Manager - Not one we need to monitor from us.

And this exchange from Area C appears to give an indication of where intelligence is known but not acted upon. Intelligence is telling the police something, and probation confirm that the offender has indeed committed another offence which is of a serious nature.

Police Inspector - This one (offender name) I want to have a discussion about. He's on an order and I would like to monitor him on the scheme. Intel is telling us he's at it.

Probation IOM Manager - Yes, he just had an SFO (serious further offence). I think he might get a custodial sentence.

Police Inspector - Right he's probably not right for the scheme then.

The following exchanges from Area C demonstrate the availability and use of police systems to obtain intelligence whilst the discussion for inclusion to the scheme is underway.

Probation IOM Manager - (Offender name)

Police Officer - I haven't seen him in ages. Checking PNC – there's one here in December for burglary

Probation IOM Manager - (Offender name)

Probation IOM Manager - I saw him recently and he said he hoped I would be his probation officer.

Police Officer - He's a burglar (offender name)

Probation IOM Manager - Yes.

Police Officer - He's also got that vehicle thing, you remember when he crashed it.

Probation IOM Manager - Oh yes. And there was the conspiracy thing when he got 28 months. A while ago though. I think what we'll do is put him on and review him in depth in six months.

The data provided by the exchange above gives an indication as to the advantage of having co-located police officers. The discussion is bolstered by the availability of intelligence and data from the Police National Computer. The next exchange from the same area gives further indication with regards to resource and the availability of spaces on the scheme. On this occasion it is the Probation IOM Manager who is concerned that the place should go do a more deserving candidate.

Probation IOM Manager - (offender name)

Police Officer - He's just been convicted. Got supervision.

Probation IOM Manager - He did his whole order mind you and then six months after that.

Police Officer - He did re-offend

Probation IOM Manager - Just one offence, and a couple of things when he was on his order. He's not Buggy Malone. What do you want to do. We can take him back, I'm just inclined to say, how much space is he going to take up when there might be someone else.

Police Officer - Who would supervise him

Probation IOM Manager - He would go to a normal team. There was an awful lot of intelligence on him and we took him over from (area) team and honestly, I cannot think that he's any more different than your normal run of the mill.

Police Officer - Right we'll not take him.

The above exchange is another example of the analytic aspect of professional judgement where it is mixed with intelligence received and the experience of managing the offender. The probation staff involved demonstrate a deep understanding of the offender and what they want to achieve with the IOM scheme.

The IOM Manager from Area E, which was a face-to-face interview without police presence. This data explains the use of police top 100 lists which were also provided to probation staff and how previously, they were just given police lists and expected to get on with the allocation process.

Probation IOM Manager - I've just provided these as an example. We'd look at the top 100, but you know all of that, you don't need me to give you that. We would use this intelligence to influence the meetings. We had periods where for example (police officer name) the police intelligence would come and give us their spiel

Researcher: - On the laptop?

Yes and they gave us a system on the laptop but it never did what it was supposed to it was supposed to be all singing all dancing. We were kind of left locally.

There are also exchanges such as the two below from Area C where the lack of intelligence would exclude an offender from the scheme.

Police Officer - (offender name) We were asked to have a look at him but he's never come around to our criteria. I'm content to, I mean in the last six months I've not had intelligence mention him once

Probation IOM Manager - Has he come up on the common case management system, (local PNC) sorry I mean.

Police Officer - No, he's only been arrested once this year

Probation IOM Manager - In that case I can't see why we would bother with him

The above exchange also provides an indication which will be considered in more detail in the analysis chapter and beyond. Police systems are often relied upon whereas probation systems are rarely mentioned. A similar exchange from the same area is provided below.

Police Officer - (offender name)

Probation IOM Manager - I want to take this one off. Nothing going on for six months. Unless (police) have a different view

Police Officer - Hasn't been arrested since November

Probation IOM Manager - He's off then.

The following exchange from Area A demonstrates the intelligence gap brought about by the changes to the Probation Service. The data indicates some cases where offenders who had demonstrated a high risk of harm had been migrated over to the National Probation Service. It is clear from the exchange that confusion remained over who would manage the offender. The new National Probation Service or the Community Rehabilitation Company.

Police Inspector - I've got another nomination here which came in from your side (offender name). He's been active

Probation IOM Manager - He was caught selling but it says here NPS (area) unallocated so I'm not sure where he's been sent. He was in this team but he might have moved. In the past I could check stuff but now with NPS I can only check so far due to the computer restrictions, I don't know when he's in court, I don't know what's happening with him. It's coming up as a (local area) address but that's as much as I've got on him. Can you check what you have?

Police Inspector - What was his dob

RESEARCHER QUESTION - Is he allocated to NPS – Probation Officer
answer - it says here unallocated to NPS (PA system announcement
interrupted recording).

Probation IOM Manager - Non acquisitive crime for him, he is an NPS case
Police Inspector - Right forget him

The actual analysis of the data obtained for the first “I” of the 3i model will be carried out in the context of the research questions in the next chapter. Presentation of the data here has given a flavour of how the Probation Managers on the IOM schemes interpret their environment. It provides an indication of the process, the actors and the actions carried out. Additionally, given the data examples presented here, the next chapter will also provide insights into the partnership approach undertaken along with the type of data provided and how it is used. The observation activity and the examples above did not uncover any data showing either agency conducting validity checks on the information they received at the meeting. There is nothing to suggest why partners would just accept information from one another. The excerpts provided have served to demonstrate that the data collected is fit for purpose in the context of the first research question.

The next section will provide a presentation of the data for the second research question.

Research question two Influencing decision makers

The second research question considers if decision makers are influenced by the intelligence they are provided with. Surveying practitioners to ascertain their use of intelligence is an established method with commentators such as O'Shea and Nicholls (2003), and Gul and Kule (2013) all having used this method during their studies using the 3i model. In order to approach respondents in different organisational areas the decision was taken to target key roles at Strategic, Tactical and Operational levels. The key roles approached as part of this survey were essentially management staff (Probation Officers and Probation Service Officers) and, Management staff (Team Managers) and those engaged in strategy and planning (Senior Probation Managers). Staff in these roles were chosen because they make offender management decisions as part of their daily duties. In order to compare and contrast responses between IOM teams and those operating under general offender management, the survey was issued to all offender management staff in the area concerned (n300). The survey garnered 109 responses and the data shows that not all respondents answered all of the questions.

The popular online survey tool Survey Monkey was used to collect responses. As well as a promoting the survey on the staff intranet site, the Probation Institute and Jim Brown's blog (a popular anonymous blog set up to offer a voice against the Transforming Rehabilitation agenda) both promoted the survey to officers.

The questions were posed to staff because they represent the Probation INT's as defined in the Literature Review and Methodology

chapters. The INT's are compiled of data which is readily available to each of the key roles during their day-to-day duties. The following section of this chapter will give a brief rationale for the inclusion of the question along with the survey result against the role of the person completing the survey.

The first question considers whether or not the staff member uses the arrest and conviction data which is provided to them. Arrest data for those on the probation caseload is provided to probation offender management staff on a daily basis. The data is provided for use by probation staff for strategic purposes in relation to reducing reoffending and for operational purposes for day-to-day offender management.

Question 1 How often do you use arrest or conviction data

	%			N
	Not Used	Sometimes Used	Highly Used	Total
Officer	25	23	52	60
Officer IOM/PPO	0	27	73	15
Team Manager	0	21	79	14
Team Manager IOM/PPO	0	0	100	6
Senior Manager	17	50	33	6

The table above shows staff in each of the key roles use arrest and conviction data during their day-to-day decision making. 100% of the respondents in three of the five key roles report using this source of intelligence.

Additionally, for this study, the conviction data for the IOM cohort was matched after sentencing and used as quantitative data for the last of the 3i's which will be presented later in the chapter.

Question two was put to the staff because priorities are reportedly decided after careful analysis of crime and disorder data. The probation service actively participates in the partnership approach and appointed staff members attend the prioritisation process. The table shows staff in managerial grades favouring this type of intelligence in larger numbers than those at the officer grade.

Question 2 Do local CDRP Priorities influence your decisions

	%			N
	No	Sometimes	Highly Influential	Total
Officer	53	35	12	57
Officer IOM/PPO	15	62	23	13
Team Manager	27	47	27	15
Team Manager IOM/PPO	0	83	17	6
Senior Manager	1	5	0	6

The third question covers national guidelines. Probation national guidelines are provided from the National Offender Management Service and the Ministry of Justice. The guidelines cover frequency of supervision appointments etc. The literature contains several references to police staff using their own intelligence at the rejection of the same from other agencies. The purpose of the question was to gauge whether staff working in a semi automatous probation organisation would engage with and follow the direction provided from an outside body. The table shows a willingness to engage with this type of intelligence in all staff grades.

Question 3 Do national guidelines influence your decisions

	%			N
	Not	Some	Highly	Total
Officer	13	57	30	60
Officer IOM/PPO	7	50	43	14
Team Manager	7	50	43	14
Team Manager IOM/PPO	0	67	33	6
Senior Manager	0	17	83	6

The next question considers the Offender Group Reconviction Scale (OGRS). OGRS is a risk-based predictive assessment developed in the late 1990's which attempts to determine the likelihood of an offender being reconvicted based upon a combination of static data points. Data points include age and gender along with data markers from the offenders' criminal history (Howard *et al*, 2009). At the time this research was compiled, the Probation Service were using OGRS 3 which had been introduced in March 2008 and was well established. The assessment provides predicted scores at one and two years post assessment. The data indicates 82% (n47) of probation officers in general offender management use this source of intelligence against 79% (n11) of officers working on IOM teams.

Question 4 Do OGRS scores or OGRS bands influence your decisions

	%			N
	No	Sometimes	Highly influential	total
Officer	18	51	32	57
Officer IOM/PPO	21	64	14	14
Team Manager	7	53	40	15
Team Manager IOM/PPO	0	33	67	6
Senior Manager	0	40	60	5

The next question directly relates to the partnership approach between probation and the police and the analysed information the police can provide to the probation service as part of the overall offender management process. The Mawby and Worrall (2011) research examined in the second chapter alluded to a changing nature of the relationship between the two organisations. This question was deliberately asked to obtain an understanding around information exchange at the different levels in the probation with their police counterparts. The responses show a much larger percentage 96% (n24) of IOM officers use this intelligence compared to 74% (n43) of officers in general offender management.

Question 5 Do you use police intelligence to help you make your decisions?

	%			N
	No	sometimes	highly used	total
Officer	26	41	33	58
Officer IOM/PPO	4	20	76	25
Team Manager	7	64	29	14
Team Manager IOM/PPO	0	50	50	6
Senior Manager	17	50	33	6

The next question directly relates to the Offender Assessment System (OASys); the system is an integral part of the work probation officers do to assess offender risk etc. First introduced in 2001, it could be argued that this is a far more comprehensive assessment than the static OGRS assessment noted in question four above. The OASys assessment has thirteen sections which include the static (past event) markers along with the more dynamic factors which are prone to change such as accommodation, drug and alcohol misuse as well as personal relationships. The assessment provides scores for an offender’s potential risk of harm and their potential risk of reoffending. The predictive validity of key variables within OASys and OGRS are readily used by researchers trying to understand the reasons for serious further offences (Craissati & Sindall, 2009). The data shows all staff at manager grades reporting use of this intelligence along with 93% (n55) and 92% (n13) for general offender management staff and IOM staff respectively.

Question 6 How influential is a services users risk of harm (OASYS Score) to your decision making?

	%			N
	No	Some	Highly Influential	Total
Officer	8	18	73	60
Officer IOM/PPO	7	7	86	14
Team Manager	0	8	92	13
Team Manager IOM/PPO	0	0	100	6
Senior Manager	0	0	100	7

The next question represents the influence drug test scores have on the day-to-day offender management decisions made by probation staff. The table shows a 100% (n14) influence for IOM officers which may be a reflection on the type of criminogenic needs most often seen in their offender group.

Question 7 How influential are drug test scores with regards to your decision making

	%			N
	None	Some	Highly Influential	Total
Officer	22	57	22	60
Officer IOM/PPO	0	64	36	14
Team Manager	15	77	8	13
Team Manager IOM/PPO	17	67	17	6
Senior Manager	17	33	50	6

The intelligence covering an offender's alcohol usage is one of two questions where none of the staff groups reported 100% usage. There is a whole section devoted to the misuse of alcohol within the OASys assessment. It is possible that the question is too broad, and a more granular question focussed on a particular part of the OASys section on alcohol (dependent or binge drinking for example) would have provided more telling results.

Question 8 How influential are alcohol test scores with regards to your decision making

	%			N
	No	Some	Highly Influential	Total
Officer	24	55	21	58
Officer IOM/PPO	21	50	29	14
Team Manager	21	64	14	14
Team Manager IOM/PPO	17	50	33	6
Senior Manager	20	60	20	5

The next question relates to offender programmes which offenders are directed by the court to attend. This has the lowest percentage scores of any of the intelligence types. Only 56% (n33) of staff conducting general offender management responded to say that they were influenced by this kind of intelligence. Additionally, only 53% (n8) of managers in general offender management responded to say they were influenced by this type of intelligence. In contrast, the numbers were 64% (n9) and 83% (n33) for IOM staff and managers, respectively. The implication for this is that almost half of the probation officers working in general offender management do not refer to this intelligence when making decisions. Understanding why this is the case presents a question for possible future research.

Question 9 How influential are accredited / internal programme scores with regards to your decision making

	%			N
	No	Some	Highly Influential	Total
Officer	44	41	15	59
Officer IOM/PPO	36	64	0	14
Team Manager	47	40	13	15
Team Manager IOM/PPO	17	67	17	6
Senior Manager	40	60	0	5

The construction of the probation INT's and their inclusion as questions in the online survey is a response to the data obtained during observation of the cohort allocation meetings. During the meetings, Probation systems and data were rarely, if ever, called out as examples of intelligence (analysed information) which could be acted upon.

The last question concerned the geography of the person filling in the survey. Almost all the respondents came from the Probation Service area under scrutiny for this survey. A small number (n5) were completed by people outside the area and were discarded.

The next section will present the data for the third research question.

Research question three Impact – Reoffending data

The data for phase three of the 3i model was collected electronically each day using an automated system set up between the researcher acting as an employee of the Probation Service and the Police. The raw data contained details of all arrests, cautions and convictions which were entered onto the local PNC within the last 24hrs. The data was extracted from the Police system and issued via secure email to the researcher each day. This data was then cross referenced with the list of offenders on the IOM scheme. The matched data set enabled the researcher to map the convictions across time by area. Additionally, it could provide a comparison of convictions for each cohort for the twelve months that they were on the IOM scheme compared with the twelve months prior to scheme start. Whilst all areas could provide individual data for the time each offender was on the scheme, the scheme staff could not all provide individual level data for the baseline period prior to scheme start.

The fields made available from the local PNC were Forename, Surname, Date of Birth, Date of Arrest, IOM Area, Offence, Disposal, Adjudication and as the Police force at the time were recording this, whether the offender was drunk at the time of arrest. The following table is just an extract of the data collected and is included here for illustrative purposes.

Table 12 – Arrest & Conviction data examples

Birth Dt (O)	LDU	Date of Arrest	Offence	Adjudication
xx-Apr-xx	F	09/01/2016	THEFT - SHOPLIFTING	SUSPENDED SENTENCE OF IMPRISONMENT OF 2 WEEKS SUSPENDED FOR 12 MONTHS IMPOSED BY Area F DISTRICT MAGISTRATES' COURT.
xx-Jun-xx	B	02/02/2016	THEFT OF MOTOR VEHICLE	DEFENDANT'S GUILTY PLEA TAKEN INTO ACCOUNT WHEN IMPOSING SENTENCE. TO PAY VICTIM SURCHARGE OF #80.00. ACCOUNT TO BE CONSOLIDATED WITH EXISTING ACCOUNTS.
xx-Apr-xx	D	03/02/2016	THEFT - SHOPLIFTING	DEFENDANT'S GUILTY PLEA TAKEN INTO ACCOUNT WHEN IMPOSING SENTENCE. COMMUNITY ORDER MADE. 09/03/2017: DRUG REHABILITATION REQUIREMENT
xx-Jun-xx	C	04/02/2016	BURGLARY OTD OTHER	TO PAY COMPENSATION OF #60.00. COLLECTION ORDER MADE. BENEFIT DEDUCTION. COMMUNITY ORDER MADE.

The performance framework for the IOM cohorts consists of a comparison measurement between the number of convictions during the monitoring year (15/16) and the number of convictions for the same offenders during the previous twelve months (14/15). Performance reporting is entirely dependent on the availability of conviction information both going forward during the monitoring period and during the previous twelve months. If this information cannot be obtained, then conviction activity for the offenders concerned cannot be included. In terms of success regarding a reduction in crime, the schemes are essentially competing against themselves as the offenders on the cohorts differ in any number of variables. With regards to the data, the offences conform to those targeted for schemes to reduce re-offending and in the main are acquisitive crime, mostly shoplifting.

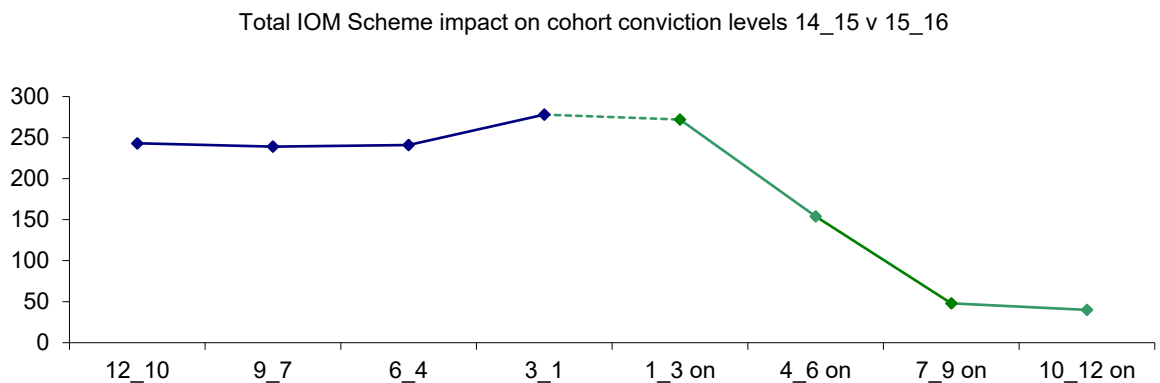
The end of year position in the Probation area

The following chart depicts the current performance position in the area being studied. The data is presented here with a brief descriptive explanation. Analysis in the context of the study will be carried out in the next chapter. The weakness of this measure in relation to impact on the criminal environment is not lost on the researcher and that weakness has been drawn out within the thesis. This is the measure which is used by each IOM scheme in the Probation Service area as an indicator of impact. Other impact measures present themselves such as a reduction in convictions per individual or a reduction in the severity of offences committed. Although the data was made available for the monitoring period, this granular data was not available for the

period prior to an individual's inclusion on the IOM scheme, therefore comparisons of that type were not available to this study.

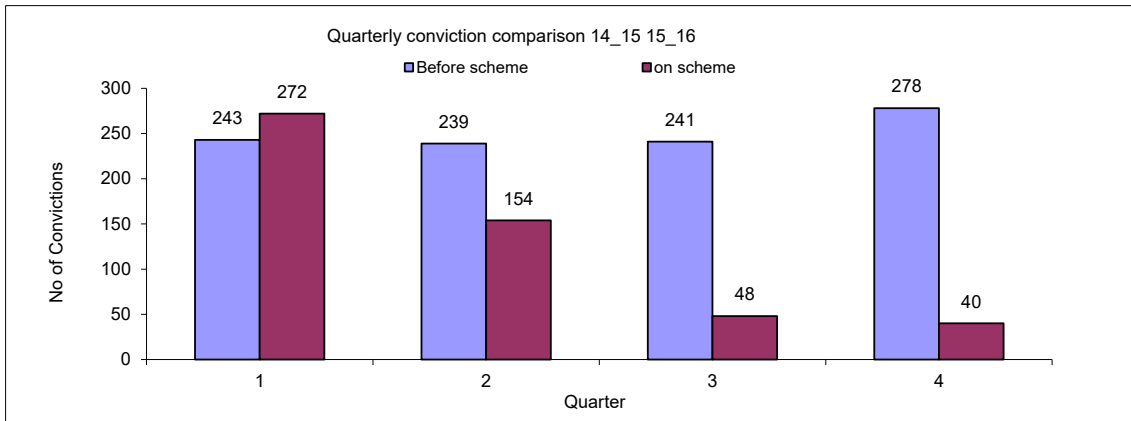
The blue line on the chart 1 below represents conviction activity for twelve months prior to the scheme start; the green represents conviction activity during the monitoring period. A classic blue line for a new set of offenders would show a steady incline starting at twelve months from scheme start. This would rise to a high at which point the weight of IOM supervision activity would, in theory, show an impact and curtail conviction activity which would be represented by a fall in the green line. The slight deviation from the classic rise is likely due to some offenders already being actively supervised. The green line however, does show a decrease in convictions.

Chart 1 Total conviction levels



Performance data obtained from police IT systems shows conviction totals at 1001 for the comparison data pertaining to financial year 14_15 and at 514 for the subsequent twelve-month monitoring period of 15_16, a fall of (49%). Trends suggest that conviction curtailment grows with scheme progression and compares favorably with the overall 38% reduction for the previous scheme and 30% reduction for the scheme the year before that.

Chart 2 below depicts a quarterly comparison of conviction activity.



Scheme impact on conviction levels

months leading upto				months on scheme			
scheme							
12_10	9_7	6_4	3_1	1_3 on	4_6 on	7_9 on	10_12 on
243	239	241	278	272	154	48	40

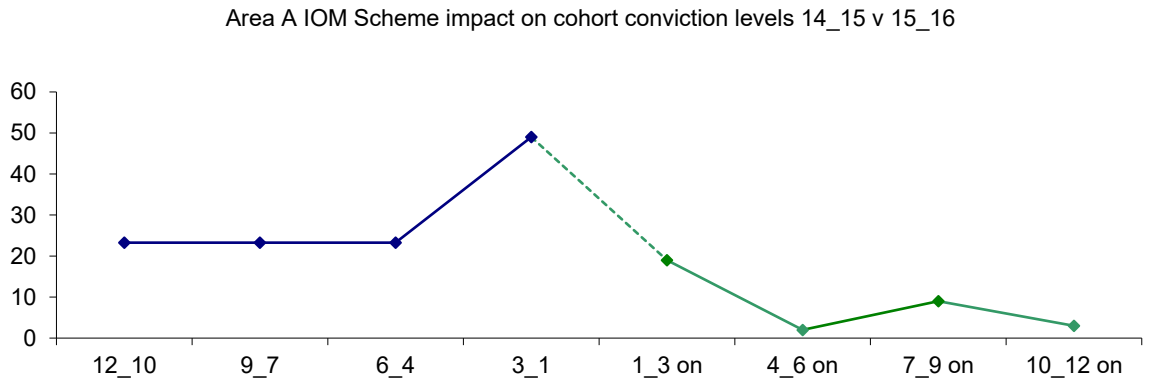
The position in each scheme

Impact / Conviction data for Area A

The conviction data obtained from the Police shows a decrease in conviction activity from 118 to 33 (72%). The blue line represents cumulative conviction activity before the scheme start, the green line represents the twelve-month monitoring period for each offender after the scheme start in April 2015. Another of the smaller schemes in terms of activity. Although not co-located, the probation and police maintained a joint approach to the cohort allocation process and although data was provided for offenders

prior to starting the scheme it was not refined into individual data for each offender.

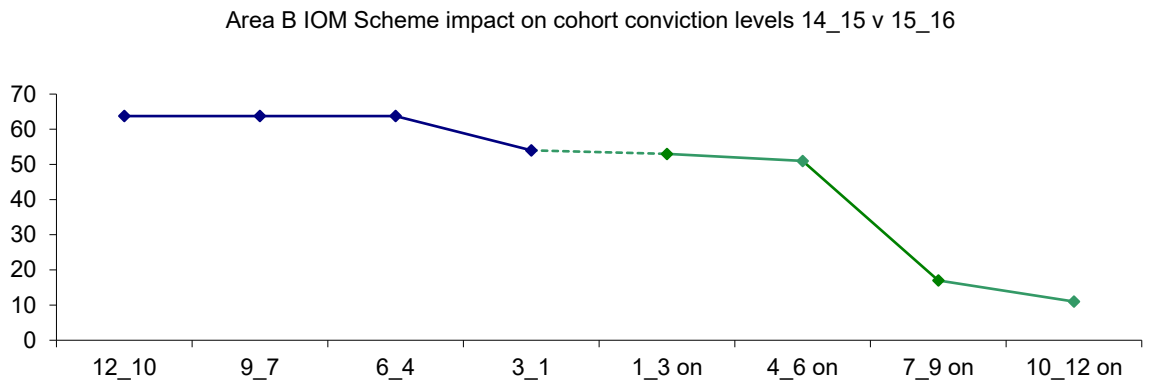
Chart 3 – Area A



Impact / Conviction data for Area B

The conviction data obtained from the Police shows a decrease in conviction activity from 245 to 132 (46%). The blue line represents cumulative quarterly totals for conviction activity before the scheme start, the green line represents the twelve month monitoring period for each offender after the scheme start in April 2015. This area is one of two large, urban conurbations within the probation region. This was a co-located scheme and although data was provided for offenders prior to scheme start it was not provided in a granular form which would allow analysis at offender level.

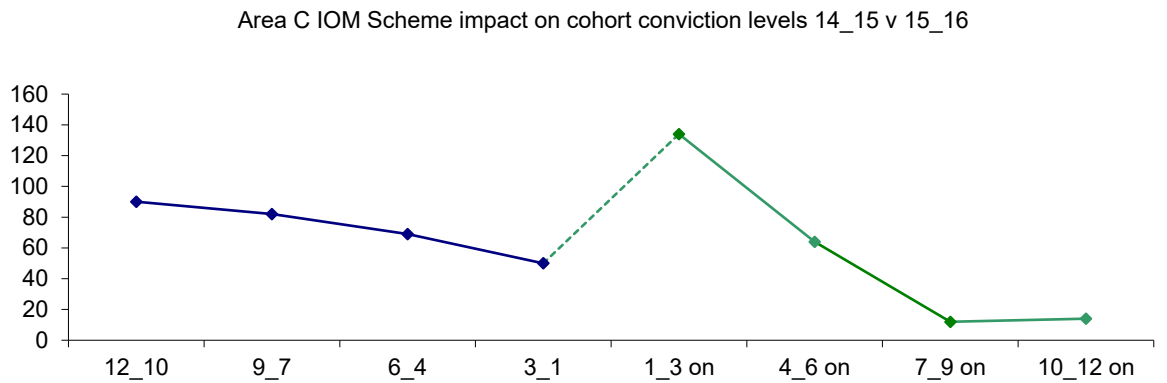
Chart 4 – Area B



Impact / Conviction data for Area C

The conviction data obtained from the Police shows a decrease in conviction activity from 291 to 224 (23%). The blue line represents cumulative quarterly totals for conviction activity before the scheme start, the green line represents the twelve-month monitoring period for each offender after the scheme start in April 2015. This area is a large, urban conurbation within the probation region. This scheme was heavily invested in the data collection exercise and still had co-located police colleagues available at their probation office. Offenders on this scheme were more active than others and in terms of geography this was a large urban conurbation.

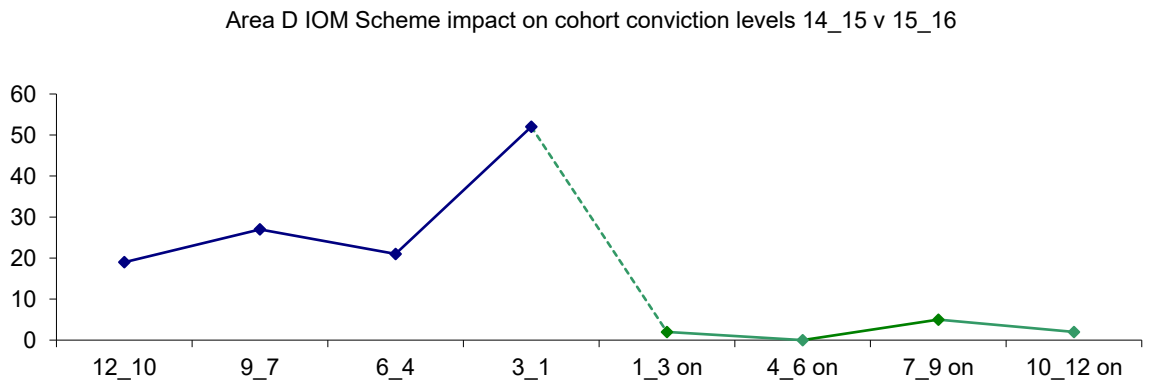
Chart 5 – Area C



Impact / Conviction data for Area D

The conviction data obtained from the police shows a decrease in conviction activity from 119 to 9 (92%). The blue line represents cumulative quarterly totals for conviction activity before the scheme start, the green line represents the twelve-month monitoring period for each offender after the scheme start in April 2015. A rural area with no co-located police presence during the scheme monitoring period, this scheme was still able to provide raw data to the project on the offenders on the scheme. The results show relatively low numbers of offending when compared to the larger schemes in the region.

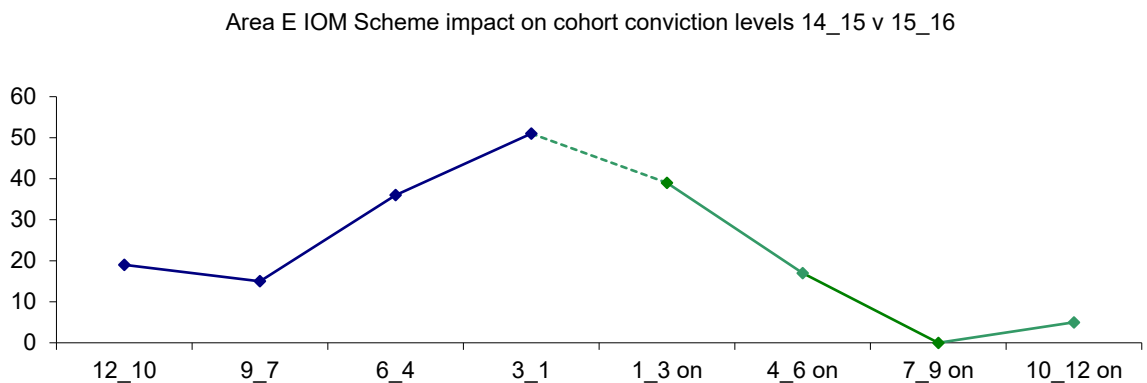
Chart 6 – Area D



Impact / Conviction data for Area E

The conviction data obtained from the Police shows a decrease in conviction activity from 121 to 61 (50%). The blue line represents cumulative quarterly totals for conviction activity before the scheme start, the green line represents the twelve-month monitoring period for each offender after the scheme start in April 2015. This area was heavily invested in the IOM scheme, they readily provided data for the offender cohort prior to scheme start and engaged completely with the collection exercise. The scheme did not have co-located police at the time fieldwork was carried out but had adopted a bespoke, secure information exchange system with their police counterparts.

Chart 7 – Area E

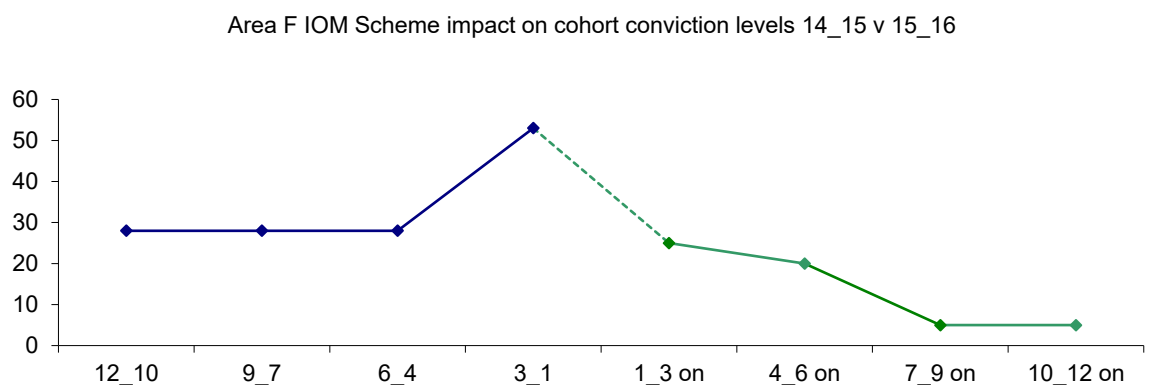


Impact / Conviction data for Area F

The conviction data obtained from the police shows a decrease in conviction activity from 137 to 55 (60%). The blue line represents cumulative quarterly totals for conviction activity before the scheme start, the green line represents the twelve-month monitoring period for each offender after the

scheme start in April 2015. In terms of gathering the data, this was perhaps the least invested area. The police presence had withdrawn from the IOM team and technical support was unavailable although data was made available for the twelve months prior to scheme start, it was provided as totals for the area as a whole rather than as raw data. Data was made available via Police IT for each offender when the scheme started.

Chart 8 – Area F



The perceived weakness of re-conviction data as a measure to determine impact on the criminal environment is noted throughout this thesis. The charts above show that each scheme collects data to monitor impact in this way. Regardless of any perceived shortcomings of the measure, this study is required to determine if the probation service carries out actions to understand its impact (the 3rd of Ratcliffe's 3i's).

The chapter will now present data collected to determine the organisational architecture of the Probation Service under scrutiny.

Phase four - Organisational Process Mapping

Carrying out this process was not a necessary mandate of the 3i system but is something reflective of earlier work (IALEIA, 2001; Schneider, 1995) which considers the organisational capability required of an Intelligence System. This also compliments the socio technical or systems aspects of the “Intelligence System” (Gill, 2017; Von Bertalanfy, 1968). The inclusion of this qualitative appreciation of the Probation Service organisation under scrutiny is entirely proper and representative of the research questions and the literature of Trist (1981) and the Tavistock institute.

The data collected for the organisational aspects of this research consists of capability maps, process flows and an understanding of personnel (actors and actions) involved in the process. As explained in the methodology chapter, the data was obtained during visits to each of the IOM units where the researcher was able to observe the operational processes of the staff as well as glean an understanding of the team structure.

In all cases there was an established hierarchy of a team leader (IOM Manager) role along with a staff of up to six specialist IOM offender managers and two administrative support officers. The IOM teams also received administrative and IT support from Head Office. In geographic terms, each IOM team was area based, with a resource management hierarchy falling within the relevant area Director. In terms of practice, strategic direction and practice meetings, IOM was specifically centralised with the IOM managers all reporting into one area Director with overall responsibility for IOM.

The study found that IOM teams occupy their own space within the Probation office. Only one team (area E) was located in a separate building to the general offender management team. The visit to Area E uncovered a bespoke, secure email exchange of intelligence which effectively replaced face-to-face meetings with police colleagues (step 2 in Figure 9 below).

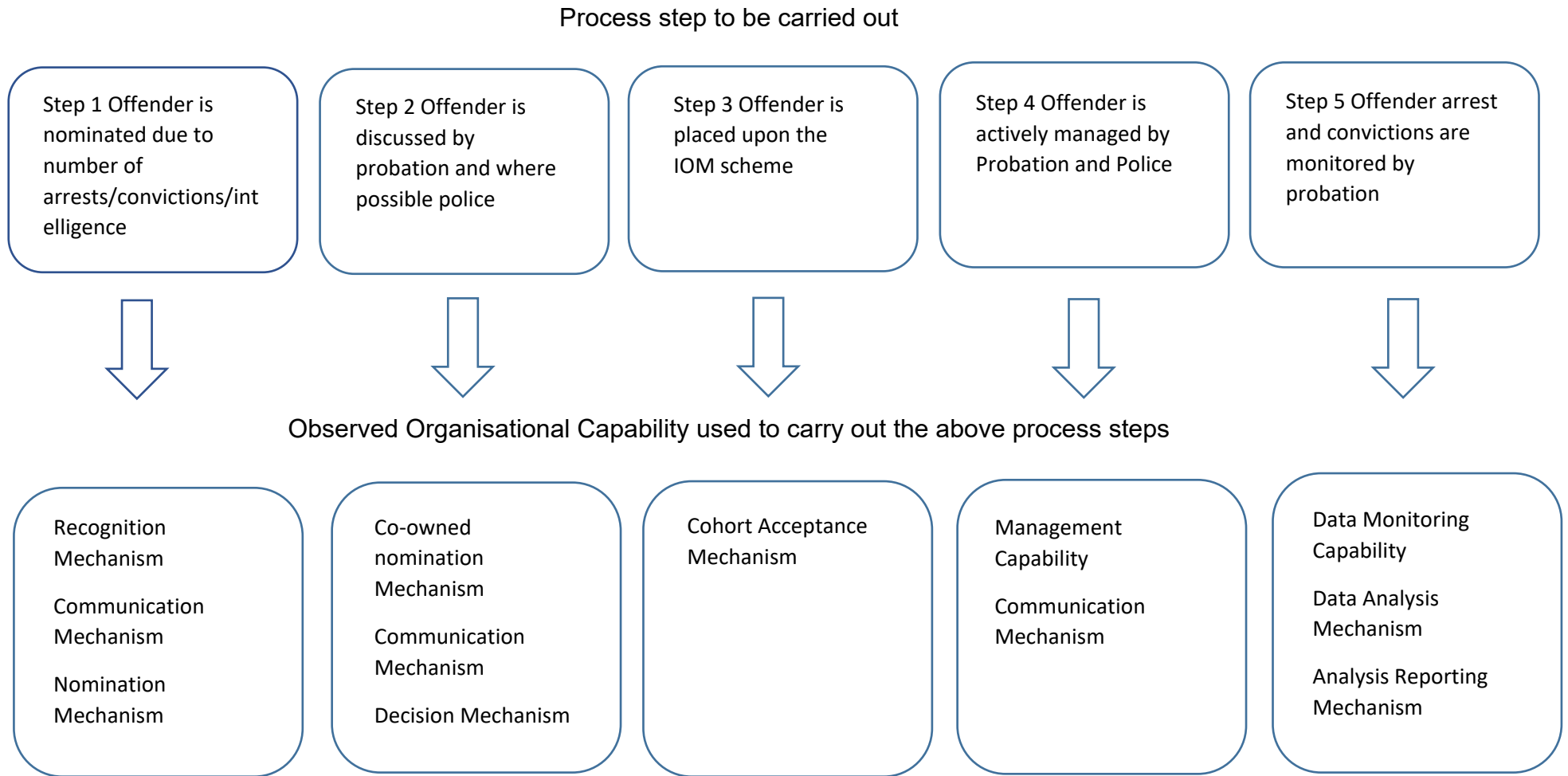
Until the start of the fieldwork for this study all of the teams also included two co-located police officers attached to the IOM team, the police officers had on-site access to the PNC. When the fieldwork was carried out however, only one team (C) still had the policing resource working within the same office space.

The high-level process for the IOM team is depicted in the process step diagram below. This data was obtained by observation at the IOM team sites, the Cohort Allocation meetings and during interviews with IOM managers. The process steps are the actions which are carried out. Beneath the process steps are capabilities which, in accordance with the literature and the observed process are organisational mechanisms which were used to carry out those steps. The steps and capability map in Figure 9 below are followed by a detailed swim lane diagram in Figure 10 depicting the monitoring part of the process.

The diagram shows each process step to be carried out and the associated organisational competencies which are required to carry out such

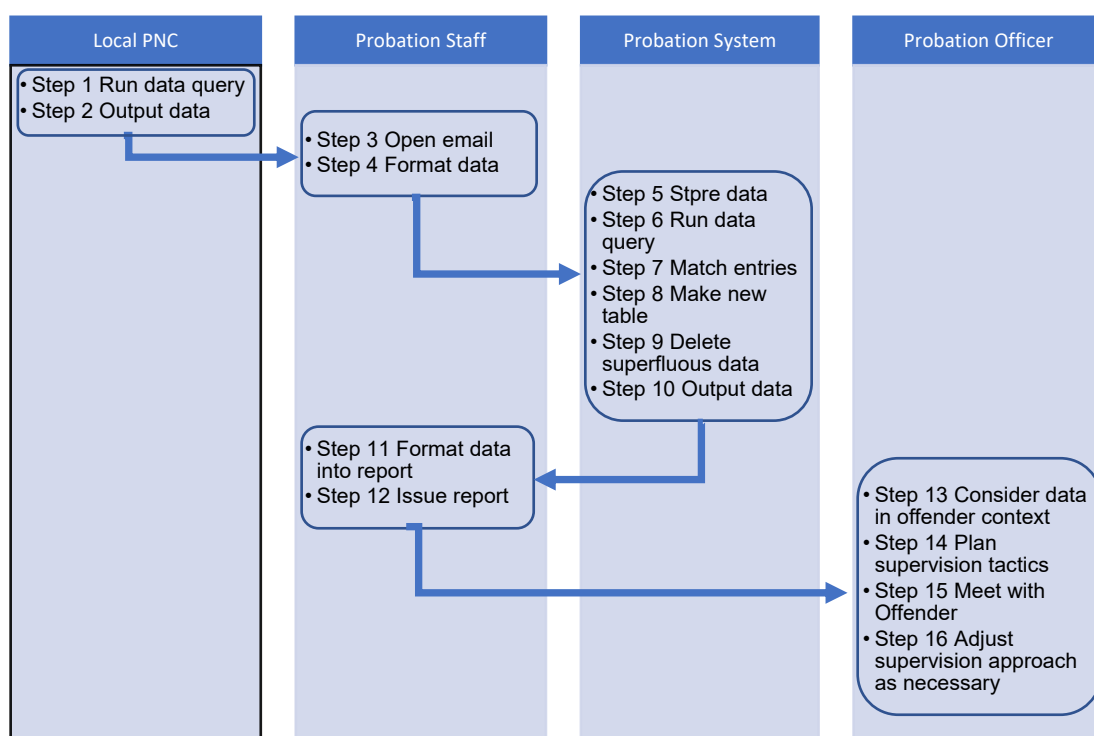
actions. The researcher, having qualified as a business analyst and qualified as a systems architect whilst undertaking this project was able to determine the competencies after consideration of each process step.

Figure 9 – IOM Process Steps & Required Organisational Competencies



The data collected as part of the exercise above will be considered within the analysis chapter. In addition to the high-level process steps provided above, the study compiled a granular process map which provides an example of the actors and actions required during step five above to collect, collate, analyse and disseminate arrest and conviction data for the IOM cohort. Analysis of the process maps and capabilities will be carried out in the next chapter and the results have enabled a gap analysis to be performed. The granular process map below is in the form of a basic swim lane diagram and includes commentary on each step.

Figure 10 – IOM Conviction Monitoring Swim Lane Diagram



Step one of the above process is an automated data query performed by the IT section at the police data facility within the region. The query extracts details of all arrests typed onto the PNC within the last twenty-four hours. The

data includes key fields available to both police and probation computer systems which are used to match offenders. Steps two and three are the output of data from the police system and transmission to probation via secure email, the files themselves were also password protected. Step four involved the probation staff removing minor data artefacts such as leading spaces from key data fields using Microsoft Excel. Step five involved probation staff importing the arrest and conviction data from Microsoft Excel into a Microsoft Access database. Steps six through to nine involved probation staff running queries to join the police data to the probation caseload. The probation caseload included all of the IOM offenders. This joining action created a new table and deleted any data which was not required for the monitoring task. Finally in step ten, the data was output into a report format. Step eleven involved the probation staff formatting the report with appropriate dates before sending it out to a pre-determined list of offender management staff. Steps thirteen to sixteen are what the offender managers did with the information when it was received.

Data Chapter discussion

The data collected for this piece of research broadly follows the 3i path marked out by Ratcliffe (2003,2005,2006) and Gul and Khule (2013) albeit carried out in an entirely different organisational area. The chapter has provided examples of the data collected including excerpts from the cohort allocation meetings and semi-structured interviews with IOM Team managers. The chapter also provided commentary on the data collection process. The chapter examined the collected data in terms of its suitability to provide answers for the first research question of whether the Probation Service interprets their environment according to the adapted 3i model. The chapter then turned towards the electronic survey data which collected the responses of (n109) offender management employees. This data provides the next chapter the opportunity to address the question of whether the Probation Service uses the information at its disposal during operational decision making. The survey data also provides the opportunity to consider which types of intelligence are considered more useful by Probation Officers in different roles. The arrest and conviction data collected for this piece of research was provided in chart format along with excerpts from the raw data tables provided by the police in the area. Each area supplied data for the third aspect (Impact) of Ratcliffe's model. The arrest and conviction data has enabled the researcher to report on the efforts made by the organization to determine the impact their operational decisions have on the criminal environment within the IOM schemes.

On reflection, the fieldwork part of this research went as largely as expected and each of the meetings and interviews were carried out as planned. The only fieldwork adaption was that the survey had to be released

quickly due to the Transforming Rehabilitation process. The researcher considered that staff movement due to TR may reduce the pool of subjects and discourage staff from completing the survey. In addition to collecting data on the main research questions, this research set about mapping the organizational process for information collection, processing and action within the probation area being studied. This involved a period of desk research and liaison with IOM managers to collect local documents pertaining to IOM. Additionally, the researcher attended bi-monthly IOM management meetings which provided an understanding of the monitoring process. Even at this, the data collation stage of the research processes, the raw data revealed signs of not only being able to answer the research questions but to propose supplementary questions of the domains concerned for future research. The next chapter will provide analysis and findings of the data presented here and will provide the results of a gap analysis which will answer the main research question.

Chapter five: Analysis of collected data.

The previous chapter provided a descriptive presentation of the data collected during the fieldwork phase of this study. The purpose of this chapter, however, is to provide an analysis of that collected data. The analysis will be carried out in the context of the research questions and will compare the collected data with the component parts of the theoretical intelligence system. The main research question will be answered using a process of Gap Analysis. The exploratory nature of this research project set out in the introductory chapter includes an experimental analysis framework with which to conduct the gap analysis evaluation. The chapter contains a number of analytic avenues with which to answer the research questions. The study recognises that the avenues pursued here do not neatly fit within the confines of the Scientific Methods Scale (Sherman *et al*, 1995), however the path pursued is a reflection on the academic gap discovered in the introduction and literature review chapters. In the context of this study, the research questions serve as broad themes beneath which subthemes are located. The following paragraphs will provide an explanation of the themes, subthemes, and stages in which they will be analysed.

This chapter will first provide an analysis of the collected data before comparing that data to the conceptual intelligence model built for this study. The comparison results will show if an intelligence system is in play or where there are gaps in the system.

As well as providing answers to the research questions, the analysis provided here will also make reference to the literature review and will consider

how the new data provides an original contribution to the overall body of knowledge.

The construction of this chapter necessitates briefly revisiting research environment established in the introduction chapter before resuming the framework adopted for the preceding chapters which has been to consider each of Ratcliffe's 3i's in turn as research questions.

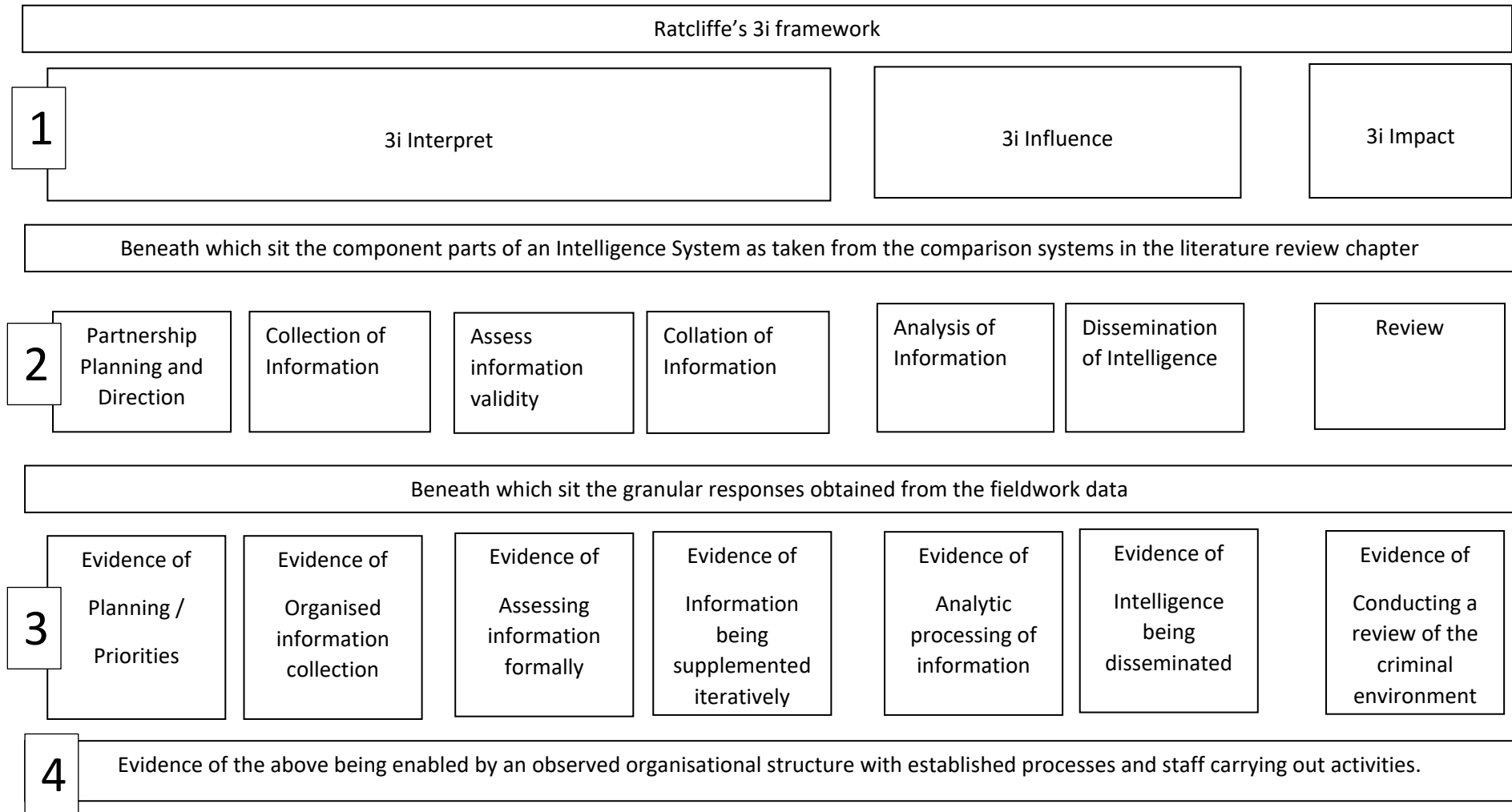
As stated in previous chapters, the headings provided by Ratcliffe's 3i model are considered too broad to enable this study to provide a granular exploration of the CRC's probation operation and any intelligence activity therein. In view of the broad nature of these overarching themes, a more granular set of questions drawn from the literature review are used to surface the findings in more depth.

In addition to the 3i's of Ratcliffe's model and the more probing questions compiled from the literature review, this chapter will also use established business analysis techniques, to analyse the organisational intelligence capabilities found within the data.

Given that there are broad research questions with more granular ones sitting beneath, there is a layered strategy for analysis which is depicted in figure 11 below. The figure provides a broad visual depiction of how theory informs the data analysis. As the figure indicates, layer one shows the major themes which are each of Ratcliffe's 3is and are the overarching research questions. Layer two shows the sub themes containing the component parts of the intelligence system. In terms of a gap analysis, layer two is the TO BE scenario which presents the comparison benchmark of an intelligence system.

Layer three contains the fieldwork data analysis which shows the AS IS situation found in the probation environment during this study. The last layer specifically considers the sub theme of organizational capability.

Figure 11 – Layers of Analysis



The first layer is one in which the three broad elements of the 3i model are used as an overarching framework for analysis of the data at a macro level. Beneath the broad layer, there are several sub themes which reflect the pertinent research literature, for example, the work of Schneider (1995) and that of Glass & Davidson (1948). The sub themes making up this second layer will be used alongside the recognized stages of the intelligence cycle to compare and contrast the findings for this study with the body of knowledge uncovered in the literature review. The third layer shown in the figure above gives examples of the more probing questions. It is the third layer which provides the actual evidence of intelligence activity. The fourth layer involves considering the organizational capability for an intelligence system which includes examining the hierarchy and management structure, personnel and tasks being carried out within the probation organisation. Conducting analysis of organisational capability is something introduced in the first chapter and precedent for such an examination was subsequently found in much of the literature on intelligence systems.

Furthermore, in terms of the analytic process, as the previous chapter has shown, the data collected for this study is, a mixture of quantitative and qualitative.

It would be pertinent at this point to re-iterate that the scope of the study does not include activity to prove that an intelligence system works. As previously explained, Intelligence systems are not explicitly concerned with the strategies employed by Probation or Police to bring about a change to the criminal environment. This study is concerned with uncovering if the probation organization carries out activities which constitute an intelligence system. With

regards to their worth, Ratcliffe (2005, p.438) points out, “the Police National Intelligence Model would be seen to be hypothetically successful if intelligence products are flowing to operational commanders”. One could argue that this study is more stringent because it also explores if re-convictions were reduced. The chapter will now present the first stage of analysis and consider the research questions as major themes.

Analysis of Interpretation data

The first of the broad research questions was to uncover whether the probation area being studied carried out activities which, within the context set out in the conceptual intelligence system, constitute an interpretation of their environment. The analysis presented here is that of data collected from Probation and Police officers who convened to consider if offenders on their lists were suitable for the IOM programme. In a very broad sense, this research finds that merely convening to consider information on the criminal environment is an interpretive action in line with the conceptual system. However, the four-stage analytic process and granular data provides the opportunity to examine the interpretation efforts of the probation area much further. The following paragraphs will present the layer two analysis of the data taking each of the component parts in turn.

The partnership approach

Whilst the literature review did not reveal this as an initial stage in any of the Intelligence systems considered, the literature revealed several texts (Wong and Senior, 2011; Gill, 1997; Godfrey and Harris, 1971) referring to information exchange between agencies and that this was a necessary ingredient for the

production of intelligence. Obtaining and exchanging information with partner organisations is a clear example of how an intelligence system would operationalise the gathering of raw data. In the case of the IOM scheme, the specific lens for this study, probation has formed partnerships with outside agencies to provide a more holistic offender management service. In the CRC being studied, arguably, the most significant partnership in terms of co-location and pooling of resource is with the police. The introduction provided a hypothesis as to why probation officers might carry out intelligence activities if they were introduced to it by a close working relationship with police colleagues. Observation at the IOM manager meetings; the strategic meetings where area managers from IOM teams would meet with the senior probation manager responsible for IOM, uncovered the fact that Police were the only outside agency invited to attend these (NPT, 2014).

Analysis of the cohort allocation transcripts for this study presented in chapter four found that although each area did carry out activities which constitute them interpreting their environment, only three areas (A, B & C) out of the six separate areas maintained a partnership approach to this where they would regularly meet with police colleagues. The transcript excerpts presented in the last chapter show that the three remaining areas (D, E & F) had previously engaged in a partnership approach with the police and had carried out joint cohort allocation meetings in the past. Not conducting a partnership approach was an unexpected finding under the IOM lens as the IOM schemes rely on joint working to be effective (Wong and Senior, 2011). As the transcripts in chapter four identified, the two areas D and F which reported working entirely in isolation, explained why they did not conduct joint cohort

allocation meetings to the researcher during the fieldwork interview. Both of the IOM managers interviewed said that the lack of joint working was due to police resources being transferred from the IOM teams back into the neighborhood policing teams.

The chapter four excerpts also show, the data collected from Area E uncovered an interesting finding. Area E pursued the partnership approach by constructing a bespoke, secure system to share information with their police counterparts. The transcripts show that the probation manager of area E made a local decision in the light of the withdrawal of his co-located police resource to set up an information exchange of sensitive data using a secure email and a bespoke intelligence reporting template. Probation staff would compile reports of pertinent data on subjects they were monitoring under IOM with the police and would share any current information via secure email link. The police counterpart would return a report providing appropriate information from their operational viewpoint. This bespoke system is a significant finding which is at the center of the research questions because it proves that a tacit system exists, that staff in probation recognize the need to share intelligence or information which may contribute to intelligence. The bespoke nature of the system shows that tacit systems can evolve from a perceived necessity which is outside of national or local direction. It is perhaps worth noting at this stage that collaborative software such as Microsoft Teams and Zoom were not commonly available to government agencies at this time. The system found during fieldwork used a bespoke intelligence template which was used to exchange information on the IOM offender group.

In his review of the work of Erikson and Haggerty (1997), O'Malley (2015) regards the police as brokers of information pertaining to risk and that this became a prominent function for the police. One could argue that the transcripts presented in the last chapter provide some evidence of this in that the police do provide intelligence on offenders as a matter of routine. In contrast to O'Malley, this study found an equal exchange of intelligence. Although police referred to their exchanged information as intelligence whilst probation staff did not. There is less evidence to corroborate the O'Malley's posit around the police becoming governed by the risk formats of outside institutions. Whilst probation managers defended their position on more than one occasion there is no suggestion that the police accepted wholesale deference to the probation point of view in any way.

The observed interactions between probation and police are closer to the trust alluded to by Mawby and Worrall (2011) in the literature review than the mistrust and fears of police corruption noted in much earlier work by Godfrey and Harris (1971). The researcher's observations of areas, A, B and C during the allocation meetings are of two separate organisations appearing to be at ease with one another, sharing information openly (although as this thesis will argue, not fully on the part of probation intelligence) and working towards a common goal. The team culture aspect of police knowledge sharing which was alluded to by the literature (Seba & Rowley, 2010) is a possible reason for the transparent nature of information exchange with their probation counterparts. Further research into police/probation cultures may reveal that they consider themselves as being part of the same team.

Observation of areas D, E and F again provided in the transcripts previously show whilst two areas were resigned to the fact that they would interpret their environment without their police partners, area E had constructed a bespoke system with which to maintain the relationship. In terms of the gap analysis, four out of six areas maintain a partnership approach.

Prior Planning and Preparedness

Observations made by the researcher during cohort allocation meetings show that a level of preparedness was undertaken before the meetings convened. Where police and probation met (Areas A, B & C), the transcript excerpts in chapter four show that the current list of offenders had been previously distributed. This shows that there had been some collation and consideration by each party separately prior to the meeting and their thoughts on each offender was shared during the meeting. New offenders whose potential suitability had not yet been discussed were added to the lists prior to the meeting so that each of the participants had knowledge of the new offenders to be presented. Transcript excerpts of the cohort allocation meetings provide evidence of the depth of the relationship between the probation officer and the offender in their charge. This is testament to a major theme within the literature consulted on probation practice in which a strong relationship with the offender was seen as good practice.

The knowledge claim made here with regards to prior planning is that the data proves that the probation service in areas A, B and C engaged in an established practice to collect specific information held by each agency with regards to the offenders in their areas. They then convened to consider the

information and the meetings were held for a sole and specific purpose and attendees knew in advance what was required of them. The data also shows that area E constructed a bespoke system to circumvent police resourcing restrictions whilst areas D and F conducted their interpretive activities in isolation.

In the case of areas D and F the transcripts show that the probation manager in each area decided upon the case list in absence of their police colleagues. Although the probation managers carried out an activity to determine who was suitable for the IOM scheme which was predominately managed by the probation service, the process for that decision did not involve the use of police intelligence. The data showing that probation areas conducted this interpret activity on their own shows a reliance and confidence in home grown intelligence data. A negative side to this silo working is that the IOM manager could not consider any new cases which would normally have been put forward by the police. The literature from chapter two, surrounding information collection and collation (Gill, 1997; Godfrey and Harris, 1971) suggests that a partnership approach with varied information sources is desirable but as this is not possible in areas D and F the activity could still be carried out.

As the transcripts from the previous chapter show, area F did not engage in the partnership approach and had resorted to relying upon a matrix supplied by the National Offender Management Service to determine inclusion on the Prolific and Priority Offender Scheme (PPO). This arguably meant that the IOM scheme was not wholly in operation in this area. The manager's actions to consider a list of offenders against a matrix demonstrates the broad

requirement for interpreting the environment corresponding with Schneider's (1995) environmental scan proposal and Godfrey and Harris (1971) situational assessment. In terms of the gap analysis therefore, the study concludes that all six areas conduct some activity to plan and prepare, only four of them do this in accordance with the conceptual intelligence system.

Collection of information – types of information and sharing.

As the literature review revealed, Ratcliffe (2005) along with Godfrey and Harris (1971) determined that interpreting the environment requires not only adequate personnel but access to appropriate data sources, (Gill and Phythian, 2012) and the tools to analyse data. Schneider (1985) lists collation of information as his second stage and Gill & Phythian (2012) and Glass & Davidson (1947) both referred to the collection and collation stages of the intelligence cycle, all of which are grouped in this thesis chapter beneath the framework of the first of Ratcliffe's 3i's (the first research question). Operational capability such as personnel and training will be considered later in this chapter, however access to appropriate data sources will be considered here.

When considering the information used to interpret the environment and analysing the data in the context of the list of the probation "INT's" established in previous chapters. This study confirms that the intelligence provided by police and probation at the cohort allocation meetings fall within Gill and Phythian (2012) general headings of PROTINT (Protected Intelligence) because they use a range of protected information from personal records held on secure police and CRC probation databases. The data is also

HUMINT (Human Intelligence) because both agencies provide information relation to that obtained from human intelligence sources such as interviews with offenders themselves or information collected by means such as police sightings of offenders.

As the transcript excerpts in the previous chapter show, the evidence presented and considered at the cohort allocation meeting for area A was well balanced. Both parties had obviously prepared information before attending the meeting and then actively presented that information for the other party to consider.

Data from area B shows that both parties prepared before the meeting, however, it is apparent from researcher observation and transcripts of those meetings that the exercise was uneven in terms of personnel attending (many more police than probation). Additionally, perhaps because of the imbalance of personnel, area B featured mostly police information. The significance of this finding is important in terms of both partnership and data legitimacy, whilst the offender list is considered and information is put forward for that, thus adhering to the intelligence process, the result of the analysis has the potential to overlook important information from the probation side as it is overwhelmed by the police intelligence during the meeting.

The transcripts in chapter four along with the researcher's notes on observations show that Area C was the most prepared as it actively used system information during the meeting. The meeting convened at a probation office which crucially included two co-located police officers who had on site access to their local PNC. The probation officers in attendance also had

access to the Offender Records system CRAMS/DELIUS, as well as access to OASys. Participants in this area also had access to the combined arrest data which matched police arrests to probation offenders. In terms of the gap analysis four out of six areas actively shared information.

Information Validity

Ratcliffe (2005) indicates the struggle intelligence units have getting access to reliable information. As the academic and practice related literature has shown, there appear to be two main considerations surrounding data validity. Both concern quality, however there is a different emphasis to each consideration, one is due to poor data inputting on the part of those feeding the systems being used and the other consideration is on checking the likelihood of the information being offered actually being truthful.

Transcript information obtained for this study did not provide evidence of data entry issues during cohort allocation meetings.

As the literature review uncovered, intelligence systems adopt a matrix approach to the grading of information received before it is fed into their agency. The 3X5X2 matrix which is commonly used to validate information received was introduced in the first chapter.

The exchanges observed between police and probation involved each side providing information at one time or another. None of these exchanges included any suggestion that the information being presented required any form of validation at the time it was presented. Those present were observed listening to the information, making decisions using the information and at no time questioning the validity of that information.

In terms of access to information, the probation service was, at one meeting, hampered by the changes brought about by Transforming Rehabilitation. As the transcript excerpt provided in chapter four shows, there was one instance in area B which the probation manager indicated that they no longer had information on a particular offender because the offender had been transferred to the National Probation Service (NPS). Area B could no longer obtain information on the offender as the record had become locked down. That particular offender therefore could not be considered for the IOM scheme. In terms of the gap analysis, none of the areas conducted data validation during cohort allocation meetings.

The data does present a future question about the use of police intelligence. There are transcript details where police intelligence suggests that offenders are “at it” but that does not appear to be proof of anything and yet it was often just accepted by the group. Blindly accepting the word of the police and then deciding to monitor an offender for twelve months afterwards appears to be an important decision requiring evidence. There is arguably more recourse if a mistake is made in an OASys assessment than there appears to be on the police intelligence provided at cohort allocation. Why then is OASys data such as the general offending predictor score which is so strenuously researched and defensible (Craissati & Sindall, 2009) not offered as intelligence?

Collation of Information

As the transcripts show, each of the area representatives who met with their police colleagues undertook activity to collate information during those

meetings. The transcripts show that the collation activity was manual and in the case of all but area C who had the benefit of technology in the room, a mental exercise. The mental exercise consisted of information being provided during the discussion, by police or probation and both parties would consider the information alongside what they already knew before deciding on scheme suitability. This mental exercise is perhaps a departure from the big data collation activity proposed by Luhn (1958) and now routinely undertaken by established, computerized intelligence systems. The study suggests that the observed actions undertaken during cohort allocation meetings is clearly collation activity.

As mentioned in the introductory chapter to this research project, the researcher previously worked within the probation service as an information analyst on a central section which undertook the task of challenging erroneous sentencing information arriving in offender paperwork from court. The case management system (CRAMS and then DELIUS) would flag up erroneous information so that it remained a source of valid material.

In contrast, the researcher's own experience and knowledge as an information officer with the probation service recalls that the data placed upon the Police Intelligence System and shared with the Probation Service was considered by Probation staff at the time of this study to be A1 in nature. This view was routinely encouraged by long standing members of staff at the probation headquarters building. The A1 classification means the source is regarded as always reliable and that the data was regarded to be true without reservation. This A1 regard was also the assumed case for Police supplied arrest data, which will be discussed during the last of the broad research

questions later in this chapter. This arrest data was transferred electronically direct from back office police computer systems and was not quality checked in any way before being matched to offender records and distributed to officers in the field. The information obtained in the previous chapter shows that this arrest data was used to interpret the environment during the cohort allocation meetings by both police and probation officers who attended the meetings. As the Area C meeting transcripts show, arrest data is explicitly referred to during the consideration of offenders for the IOM schemes. Police officers regularly called out arrests from the information they obtained whilst interrogating police national computer data. During the meeting the same observation can be made for the Probation Team Manager who consulted their own system data to call out arrest particulars to establish ongoing patterns of behavior.

Two of the areas D and F, did not actively demonstrate any collation activity outside of their own data. Area E as previously described, constructed their own secure, electronic information exchange with police which actively demonstrates activity to exchange and collate information on offenders in their area. In terms of the gap analysis four out of six areas conduct collation activity.

Analysis of information

Examination of the literature in chapter two uncovered definitions of intelligence to be that intelligence is “analysed” information (Alach, 2011; MOD, 1991). The review also uncovered that analysis is about translating information into a practical and operation format (Cope, 2004). As the literature review uncovered, early attempts to standardize methods of crime analysis

such as those included in the TREVI definitions (Read & Oldfield 1995) do not fit with the activities of the Probation Service as the definitions were constructed to standardize criminal intelligence analysis for investigative purposes. This study asserts that the observed process carried out during the cohort allocation meetings does constitute analytic activity but that it has not been given a formal title. Perhaps the closest formal technique with regards to Trevi definitions to the one observed would be offender profiling (Read and Oldfield, 1995), however, this technique is concerned with investigative analysis and solving crime Bruce (2004) rather than the probation mission of reducing the offending of offenders already being managed by the service.

Godfrey and Harris (1971) suggest that there is a close relationship between collating information and analysing information; they report that the two activities can be carried out together and this guidance is a direct reflection of the actions carried out during the observed allocation meetings. The meeting transcripts show analysis activity being carried out in the areas A,B and C on each offender as participants offer new, current information (collation) to the group on a given offender which is then considered (analysed) by other attendees. Observations of the allocation meetings also demonstrate Ratcliffe's second "I" (influence) being carried out by the convened groups because a collective decision on whether to include an offender was then made during the meeting in almost all of the offender cases considered.

Whilst analysis is considered by Godfrey and Harris (1971) as being at the center of an intelligence system and is one of the steps within the intelligence cycle (Gill & Phythian, 2012), the literature review shows that Schneider (1995) concurred with this view commenting that "the analytical

phase is the backbone of the intelligence process". In considering the evidence provided during this study, there is a gap in relation to formal or recognized analysis techniques within the probation service, however, as intelligence work is not mandated in probation this gap is to be expected. The absence of another formal analytic tool at the offender management level is no doubt welcome as it leaves the analysis to probation practitioners themselves. Commentators such as Fitzgibbon (2007) suggest that the automated aspect of risk-based tools are a tick box exercise which ultimately de-skill probation officers from their traditional practice of case work. Reflecting upon Fitzgibbon's theory and upon Raynor & Vanstone's (2018) commentary on the re-emergence of core skills, this study has observed IOM managers conducting analysis in a case conference environment where participants engaged cognitively with the information presented to them. The evidence found in the transcripts demonstrates cognitive analytic abilities of probation practitioners who are adept at making defensible decisions based upon intelligence received. The evidence show that analytic ability is enabled by probation practitioners who have a deep understanding of the offenders in their charge and can employ intuitive logic rather than rely upon a structured analytic process or a risk management tool (Fitzgibbon, 2010; Marrin, 2007).

Schneider (1995) also noted that the analytical stage was the step least understood and least used by the policing function and the study finds merit in this observation for without stopping the flow of the conversation during the cohort allocation meetings to specifically ask probation staff about the cognitive process, this study cannot realistically suggest knowing a great deal more about any intuitive analytic techniques used. The study suggests

that further research is required to consider in depth the analysis activity carried out within probation so that formal proposals can be made to recognise the process involved. This recognition would allow for an assessment of analytic rigor from the intelligence perspective.

The plethora of books and courses noted in the introduction chapter provide a body of knowledge available to criminal, military and business analysts but nothing to aid the analysis of probation information to turn it into actionable intelligence. In addition to the lack of formal analytic techniques, there is not, at the time of writing, a professional body such as the International Association of Crime Analysts available to steer developments of a probation analysis domain. Using academia to further the police intelligence function is not un-precedented, indeed this is something Godfrey and Harris called for:

*“The resources of local or regional universities should be exploited for specialized personnel assistance wherever the budget permits.”
(Godfrey & Harris, 1971, p.66)*

The lack of a professional body, any academic scrutiny or a recognized body of knowledge is likely to have contributed to the current situation where individual probation staff undertake informal analytic activities. Reflecting upon the literature review and the comments made by the authors of the recent thematic inspections of IOM schemes (HMIP, 2020), the transcripts for this study did not find a formal decision documentation process for IOM, as the transcripts show, agreements made were noted by participants, however no formal decision documentation or evidence pertaining to the intelligence used was kept.

The process of considering offender information during the observed allocation meetings is an example of analysis activity being carried out by probation officers and some form of this activity was found to be present in each one of the areas being observed. Even where cohort allocation was conducted in isolation, the IOM managers carried out operational analysis to consider each offender before coming to a decision on their suitability on the scheme. The data shows that in terms of the gap analysis, six out of six areas undertake analytic activity.

**Conclusions drawn on the first of the three research questions:
Interpreting the environment.**

As the chapter thus far has shown, within the lens of the IOM scheme, probation officers do actively interpret their environment. The interpretation effort is, in the main, an organized effort and is in place across the CRC. Where possible this interpretation effort is conducted alongside defined professional partners in the police. The transcript from Area A shows that strategic direction and priorities are business drivers for the IOM schemes and that the IOM Team Managers refer to these when interpreting the environment. Priority around offenders committing acquisitive crime and the adherence to the number of crimes and time frame of those crimes being committed are examples of IOM schemes operating under a strategic direction. The transcripts reveal collection and collation activity are in place where information is actively sought out and then added to where possible. The transcripts show that the information collection activity which occurs during the actual cohort allocation meeting (when either police or probation provide intelligence) does not appear to have any formal verification process attached

to it. The transcripts reveal no formal analytical techniques in comparison to those developed in business, military, or crime analysis in operation, however, the transcripts for each area show that a cognitive analytic process does take place. This can be observed in the discussions between police and probation before a decision is reached. Similarly, during face-to-face interviews with IOM managers for the three remaining IOM schemes who undertook cohort allocation in isolation, they each described the process they used to determine suitability. A lack of a formal analytic process is a reflection on limited intelligence architecture within the CRC, however, as the data has shown this does not hinder analysis. The analytic activity embedded within probation practice is evident within the observed process: it is enabled by an in-depth knowledge of the offender in their charge along with a unique understanding of the motivations for committing crime and engaging in rehabilitation. Although the IOM scheme is a tactical tool to reduce recidivism, the analysis carried out by officers at cohort allocation meetings is done at an operational level. At the time this research was conducted, the interpretation effort was hampered in three of the six areas only because of resourcing changes within the police, had this not happened, the study suggests that all probation areas would have continued with joint cohort allocation meetings with their police counterparts had the resources remained available. The study finds that interpretation effort is bolstered by access to pertinent data from partners. The study found evidence to corroborate existing theory of a reliance upon police data in the case of arrest information and intelligence such as sightings of individual used during meetings. The study found that probation data is not utilized as readily as police data in the cohort allocation meetings. The chapter

also uncovered that where an organized effort is removed due to police restructuring, one of the areas sought to re-establish information exchange via secure electronic means. With regards to documenting the decisions made during the cohort allocation meetings, the data did not provide any evidence of formal documentation, a corroboration of the findings published on the recent IOM thematic inspection (HMIP, 2020).

The following paragraphs will look at the second major theme and analyse the data from the online survey which asked probation staff if they were influenced by different types of intelligence during their decision-making process.

Analysis of the data on Influencing the decision makers.

As the figure at the beginning of this chapter shows, this is the second major theme to be explored within the data. This theme has been presented throughout the study as the second of the broad research questions (the second of Ratcliffe's 3i's) which was to uncover and understand if CRC decision makers were influenced by different types intelligence that are made available to them. The nine intelligence types considered in this part of the chapter were introduced in chapter two's literature review and are a probation centric adaption of Gill and Phythian's "The Int's" (2012). The analysed information which comprises the "INTs" is provided to probation staff by internal or external sources.

The analysis provided in the following paragraphs was carried out on the responses to the online survey of all staff (IOM and GOM) in the CRC. As noted in the literature review chapter, O'Shea & Nicholls (2010) and Gul and Kule (2013) have used similar methods to collect data on police staff being influenced by the intelligence they are given access to. Gul and Kule found that intelligence analysis was linked to decision-making and O'Shea & Nicholls found that officers in each of their key roles used intelligence but more so those from specialized units. Ratcliffe (2005) posits that intelligence staff, in the policing environment, should be able to identify decision makers; however, this study contains a necessary departure from this and similar studies in the literature review since the CRC did not employ (at the time of writing) intelligence analysts with a remit to provide intelligence products. The intelligence provided to probation staff is either disseminated via electronic means, is self-generated by or is provided by partners. Decision making is an

occupational attribute (Mullineux *et al*, 2018) at each level within probation work, therefore in terms of decision makers, this study sought the opinion of all staff at operational (Probation & IOM Offender Managers), tactical (General and IOM team leaders) and strategic levels (Directors of Offender Management).

As the following paragraphs show, this second major theme, just as the first, is divided into a number of sub themes, in this case the aforementioned intelligence types. Analysis provides insight on the influence of each type of intelligence on the group in general and also the influence depending on the job role of the respondent. The basic premise of the survey was to ask respondents to consider their decision-making duties and then to indicate to what degree they were influenced by nine different types of intelligence which was normally made available to them. As the data chapter explained, the respondents were given a reporting scale for each of the questions.

Given that the literature review provided evidence strongly suggesting that the police have in the past preferred their own intelligence (Bullock, 2013) above that of other agencies, the study will attempt to consider this from a probation perspective. The Probation INT's used within this study are derived from a mixture of internal and external sources which can be identified. The latter part of the study will provide analysis on the use of intelligence in terms of where it was generated from.

The chapter will now turn towards the analysis of each of the probation INT's and their influence on staff decision making.

Arrest and Conviction Data

When asked about how often they used arrest and conviction data provided by the police service, respondents provided an expected result for IOM officers but a less expected result for general offender management officers. The majority of staff stating that they use this data is an expected result because the data is provided in an electronic format each day to individual officers across the probation area. This is a familiar type of intelligence to probation staff because national reoffending measures such as local adult reoffending are compiled from the analysis of arrest and conviction data. Despite the familiarity, 25% (n15) of general offender management officers responded to say they did not use this daily intelligence source whereas 100% of the IOM officers reported that they used this data. One senior manager said that they did not use this data, a possible explanation for this is that due to its granular, operational nature, details of daily arrests are of little significance at the strategic level. In terms of pure usage, beneath the framework for this question, the result shows that Integrated Offender Management teams, those working closely with the providers of this information are most influenced by it. Based upon analysis of the data, the study can conclude that this type of intelligence is used by 85% of probation offender management staff during their day-to-day decision making and that the figures show IOM officers are more likely to use it.

Fieldwork activity for this study revealed that a specific data exchange initiative between police and probation enabled the production of this intelligence. The process to bring about this intelligence will be discussed during the last part of this chapter on organisational capability.

Priorities provided by the local Crime and Disorder Reduction Partnerships

Respondents were asked to consider the above in relation to their offender management decision making. The general response to this question indicates that the priorities agreed and adopted by the statutory Crime and Disorder Reduction Partnerships (CDRP's) have the least influence over probation staff; 37% (n37) saying they had no influence when making their offender management decisions. This is not a surprising result overall as CDRP's are a strategic partnership sitting at a local authority level. The results were surprising in one aspect; none of the senior managers responded that the priorities coming from the CDRP were highly influential to them. Most senior management respondents (n 5) reporting that they had some influence and one senior manager reporting that they had no influence at all. Although the data answers the research question on influence the study suggests further research is necessary to ascertain the level of validity placed upon "outside" intelligence by probation staff. The consideration here is whether probation staff reject this intelligence because it comes from an outside agency albeit one attended by probation managers or if it is too strategic to be useful.

National guidelines provided by the National Offender Management Service.

It is unsurprising that the majority of respondents 90% (n 92) indicated that national guidelines influence their day to day decisions as guidance and regulation coming from the National Offender Management Service (now Her Majesty's Prison and Probation Service) form the framework for the national standards for the management of offenders for both the National Probation

Service and the Probation Trusts (Community Rehabilitation Companies). However, the data does provide a surprising number of respondents (nine officers and even one team manager) who answered that national guidelines did not influence their decision making. This appears at odds with practice literature, as the National Offender Management Service (NOMS) practice framework (NOMS 2015) starts with a chapter on decision making and equality.

Scores and Bands for the Offender Group Reconviction Scale.

The response to this question was the only area where the influence of the intelligence available reported higher with general offender management officers 82% (n47) than with IOM officers 78% (n11). It is arguably a comfortable statistic for all probation staff as at the time this research was collected the measure was in its third incarnation. One explanation for the result is that this intelligence is entrenched in the probation pre-sentence activity, which is an area of business that, given their role, the general offender management staff are more closely associated with. Additionally, fieldwork revealed that this calculation is in operational terms also “done on the fly” by court-based probation officers to provide a predictor score of reoffending at one- and two-years post sentencing, therefore they are more used to generating the score than their IOM counterparts. Fieldwork revealed that OGRS Bands are used (grouping offenders by pre-defined score bands) to determine the type and number of sentence requirements proposed on a pre-sentence report which is an area of business removed from the day-to-day work of Integrated Offender Management. Overall, the data shows that this intelligence is used by probation offender management staff.

Intelligence on offenders which is provided by the police

The data collected for this question produced an expected result in that the IOM offender managers 96% (n25) and team managers 100% (n6) scored higher in terms of using police intelligence for their decision making as opposed to staff in general offender management. Although the Team Manager score was high at 96% (n 24) the general offender manager score was relatively low at 74% (43). As the literature review for the study has already shown, IOM schemes are collaborative in nature (Wong and Senior, 2011). The collaboration/partnership approach was explored earlier in this chapter and its scale and nature was evident from analysis of the transcripts and of the meetings with IOM team managers. Offender management staff in IOM teams having been co-located with police colleagues are used to working with their information have a common practice of sharing information on the same offenders whereas general offender management activity does not have this level of partnership. The results show that this type of intelligence is used by probation staff.

Probation Offender Assessment System (OASys)

When asked about how influential this score was, the respondents indicated that the offender assessment scores featured in their day-to-day decision making. Staff in each role reported a high level of use (IOM officers 92% and GOM officers 93%). The result is to be expected as probation staff carry out regular assessments on the offenders in their charge during community supervision. The assessment is a highly regarded research-based tool which has been in use for almost two decades as the primary risk assessment tool

(NOMS, 2015). The results, however, provide the study with an overall dichotomy because as the evidence from the start of this chapter shows, that the offender assessment system was barely mentioned during any of the joint meetings between police and probation. This resonates with existing theory which reported police non-acceptance of outside data sets. Whilst probation staff themselves use the offender assessment system and use that as the basis for a plan to manage the sentence of the offender, they do not explicitly share that information with their police colleagues. Further research is needed to understand why this is so, it seems unlikely that a multi layered assessment of an offender's criminogenic needs along with predicted scores for general and violent reoffending would be of no intelligence worth when considering offenders for an integrated management scheme.

Drug Test Scores

When asked to reveal how influential drug test scores were with regards to their decision making, respondents from IOM teams 100% (n14) all reported drug test scores as influential, this is an expected result given that the makeup of IOM offender caseloads contain those also on a Drug Intervention Programme (Home Office, 2011). The caseload split goes some way to explain why general offender management staff are less influenced 78% (n47) by these scores.

Alcohol test scores

When asked to reveal how influential alcohol test scores were with regards to their decision making the responses do indicate that this intelligence has some influence on staff when making decisions, however, the results show that a

relatively high percentage 22% (n22) responded to say the intelligence has no influence on them. The results show that this intelligence is amongst the lowest in influence overall. At 88.9% IOM team managers provided an identical response for this question to the preceding drug test question. Overall, this question provided a relatively low positive response when compared to other types of intelligence available to staff; only the accredited programme scores indicate a less favorable influence upon staff.

Accredited / internal programme scores.

The results provided by respondents with regards to the scores obtained after an offender attends an accredited programme provided a surprising result in that it uncovered the highest percentage of respondents (40%) for any question who did not use the intelligence being offered to them. The probation service being studied used a mixture of accredited programmes provided by a permanent in-house team and a number of external providers. In theory, an offender attends a structured programme of activities which will support them to stop offending. In the probation area being studied, each offender undertakes an evaluation at the beginning of the programme and another when the programme is complete. Comparison of the before and after scores indicate attitudinal shift. Given the relatively low scores provided by probation staff, this study suggests that more research is required to understand why so many responded to say that the programme scores have no influence on their decision making.

Internal or External types of Intelligence

For decision makers to be influenced by intelligence, it follows that they must first be presented with the intelligence. The literature review (Glass & Davidson 1948, Gill & Pythian 2012) shows that Dissemination is the final part of the Intelligence Cycle and as the figure at the start of this chapter indicates, when synthesised with further literature, dissemination sits just before the application of intelligence and a review of results following that application. More will be said about the organisational capability for dissemination later in this chapter but the findings from the data analysis reveals no mention of a formal briefing process for the delivery of intelligence to probation staff. Analysis of the data shows that the intelligence available to staff is either generated by themselves for example during an OASys interview in which they would score criminogenic needs, or it is provided to them from an external source, for example when new probation instructions are released from the National Offender Management Service. The data obtained for this study does provide the opportunity to split CRC intelligence into two separate types, that which is provided to staff and intelligence which they compile for themselves. Although it appears as though the types of intelligence in the list below are weighted in favour of those being given to the probation staff, it should be noted that the self-generated intelligence is very comprehensive; the OASys assessment for instance has thirteen parts, each of which is an assessment of a different type of criminogenic need which results in a risk of harm score and a risk of reoffending score for an individual offender. The table below adds in the collection method for each intelligence type alongside the percentage of staff in each role who said they were influenced by that type of intelligence.

Table 13 Probation Intelligence: Influence figure by Collection Method & Staff

	Collection Method	Officer	Officer IOM/PPO	Team Manager	Team Manager IOM/PPO	Senior Manager
Arrest Data	Combined	75.00	100.00	100.00	100.00	83.33
CDRP Priorities	Provided	47.37	84.62	73.33	100.00	83.33
national guidelines	Provided	86.67	92.86	92.86	100.00	100.00
ogrs scores bands	Self Obtained	82.46	78.57	93.33	100.00	100.00
police intelligence	Provided	74.14	96.00	92.86	100.00	83.33
risk of harm (OASYS Score)	Self Obtained	91.67	92.86	100.00	100.00	100.00
drug test scores	Provided	78.33	100.00	84.61	83.33	83.33
alcohol test scores	Provided	75.86	78.57	78.57	83.33	80.00
programme scores	Both	55.93	64.29	53.33	83.33	60.00

In terms of intelligence influencing staff in different roles, the table above shows that IOM officers responded more positively to intelligence that is provided to them than did their colleagues in general offender management. Given the partnership working arrangements between IOM officers and their police counterparts this finding appears to concur with the absorption theories

(Cram, 2020, Kemshall and Maguire, 2001) indicating that those closer to something are likely to be more influenced by it.

Whilst the different types of intelligence are not comparable themselves, when ranked by overall score of influence in the table below, the analysis shows that probation staff overall are more influenced by intelligence which is self-obtained (OASys Score), then by intelligence which is provided to them from their national governing body (National Guidelines) and then by intelligence derived from a combination of their own data with that of their closest partner, the police (Arrest and Conviction data). The table shows that probation favour their own intelligence, and this is in keeping, in an organisational sense, with the findings of the literature review which stated that the police also favour their own intelligence rather than that given to them by outside agencies (Bullock, 2012).

Table 14 – Probation Intelligence: Ranked by level of influence.

Type of Intelligence (Probation INT)	Collection Method	Rank
Question 6 How influential is a service user's risk of harm (OASYS Score) to your decision making	Self Obtained	1
Question 3 Do national guidelines influence your decisions	Self Obtained	2
Question 1 How often do you use arrest or conviction data	Combination	3
Question 4 Do ogra scores or ogra bands influence your decisions	Self Obtained	4
Question 5 Do you use police intelligence to help you make your decisions?	Provided	5
Question 7 How influential are drug test scores with regards to your decision making	Provided	6
Question 8 How influential are alcohol test scores with regards to your decision making	Provided	7

Question 2 Do local CDRP Priorities influence your decisions	Provided	8
Question 9 How influential are accredited / internal programme scores with regards to your decision making	Both	9

The data has shown that a number of intelligence sources both internal and external are available and are used by probation staff and that some types of intelligence have more favour with regards to day-to-day decision making.

The Analyst as an influencer to the decision makers

Chapter two uncovered this argument within the literature and the data collected for this study could not add to the discussion with regards to the position of the analyst. As the probation service did not employ an intelligence analyst with a direct responsibility to provide products there was no way of testing the assertion that an analyst themselves has influence over the decision makers. The observed operational procedures dictate that it is left up to decision makers themselves to analyse the intelligence given to them for decision making purposes. Analysis of data by the probation officers themselves has been considered in the previous section and will be discussed in that context in the last chapter.

Conclusions drawn on the second of the three research questions: Influencing the decision makers.

Analysis of the data collected via the online survey reveals a number of key points about intelligence data influencing the offender management decisions of CRC probation staff. The data shows that probation staff do use intelligence when making their day-to-day decisions. The data shows that intelligence available to probation staff can be generated internally from probation systems

such as offender assessment scores which include an analytic output or that it can be provided to probation staff by an external source such as police intelligence or it can be derived from a combination of both such as the process undertaken to collate arrest and conviction data. Some of the available intelligence is focused on individual offenders and provided to or generated by staff who are directly responsible for the management of that offender's probation order. Some of the available intelligence such as priorities from partner agencies are provided at a strategic level, however, the transcripts and survey data show that operational staff, generally removed from strategic decisions, are aware of strategic intelligence and do make use of it to some extent.

Given that staff in the probation domain are unlikely to recognise their analysed information as "Intelligence" (Gill, 2012), the questions used in the fieldwork survey were deliberately void of the word intelligence. Given the responses, the data shows that probation staff have access to a myriad of valid intelligence sources. Whilst they may not be referred to as intelligence under the current operating model, this study posits that further research should confirm a set of information sources used for probation business which would effectively become the probation 'INT's' (Gill & Phythian, 2012). The Probation INT's constructed for this study, such as the CDRP priorities may, after further scrutiny, be too abstract and strategic to be considered as intelligence for use within probation.

With regards to the intelligence and general offender management staff, the data shows the intelligence showing the most influence is the OASys assessment score. This is generally self-generated intelligence, collected,

collated, analysed, and disseminated onto a national system by the probation officer themselves. As the literature review shows the assessment is signed off by a manager and its contents can form the basis for a defensible decision made during offender management if an enquiry should materialise.

Whilst for IOM offender managers, the intelligence which scored the highest are arrest and conviction data which scored 100%. Although the raw data for this is provided to probation by their police colleagues, it is combined with probation data and the product itself is produced and disseminated centrally by probation staff.

IOM staff gave a higher influence score in eight out of nine probation INT's; with general offender management staff giving the Offender Group Reconviction Scale a higher influence score than their IOM counterparts. The data shows that staff in IOM teams are more likely to engage with and use the intelligence offered to them whilst making decisions. However, there is enough information to suggest that staff in general offender management have access to and use intelligence almost as frequently.

IOM staff use information from their police partners more than staff from general offender management teams and a possible explanation for this is that IOM teams work more closely with their police counterparts than do general offender management.

The intelligence least likely to influence probation staff in either general offender management or IOM are the guidelines provided by their local Crime and Disorder Reduction Partnership. The study has suggested that a possible

explanation is the strategic nature of CDRP's despite senior probation managers attending these.

In terms of the ordered rank according to the level of influence, the table above suggests that probation staff are more likely to be influenced by intelligence which is generated from within their organization.

The data shows that cognitively considering information (intelligence) for decision making purposes is entrenched in probation practice and can be observed at all staff levels and in all of the team environments studied for this project. The practice observed here mirrors the intelligence definition and rather like Gill's (2012) discovery, it would appear that nomenclature has created an artificial separation.

The chapter will now provide analysis of the data collected for the last research question and the third of Ratcliffe's 3i's.

Analysis of data on Impacting the criminal environment.

The third major theme covers the impact that intelligence has on the criminal environment. The analysis here covers the monitoring effort and the impact itself. In the 3i model, impact is about crime reduction, the position taken by Ratcliffe (2003) is that the system had little value if it did not affect crime reduction. It is prudent to re-state that the objective of this study is not to prove that an intelligence system works or is of any value in the Community Rehabilitation Company; the objective here is to ascertain if CRC staff carry out the constituent parts of an intelligence system. As outlined in the literature review chapter, even the studies conducted by Ratcliffe (Ratcliffe and Giudetti,

2007) provide sparse details about how the impact phase of the 3i model should be measured.

As outlined in chapter three of this study, and noted in the analysis framework presented earlier, the way in which the impact was measured here was to collect and analyse arrest and conviction data on each offender in the IOM group. The justification using re-offending as a measure of impact is that it is an established practice for IOM schemes and for probation work in general. Measuring re-offending is used to judge impact locally in relation to the six IOM schemes featured in this study and nationally with the wider offender management population such as the local adult reoffending measure (MOJ, 2014). The process was described in chapter three and the data was presented in chapter four. Analysis of the data has been carried out and the findings are presented by area below. As chapter four has shown, performance data obtained from the Police shows conviction totals are n1001 for the comparison data pertaining to financial year 14_15 and at n514 for the subsequent twelve-month monitoring period of 15_16, which constitutes a fall (40%). In terms of the reduction in numbers of arrests and convictions then the IOM scheme and the intelligence system within this probation area is likely to be regarded as having a successful impact on the criminal environment.

Each of the areas reported a decrease in convictions for the group of offenders on their scheme. Direct comparisons between the areas are not possible due to 1) the slight differences in their reporting measures, one example of this is that Area C did not count drunk and disorderly convictions but as this was an agreed priority for Area B they were included in the statistics for that area 2) the slight differences in the process taken to keep offenders on

the scheme, for instance the transcripts of the cohort allocation meetings show that some police and probation meetings decided that they would not keep incarcerated offenders on the scheme because they agreed they would not be able to work with them whereas other areas (Area A) decided they could work with offenders whilst they were in prison. The other issue with keeping offenders on the scheme whilst incarcerated had the inevitable (these are prolific offenders) outcome of reducing the number of convictions for the scheme overall. Essentially, by measuring the difference between the levels of convictions for twelve months prior to scheme entry against the same for the twelve months after the scheme start means that each area is competing against itself.

Results of the year-on-year comparisons show that the convictions in Area A reduced by 33%, Area C 37%, Area E 35%, Area D 29%, Area F 35% and Area B 33%.

The figures for the reduction in convictions do show an impact in the criminal environment. As the charts in the previous chapter show, where quarterly details were made available, there is a marked difference in the number of convictions in the year before offenders started the scheme to those they amassed during the twelve month monitoring period whilst on the scheme.

As the purpose of this study is to uncover an intelligence system in place and to do that the study is broadly following Ratcliffe's 3i model. The 3i model states that for an intelligence system to be in place then there needs to be an impact on the criminal environment. This is the third of Ratcliffe's 3i's.

As the offenders on the IOM scheme are the criminal environment in this study and the IOM scheme success is measured by monitoring re-convictions as an established practice, then this is the measure to be used for this study. This study did not seek to find any causal explanation between the use of intelligence and a reduction in arrests and convictions. A causal link could only really be claimed after a rigorous examination of the interventions put in place and as previously explained interventions are not part of the scope for this research. Interventions are noted later in this chapter as the missing piece of the puzzle.

Reviewing the Impact

The literature review revealed a number of Intelligence systems which include a review component at the end of the process, Schneider (1985) for instance concludes his nine-part process with a review, the Problem Orientation Policing (POP) process also includes a review segment (Popcentre, 2021). The evidence obtained for this study does show that a formal review of results takes place at the end of an IOM scheme and that figures are reported during IOM manager meetings during the twelve-month period of the scheme. In addition to this, as the beginning of this chapter has shown, the cohort allocation process includes a reflective element where offenders are re-considered for inclusion on the scheme depending upon their offending behavior. In terms of the gap analysis, each of the six areas conducting an IOM scheme also conducted a review of the scheme impact by analysing arrest and conviction data for each offender in their cohort. The study suggests that even if the areas had not reported a reduction in re-offending then the action of carrying out the review, obtaining the data and analysing the figures

constitutes the staff carrying out the relevant review part of the intelligence system.

Conclusions drawn on the third research question.

Two pieces of evidence satisfy the last of Ratcliffe's 3i's, the first is the actual process which each of the IOM schemes undertakes to monitor the arrest and convictions of the offenders in each cohort, the same process is undertaken in each scheme area to obtain information from police systems, this is done centrally, the data is then analysed, results are considered during IOM Manager meetings and the results are published internally at the year end. The second piece of evidence obtained during this study which satisfies the third of Ratcliffe's 3i's is the actual impact upon the criminal environment; in each of the IOM areas there was a reduction in arrests and convictions. The study maintains that the impact review element is satisfied by the monitoring activity and by publishing the results at the scheme end. The reduction seen is indicative of the literature (Williams & Ariel, 2012) claiming that IOM participants are more likely to desist from crime. That crime has been reduced is testament to the IOM scheme, but the data collected does not provide evidence showing which elements of the IOM scheme are the cause of crime reduction.

A note on Interventions; the missing piece of the puzzle?

As Intelligence purists will point out (Ratcliffe 2005), and has been discussed briefly earlier in this study, an intelligence system is not concerned with the actual interventions put in place by planners. This was noted in the literature

review by Burcher & Whelan who cite this as a criticism of the intelligence cycle stating that: -

“it (Intelligence Cycle) has no consideration as to the broader law enforcement environment in which it sits.” (Burcher & Whelan, 2018, p.140)

This study does not dispute the above claim; however, the study asserts that as the production of intelligence is a process which aids decision making, it is rightfully separated from any interventions put in place. If interventions require intelligence to function then as the literature review has shown, those requirements will be made of the intelligence staff for the appropriate area of intelligence interest (MOD, 1991). Interventions themselves are not part of the intelligence system; the IOM scheme for instance and the mechanism for its day-to-day management are not within the scope of the intelligence system. To include interventions here is to re-invent Problem Oriented Policing in a Probation mold and to have intelligence work done in silos according to specific crimes rather than as a broad domain.

Due to this disconnect between intelligence an intervention, further study is proposed in this area to model a hybrid 4i system including interventions will be considered in the discussion in the next chapter.

Analysis of data covering Organisational Capability

The final part of the research project was to consider the organisational elements of the CRC relevant to intelligence capabilities. The literature review included insights from Hindle and Paul (Paul, Cadle & Yeates, 2015) on how to model a business process. Literature such as that of Meadows (2008) Von Betallanfy (1968) and Eric Trist (1981) indicated for there to be a system in place, the operation must contain inputs, processing activity and outputs.

The data presented in the previous chapter provides details of a functional view of the six different probation teams under scrutiny. The next few paragraphs will provide the study with an organisational breakdown of the IOM units and the capabilities therein.

In terms of hierarchy, each area was managed by a director level post with a remit for general offender management. One of these area directors also undertook an IOM leadership role of all six IOM Schemes. The transcripts provided in chapter four provide no suggestion that having two leaders of equal rank had any adverse effects in an operational sense.

Whilst the Director with responsibility for all six IOM teams was based at head office they were within easy reach to receive central intelligence products, an advantage noted by Ratcliffe (2002). The IOM team managers who were based in the field had access to daily arrest data for the offenders being managed by their teams.

With regards to the organizational analysis, the study found that some specific intelligence was directed towards staff according to operational need. An example of this is at the Strategic level, Directors of Offender Management

of which there were six, would receive retrospective Reducing Reoffending reports on a quarterly basis. These reports provided analysis on the arrest and conviction of offenders in their overall cohort. The reports would provide detailed analysis of the local adult reoffending measure derived from data provided to probation areas from a central source within the Ministry of Justice. The data reported on offending behavior which was twelve months out of date which although arguably informative was provided too late to be of any use in an operational sense.

In terms of location, only one team (area E) was located in a separate building to the general offender management team and it is this team when faced with a cessation of co-located police colleagues set up a bespoke intelligence system.

Until the start of the fieldwork for this study all of the teams also included two co-located police officers attached to the IOM team, the police officers had on-site access to the Police National Computer.

A local team manager would oversee the tactical running of team, which included joint management of the cohort allocation meetings engaging with operational activities which is clearly evident in the observed organisational makeup.

The process flow and capability maps included in this and the previous chapter indicate clearly segmented activities along with a defined operational structure. The granular process map (Figure 10) showing the monitoring effort undertaken during the IOM scheme is a strong example of how actors and actions all contribute to the organizational capability of the tacit intelligence

system. The process map shows inputs such as police data, along with processing activity such as information collation where police data is merged with the probation offender data set. The process map then depicts the resulting analysis which is then packaged into an intelligence product (a report) and disseminated to staff. Each aspect of the process is carried out within 24 hours of the information being placed upon the local PNC. The system output (the intelligence report) is made available to the offender manager who can use it in conjunction with their practice activities. The offender manager may call a supervision meeting with their offender or if a meeting is already arranged, they can use the new intelligence to frame the conversation at the meeting.

Ratcliffe (2005) also states that an intelligence system should be able to identify decision makers and even discusses in a case study the proximity of the intelligence office to the police muster area and how this was well positioned to communicate to patrol officers but too far from easy access to strategic managers.

The researcher's observations of probation staff activity show that at the Tactical level, Team leaders and IOM Team leaders of which there were twenty received operational intelligence and daily arrest data and at the operational level Offender Managers and IOM offender managers received daily arrest data. Mandatory communications from MOJ and national guidelines were issued to all staff.

A pertinent finding of the fieldwork is that without the intelligence apparatus in place which would usually include staff to collate and analyse

data, the probation officers carry these activities out themselves. The capability matrix below is a transposed version of the diagram at the start of this chapter however, here, the themes are considered as tasks with the observed organisational capacity attached to them.

Table 15 – Evidence and capability matrix

Theme	Action	Capability	Staff	Evidence
Interpret	Planning / Direction	An agreed understanding on what type of offenders to target for the scheme.	Senior management, IOM Managers	IOM scheme in place. Transcripts show use of agreed guidelines during cohort allocation activity.
	Collection of Information	Action taken prior to cohort allocation meetings to provide appropriate information and intelligence.	IOM Managers	Information prepared for and taken to cohort allocation meetings such as offender lists. Current knowledge of offender engagement with probation.
	Assessment of Validity	Actively, formally, considering the validity of information before using it.	N/A	N/A
	Collation of Information	Assimilation of information into the current body of knowledge.	IOM managers and IOM officers. GOM	Discussing new information in an offender context during allocation.
	Analysis of Information	Cognitive engagement with the data. This could be formal such as a prescribed analytic product or informal such as a discussion about the intelligence received.	IOM Managers, General Probation Staff.	Cohort allocation meetings, Review of conviction totals. Using the INTs for daily decisions.

Influence	Assessment of analytic rigour	A review of the analytic process undertaken to provide intelligence or make a decision upon that intelligence.	IOM Managers, General Probation Staff	The only evidence approaching anything like this is the OASys countersignature.
	Dissemination of Intelligence	Providing appropriate intelligence to appropriate staff at the appropriate time.	Central Information Team, Self-generation by staff. NOMS.	Arrest information, OASYS, OGRS, cohort allocation meetings. All CRC INT's are delivered.
	Application of Intelligence	Initiatives undertaken or changed based upon the intelligence received.	IOM Staff, General probation Staff	Using arrest intelligence in supervision meetings, using the INTs. IOM allocation meetings.
Impact	Review	Collecting evidence of the scheme actually having an impact on the criminal environment.	IOM Managers	IOM Scheme end of year review of conviction totals. IOM bi-monthly management meetings.

Whilst the evidence provided above is not exhaustive due to space; as the table above shows, probation staff carry out activities within almost all of the sub themes which contribute to the 3i Intelligence Model. There are gaps within the capability matrix which show that the probation service does not carry out verification activities – one could argue that the OASys system does have this check as it is countersigned by the offender managers supervising officer.

GAP Analysis Results

Conducting a Gap Analysis was introduced during the first chapter as one of the business analysis tools to be used during this study. As the methodology and methods provide several data streams to report on the different aspects

of the conceptual intelligence model the study posits that a gap analysis provides a way to draw each aspect of the model together to enable the drawing of conclusions. The literature review provided the validity of engaging a Gap Analysis (Rollason, 2015) to ascertain the difference between the operation as it is observed during fieldwork and the recognised operational components of an intelligence system. The methodology chapter outlined how the Gap analysis was to be carried out and the following tables show the results of the analysed fieldwork data. The table below shows the first research question and the number of IOM teams supplying evidence showing that they carry out this activity.

Table 16 – GAP Analysis results – Interpret the Environment.

Interpret the Environment				
	Competency description	IOM's displaying evidence	Maximum	Score
Partnership Approach	Engaging other Agencies	4	6	4
Direction (Planning and Preparedness)	Understanding what is required	4	6	4
Collection of Information	Type and sharing	4	6	4
Information Validity	Checking that information is valid	0	6	0
Collation of Information	Iterative collation	4	6	4
Analysis of Information	Understanding the relevance of information received	6	6	6

The gap analysis above shows that almost all of the IOM teams demonstrated evidence that they carry out the component parts of the first research question. Notable variants are Area D and Area F. None of the IOM

teams provided evidence of formal or informal activity to validate the intelligence they received. The study does recognise the harshness of the information validity score as some of the intelligence probation staff have access to is self-directed, the assumption being that self-directed intelligence does not require verification in the same way that information supplied by a third party would.

The table below shows the Probation INT's and their use in percentages split by Integrated Offender Management and General Offender Management (Team leaders and Managers only). The table also provides total percentages.

Table 17 – GAP Analysis results – Influence Decision Makers

Influence Decision Makers				
Type of Intelligence	IOM	GOM	Total	Total
	Yes	Yes	Yes	NO
Arrest Data	100	80	85	15
CDRP Priorities	89	53	62	38
National Guidelines	95	88	90	10
OGRS Bands & Scores	85	85	86	14
Police Intelligence	97	78	84	16
OASys	95	93	94	6
Drug Test	95	78	83	17
Alcohol Test	80	76	78	22
Accredited Programme	70	55	59	41

In terms of a GAP Analysis the figures show that all of the intelligence types have some influence on respondents. Even the intelligence type with the lowest response rate (Accredited Programmes) for its influence manages to influence 59% of staff overall. The Offender Assessment (OASys), a self-directed type of intelligence has the highest influence on staff according to

respondents. The overall point of the above table in the context of the GAP Analysis is that where intelligence is available it is used and does influence day to day decision making. The OGRS percentages are tied when managers are included in the figures, however as the earlier tables did show, general offender management staff were influenced by OGRS more than their colleagues in IOM.

The table below shows the percentage reduction in convictions for each of the IOM cohorts at the end of the twelve-month monitoring period.

Table 18 – GAP Analysis results – Impact the Environment.

Impact on the Criminal Environment	
Area	Percentage Reduction in Convictions
Overall	40%
Area A	33%
Area B	33%
Area C	37%
Area D	29%
Area E	35%
Area F	35%

As the table above shows, the impact on the criminal environment can be seen by a reduction in convictions for the offenders in each IOM area cohort. The figures above were published internally within the probation area as part of an end of year performance document for the IOM scheme. In terms of the GAP analysis, each of the schemes recorded a reduction in convictions and can therefore state an impact on the criminal environment in accordance with the third research question.

The Tacit Socio-Technical Intelligence System

The evidence shows that probation staff carry out actions and activities which mirror those of explicit intelligence systems uncovered in the literature review. The evidence also shows that actions and activities carried out are not officially mandated and in the explicit nature of a system (Meadows, 2008) are not documented or communicated in any form of intelligence related instruction or guidance. The evidence shows that the actions undertaken by staff are carried out without any direct reference to it being intelligence work; the one exception being the actions undertaken by Area E. There is evidence of guidance at the strategic and tactical level (NCRC, 2014) where the IOM scheme is broadly sketched out in accordance with the national IOM guidance provided at the time. Synthesizing what is now known about the activities carried out within the CRC operation with the rudimentary systems exercise offered by Meadows (2008) reveals that there are identifiable parts to the system which are in operation. Some parts of the operation have an identifiable effect on each other; the example here being that interpretation activity leads to informed decision making which is arguably better than no interpretation activity and less informed decision making. Additionally, the un-mandated intelligence activity persists in a number of different teams which is another corroboration with Meadows (2008) systems exercise. The process flow diagram provided in the previous chapter demonstrates the maturity of the partnership approach between the CRC region and their police counterparts at a technical level. The probation area concerned went to great lengths to collate arrest and conviction information. The data was considered by the police to be operational data, having occurred within 24hrs and an agreement on its disclosure to the

probation service took eight months to achieve. Once disclosed, the data exchange process was carried out every twenty-four hours, this was understood to be a probation first and in terms of functionality it was eighteen months ahead of the national release of reoffending data. As the transcripts and survey show, was useful in an operational sense. The findings explain that this seemingly invaluable information was more often used by the IOM officers than their general offender management counterparts and this finding provides further insight into the willingness of the IOM officers to engage with information from outside their agency.

Conclusion to the analysis chapter

The layered approach to analysis described in the introduction has enabled this study to consider the fieldwork data at a general level of the broad research questions and at a more granular level uncovered by the literature review. The findings show that the data provided by the fieldwork was fit for purpose in terms of answering the broad research questions. In terms of primacy, the findings presented in this chapter have provided knowledge claims within the Probation domain, the Intelligence domain in general and have also confirmed the chapter one hypothesis that a tacit system is in operation.

Given the findings presented here with regards to General Offender Management staff, this study asserts that the actual practice of intelligence activity within probation predates any professionalisation initiatives which may have come about in the National Probation Service since this study started. This is an expected outcome as a similar assertion was provided by Bruce (2004, p.12) when discussing the history of Crime Analysis.

By analysing the data collected for this study, this chapter has provided evidence to show that the CRC area being studied did conduct activities conforming to each of the three aspects of the conceptual model. Additionally, when probing further into the granular aspects of intelligence systems uncovered in the literature review, the study has shown that the probation staff conducted operational tasks specifically identified as belonging to several recognised intelligence systems. Tasks such as collection and collation of information can be identified in the intelligence cycle (Glass & Davidson, 1947, Gill & Phythian, 2012), analysis tasks can be identified in Schneider's Normative Model and the National Intelligence Model (Schneider, 1995, NCIS, 1999) and dissemination of Intelligence is identified as a specific activity in the Business Intelligence System offered by Luhn (1958). The findings also uncovered review activities being carried out during and after the IOM scheme ended which is identified in Schneider's (1995) Normative Model and is also included in the process of Problem Orientated Policing (Popcentre, 2021). The study has shown that officers do consider their criminal environment by collecting and collating information on specific offenders. That they share that information with trusted partners and then analysing that information into intelligence which allows them to determine if the offender is appropriate to join the IOM scheme. The study shows that a majority of the IOM schemes carried out these activities although some had a more formal partnership approach to doing so. The Gap Analysis scores gave a strong indication that most IOM schemes carried out most of the Interpretation activities and had the organisational capacity in place to do so.

With regards to the second research question of influencing decision makers, this chapter has shown that various types of intelligence are made available to probation workers in the CRC. The chapter was able to show that staff members operating in different parts of the CRC favour different types of intelligence to carry out their day-to-day decision making. The chapter has shown that intelligence types are available at the strategic, tactical, and operational levels. An example of Tactical intelligence is the actual list of IOM offenders which will be managed within the scheme, this is an area tactic, whereas the individual intelligence reports used during cohort allocation meetings are an operational tool. The reducing reoffending and CDRP priorities are a strategic intelligence resource.

Supplemental to the broad research questions, the findings show that probation staff are more likely to use intelligence that is self-generated, or which comes from inside their own organisation. This echoes findings from within the literature review of the police favouring their own intelligence (Bullock, 2012).

The Gap Analysis results revealed that all intelligence types were used to a certain degree and that they were used by members across all the staff groups surveyed. The Gap Analysis results also revealed that in eight of nine intelligence types surveyed, Integrated Offender Management staff scored their influence higher than did their General Offender Management colleagues. The one intelligence type receiving a higher score from GOM was the Offender Group Reconviction Scale.

With regards to impacting the environment, this chapter has shown that there are established operational activities which are undertaken to collect, collate and analyse the arrest and conviction data. These activities outlined the unique nature of the data exchange relationship this CRC area has with their police colleagues in that respect.

The study was also able to show that for the IOM scheme there is an actual impact on the criminal environment. The IOM scheme impact is evident in the reduction in arrests and convictions for offenders between the twelve months before they joined the scheme and the twelve months they were being monitored as part of the IOM scheme. It is noted that the study can not provide evidence of causation in relation to impact. The study posits that a more complete understanding of impact could be achieved if interventions were included in a review. As interventions are not part of the intelligence system then a more appropriate measure of impact should be sought. Intelligence impact will be discussed in the next chapter.

This research has shown that the probation area being studied did employ an intelligence system with regards to the overall framework because there was evidence of all three of Ratcliffes 3i's being undertaken in most of the IOM teams being studied.

The study acknowledges that the level of adoption or use of the identified component parts of an intelligence system varies between IOM schemes and that this can be seen in the figures and findings. The variation of use is to be expected due to the tacit nature of the activity being carried out.

In keeping with the findings of the literature review and Soft Systems Methodology for learning and inquiry into the world (Checkland & Haynes, 1994) the study suggests that the competency gaps found in each of the IOM areas and uncovered in this chapter could now be addressed in a practical sense. Addressing the competency gaps would provide a closer real-world operation to the component parts of the recognised intelligence system, however, a discussion is required on whether or not this is an appropriate way forward. The study suggests that more research is required to provide a normative model for probation intelligence in a similar way to that conducted by Schneider (1995) and that the GAP Analysis used here could provide a basis for that model. The GAP Analysis tool used here will be presented as a way forward for this in the next chapter.

The chapter then turned towards the last of the four analytic layers which covered organisational capability. The study was able to show that the probation area adopted a tacit intelligence system because even though evidence was found to show the process in operation, staff undertook activity without any mandate to set up and carry out a formal intelligence process at any level. The collective consciousness previously alluded to by Jashapara (2007) is evident in the existence of the tacit system that prevails within this organisation according to the findings. The cultural dimension is evident through the shared language, transparency of mission and acceptance of a shared responsibility between police and probation for making the IOM schemes a success.

The study did not provide any evidence of an organisational subculture in existence with regards to intelligence. The study posits that such a

subculture could have existed given the close working relationship with IOM staff and their police colleagues who have been “Intelligence-Led” for over twenty years. The findings, however, show that staff in different areas are willing to use the intelligence they are provided with and this is not confined to IOM staff.

The autonomous nature of the IOM schemes was revealed when the chapter uncovered in one area, IOM staff adapting their established practice to provide a bespoke system which would fill a void left by reduction in resources in their policing counterparts. Uncovering the bespoke system is particularly telling in that the study suggests it is a direct reflection of the working examples of socio-technical systems provided by Trist (1981) whilst conducting action research for the Tavistock Mining Institute.

This chapter also satisfied the simple system exercise provided by Meadows (2008) by uncovering the inputs, processing and outputs involved in the scheme under observation, this was done by providing process maps showing the actors and actions engaged in carrying out the granular intelligence activities involved in processing conviction data.

Given the positive results of the gap analysis exercise, the conclusion that can be drawn from the findings presented in this chapter is that that IOM staff carrying out probation work at the CRC operate a tacit intelligence system.

The final chapter will discuss the results of this study with regards to its major findings and what impact they have on the domains of intelligence, probation work and systems theory. The chapter will include a discussion on

the GAP Analysis tool constructed for this study and how that may be used to repeat the process. The final chapter will also provide a reflection of the academic journey undertaken to complete this piece of work which will include a discussion of what the researcher would change given the chance to complete the study again. The discussion chapter will provide insights as to the perceived shortcomings of the study. The reflection will cover both the researcher's personal journey and the practical issues which upon reflection, may enhance any further study.

Chapter six: Conclusion and Discussion.

Introduction

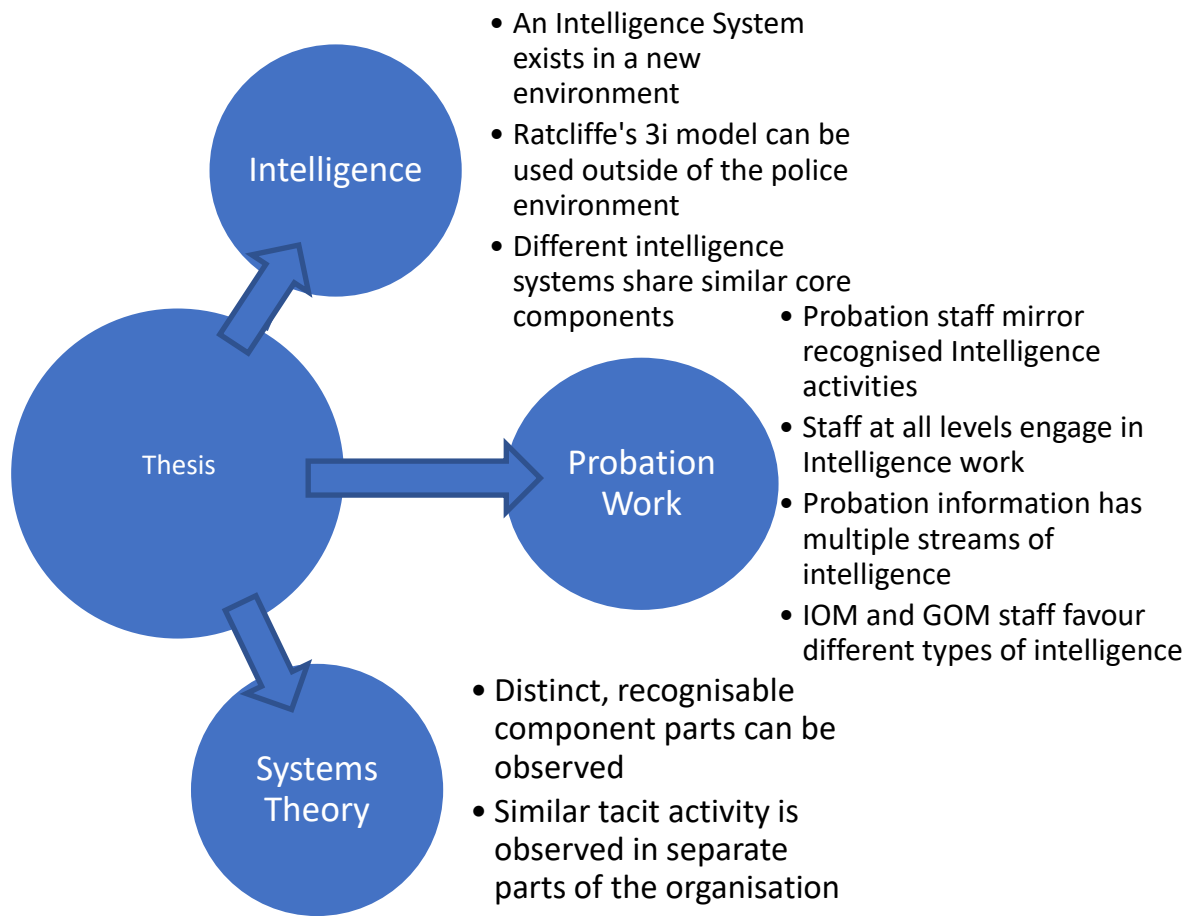
The previous chapter provided analysis of the data collected for this study along with direct answers to the specific research questions. What follows is a concluding chapter which will consider what the study has found and what that knowledge means for Intelligence as a stand-alone domain, and what the knowledge means for the Probation domain including any impact on Integrated Offender Management (IOM). The chapter will also consider whether the corroborative findings have any insight for systems theory. This chapter will also critically consider the academic journey undertaken to deliver this thesis and suggest the further avenues of data collection and analysis which present themselves for the future. The chapter will also provide space for a personal reflection from the author, this part will acknowledge the academic and professional growth experienced by the researcher during the course of the project. Finally, the chapter will consider the original contribution to knowledge provided by this thesis and the implications this has upon future research in what is still, an under researched area. To ensure that the discussion remains in context, it is worth re-iterating that the objective of this study was not to provide vindication for intelligence systems or the IOM scheme or to say that having an intelligence system is better than not. The primary basis on which this study was carried out was to identify the component parts of a recognised intelligence system operating in the non-traditional area of probation work.

Original Contribution to Knowledge

The original contribution to knowledge declared by this study is enabled by a combination of knowledge claims. The claims are relevant to the research questions and each claim is defensible due to the collection and analysis of empirical data provided in previous chapters. The study posits that the research questions are valid and worthwhile. By examining Intelligence from the perspective of the probation environment this research has broken new academic and practice related ground. As this chapter will show, the study has knowledge claims in the two main domains of Intelligence and Probation and has corroborative claims in the domain of systems theory. It could be argued that the study can identify lesser and more general insights in relation to the Police Service and IOM management in general and this will be highlighted in the paragraphs to follow. This study has shown that intelligence work is not confined to the few domains in which academia has thus far sought to examine. The figure below depicts the main impact areas which this research has upon different domains.

As figure 12 below denotes, the research posits that it has defensible impacts with regards to Intelligence, Probation work, and Socio-technical business systems.

Figure 12 – Contributions to knowledge diagram



Although it is focussed upon specific research questions, the study suggests that the impact of this research is enhanced somewhat due to providing findings to the different domains. Providing findings for different domains is a direct reflection of the literature review which highlighted the inherent weakness of affording "privilege to one's own perspective" (McNeil *et al*, 2012).

What the findings mean for the different domains

The study has shown that even in a non-mandated, non-traditional domain of probation work, there exists a number of tacit business processes which are carried out by dedicated, knowledgeable officers whose actions conform not only to the broad concepts but also the granular understanding of what constitutes an Intelligence System. The tacit nature of intelligence activity leads to a paradox regarding findings. The concurrent positions of having and not having an intelligence system in place are, to some extent, both true. The system is there because staff are carrying out intelligence activity albeit tacitly and without formal direction. Whilst, arguably, the system is not there because no official direction, training or organisational architecture is in place. The contradiction is recognised here. The notion of contradiction within qualitative research is acknowledged in qualitative research literature (Deacon, Bryman & Fenton, 1988; Tracy, 2007; Mifsud, 2016). El-Sawad, Arnold & Cohen (2004,p.1200) specifically consider contradiction within research findings pertaining to organisational life. They consider that separate, genuine, contradictory narratives can exist and do not collide.

Given the impact data presented in this study, finding an intelligence system within the probation environment appears to corroborate Cluey (2009) in that achieving desistance from re-offending requires a system of interconnected operations rather than a “Damascan revelation” on the part of the offender concerned. The following paragraphs will break down the discussion into the relevant areas of impact as depicted in Figure 12 above.

Intelligence Impact

The study presents a number of identifiable impacts with regards to the domain of Intelligence. Not least of these is the new understanding that the Intelligence domain is commonly practiced in an entirely new environment. A notable impact with regards to uncovering this intelligence practice is that the 3i model developed by Ratcliffe can be adapted for use in domains other than policing.

The conceptual model built for this study provides a flexible framework with which to conduct this explorative exercise. The study posits, that the model could be used to similar effect in other probation areas or indeed other domains. The study asserts that the 3i model requires adaptation to accommodate the probation domain and as the study has shown, component parts of other intelligence systems can be adapted to undertake more granular enquiry.

The analysis carried out in chapter two which matched the component parts of intelligence systems from different domains does not appear (at least within the available literature) to have been carried out before and yet matching Luhn's (1958) business intelligence system against Schneider's (1995) criminal intelligence normative model enabled this study to compare the components and identify those with the most commonality. Given that the literature strongly suggests the Intelligence domain keeps re-learning the same lessons, this matching exercise confirms that position and shows that separate domains have commonality. Separate domains can therefore engage in a cross-fertilisation of ideas to benefit their differently named but functionally similar component parts. The matching exercise confirmed the

core principles of the Intelligence Cycle are found within later derivations appearing in different domains. Contrary to the arguments put forward by Warner (in Phythian *et al*, 2013) , in the literature review, the Intelligence Cycle is still relevant and in an academic sense has enabled the mechanics of this study to unearth more granular findings. The study shows that intelligence is not a “dark art” (Coyne, 2017) and that facets of the domain are clearly recognisable and identifiable in operation within the day-to-day business of probation work. Intelligence has not yet entered the lexicon of those in probation circles but equally so, is that thus far, probation work has been somewhat dismissed within the Intelligence domain, and not only within the UK.

The assumption of a rich vein of North American and Australian literature pertaining to probation intelligence did not materialise within the review process and what was found was confined in the main to the area of corrections intelligence in custodial settings.

The literature review provided evidence that intelligence scholars still debate the definition of intelligence. The study found that key to answering this prevailing question is the military phrase “area of intelligence interest”. Whilst the probation domain may require all kinds of “intelligence” to operate, a definition of this in totality would prove cumbersome. The study lends weight to the argument that pursuing close definitions of intelligence is a folly at a strategic level but that these definitions gain credence at tactical and operational levels. Having observed the cohort allocation meetings during this study, it appears as though an IOM manager would be able to describe what kind of intelligence they need for their specific “area of intelligence interest”

(MOD, 1991, p.1 A-1), which would enable a suitable definition. The study posits that adopting the military understanding of an “area of intelligence interest” would enable scholars of intelligence to move beyond the definition debate.

The study posits that the persisting argument around the position of the analyst (Belur & Johnson, 2016) perpetuates a confusing narrative. Whilst the difficulties noted in the literature surrounding acceptance of civilian or uniformed analysts into a broadly investigative culture are accepted here, the inference that their analysis products are rejected is not accepted. The study posits that analysis is at the centre of the intelligence process as it is carried out by the recipients of information. The evidence collected in this study provided findings to show CRC probation officers conducted informal analysis of data as it was presented to them. This informal, intuitive analysis is made possible by the combination of timely information exchange and practice related decision making. This is entirely in keeping with non-structured intelligence analysis as described by Marrin (2007) in the literature chapter.

The findings support partnership working as an intelligence practice as it offers a more direct opportunity for operational transparency and information exchange.

A further observation concerning the tacit nature of the system found concerns the culture of the Intelligence domain itself. The insistence on specific terms and the adoption of a cultural lexicon may be a barrier to other domains formally engaging with the practice of intelligence. The literature shows that differences in terminology lead practitioners in separate domains

to draw distinctions between themselves even though in practical terms they are involved in strikingly similar areas of business (Gill, 2012). The study has shown that probation staff do carry out intelligence activities and that the organisation does not refer to them as such.

The findings regarding the tacit nature of the system observed offer a riposte to the notion of intelligence being biological in nature. The combined findings in this study show that intelligence is an organisational construct, whether tacit or explicit.

Probation Impact

In an academic first, the thesis has uncovered a tacit intelligence system in operation within a number of IOM teams. This discovery is especially important since unlike the Police Service, private sector probation provision did not, at the time this enquiry was undertaken, have an established intelligence presence in terms of organisational capability or business mandate at any level, national or local.

Given the evidence here, the study claims that an intelligence system exists within the CRC region being studied. The study does not claim that uncovering an intelligence system is a transformational finding or even that each of the six separate geographic areas studied within this piece of research carried out all the component parts of the intelligence system or even in the same way.

The findings provide evidence that CRC probation staff in IOM carry out almost all of the recognised component parts of an intelligence system. The

notable exception is that validity checks on intelligence provided by the police. The evidence shows that during cohort allocation meetings, validity checks appear to be carried out by the police and are accepted by probation and vice versa. The researcher's own experience as an information officer within the probation environment, can attest to the lack of any formal validity checking in probation on police data is because the police are an established and trusted partner with a longstanding intelligence system in place.

It is clear from the findings relating to the second research question on the influence of intelligence that Probation staff will use intelligence from outside their own organisation. The findings also show, however, when making offender management decisions, probation staff prefer to use intelligence which comes from within their own environment, this finding reflects the early writing on police intelligence and the acceptance out outside data sets.

A major finding to note is that staff are contributing to a recognised intelligence system without conscious knowledge of it. Staff undertake these actions despite the absence of organisational architecture and capacity such as specified roles, defined teams, explicit work processes and without any formal direction of their managing body. Whether by imitation of their police counterparts or independent development due to organisational need, CRC probation staff and in particular, Integrated Offender Management Teams, are already undertaking intelligence activities and it is from here that further organisational learning should start.

The findings do not support the notion of an intelligence subculture in which a specific section of probation staff engages in intelligence activity whilst

others do not. The study found that general offender management staff also engaged with the intelligence they were presented with.

The study has shown that probation generates a myriad of information into intelligence but that it is neither considered nor promoted as such. The study shows that the information generated by probation satisfies much of the criterion warranted in the intelligence systems uncovered during the literature review. Probation data appears as though it is collected in a robust, transparent, and legal manner and that intelligence such as the offender assessment scores are analytically defensible. The findings show that information derived from offender supervision is provided to partner agencies and that this information falls within human intelligence as described by Gill and Phythian (2012). The findings in relation to the second research question show that risk scores are an important factor in probation work. The offender assessment, the OASys tool calculates both a risk of reoffending and a risk of harm score. Maguire (2000) argues that the police are seen as a key provider of knowledge pertaining to risk, asserting that this is a major role for the police. The evidence from transcript data in this study demonstrates probation staff owning risk data as a matter of professional practice. The study shows that probation staff generate risk scores for offenders but the discussions in cohort allocation for instance are not conducted using that information as a currency. Instead, the evidence shows, that probation officers impart their risk assessment information outside of the naming conventions associated with intelligence. The study posits that scholars such as Maguire would lend equal weight to Probation in the same context if their internally produced intelligence such as risk information were recognised and promoted as intelligence. The

literature tells us that the distinction between information and intelligence is an important one. Understanding that data has gone through the intelligence process makes its worth transparent to other intelligence users. The intelligence process here is not transparent and without explanation and transparency, intelligence outputs could be ignored. The literature review chapter demonstrated the difficulties encountered when implementing a new intelligence system into the policing function. Schneider (1985) also commented on the need for a police intelligence function to become legitimised within the policing organisation noting that the management structure within the policing function should demonstrate a willingness and commitment to use intelligence for decision making purposes. It is unclear at the time of writing whether a fledgling intelligence system in a newly re-unified National Probation Service will require a similar exercise to become a legitimate entity, the experience in the policing domain suggests that it may.

This study had to consider what information Probation uses to achieve its objectives and in doing so the researcher has proposed nine different types of intelligence. The exercise to uncover these intelligence sources was informed by Gill and Phythian's "INT's" (2012) and as such is to be considered indicative. The task for a re-unified probation service and perhaps academia, is to consider the wealth of information generated within probation work and examine this to compile a definitive list of probation "INT's". The data could not offer a reason as to why probation staff working in IOM had not adopted the term intelligence with regards to their own information but readily accepted and used the term when referring to data from their colleagues in the police.

The findings regarding probation organisational design and the social and technical makeup of each of the units became an important aspect of uncovering the intelligence system. In a stark contrast to the findings of Cram (2020), when quoting Nash, the idea of a "polibation officer" was not evident in any of the IOM schemes scrutinised for this study. Whilst the police did on occasion use negative language, one example in area B calling an offender a "horrible burglar", this type of language was not used by probation colleagues.

There is convergence of sorts brought about by the shared goals however it does not appear as though that the level of convergence in relation to task has had a cultural effect on probation staff in this study. In Cram's study, the IOM staff were located in police buildings which may account for the subtle adoption of police culture by a minority of probation officers. In this study, co-location took place either in probation offices or in the case of one scheme its own premises. The evidence here shows that probation staff have a clear understanding of mission, one which, when faced with conflicting views, was strong enough to re-state its position and aims but also one, paradoxically, not seemingly strong enough to impose itself (probation intelligence) in an a non-traditional "Intelligence-Led Policing" environment.

Those units which were identified as co-located or who worked closely with the police appeared at the time to have no obvious role distinction; without prior knowledge it may have been difficult to guess which were police and which were probation officers. Co-located probation officers consulted police intelligence systems to interpret their environment and make decisions about the offender pool whereas those units not co-located or not having the relative luxury of police staff working closely with them tended to use home grown

intelligence such as the prolific and priority offender scoring matrix. The evidence presented in the last chapter shows that probation staff conducted a form of intelligence analysis to interpret their environment for cohort allocation purposes. Although cognitive rather than computer-based analysis, probation staff carry this out in much the same way as a police analyst might collate and analyse data before recommending action. The analysis provided by De Long & Fahey (2000) states that culture is reflected in values, norms and practices and at the deepest level culture consists of values which are embedded, tacit preferences about what the organisation should strive to attain and how it should do so. In view of De Long & Fahey's statements, finding a tacit Intelligence System embedded within a probation organisation strongly suggests that Intelligence work resides at the cultural core of the probation organisation even though it is not a mandated activity. Rather like tacit knowledge, the intelligence system found here is invisible but as the findings show, it is no less real than the explicit operational systems performed as day-to-day probation duties. This presents probation with a problem in that to derive any organisational learning within the domain on this issue the service will have to start with the actual recognition of the tacit intelligence system that is in place. Once recognised, the current, tacit, system can be interrogated and operationalised to turn tacit activities into explicit ones. Applying a more explicit intelligence system may provide operational and performance related benefits.

The study posits that recognition and adoption of a professional intelligence system will, with the addition of appropriate interventions enable the re-unified Probation Service to improve outcomes, provide explicit

recognition of their intelligence processes and provide career opportunities for probation intelligence officers.

The findings in this thesis have provided the starting point for an academic position regarding the domain of intelligence and probation work. The findings in relation to how the CRC interpret the environment suggests additional skills sets have been acquired by probation workers to supplement their established practices and casework (Burnette & McNeil, 2005). The introductory chapter indicated that the National Probation Service has embarked upon a programme to introduce intelligence work into its organisation. Understanding the tacit system observed in the CRC is likely to be a great boon to this fledgeling initiative. The intelligence activities being carried out should be recognised as such; this would have implications in relation to tasking and training. The study posits that the pursuit of professional practice regarding intelligence would not be to the detriment of the probation service.

Finding intelligence principles operating within probation opens the probation domain to the same kind of professional attention in this area which has thus far been confined to the police. Professionalisation and formal accreditation of probation intelligence work is possible if the recognition is appropriately managed by bodies such as the Probation Institute in conjunction with bodies such as the International Association of Intelligence Education or the International Association of Law Enforcement Intelligence Analysts. The study suggests that professionalising probation intelligence would open this area of probation to a similar type of academic scrutiny which has been thus far only conducted within the policing domain.

Application beyond the CRC featured in this study

Regarding application of the principles beyond the CRC, certainly in light of the IOM reviews, (Wong & Senior, 2011; Cram, 2023) it is clear that the conceptual system is broad enough for application in any probation operation. The study posits that the framework for the conceptual system constructed within this research is broad enough at the outset to be used in any organisational setting and need not even be confined to probation work. The layered data collection described in the methodology chapter supported by table two and the layers of analysis described in the analysis chapter which is supported by figure eleven show that the conceptual system is generic and not tied to the CRC used in this research. When the granular methods employed in each of the research questions are applied, then the conceptual system is effectively embedded in a probation setting. The study posits that the more granular questions sitting beneath the broad 3i's could be adjusted to reflect the nuanced operational machinery of any probation area. Re-unification, although underway is unlikely to come to fruition until at least 2024 (HMPPS, 2022) due to a complicated and un-coordinated structure inherited from the private sector operators. Should the 2019 Intelligence Professionalisation direction issued to the NPS received a wider roll out (it did not include private providers) post re-unification then this study would be of great benefit to the re-unified service. The literature review has shown how difficult it was to implement the National Intelligence Model within the policing environment, the researcher posits that having a CRC study such as this would benefit any process to implement new intelligence architecture into the organisational structures of the newly formed NPS.

Perceived problems between intelligence work and the underlying nature of probation work

Context is important here when considering if the probation organisation or the staff therein want to be seen as 'agents of intelligence'. As previously stated, the definition of intelligence is that it is analysed information. On a strategic level the very least to expect of any organisation is that it would consider (analyse) the information it receives or generates. The same can be said at the mezzo or tactical level, where team and area leaders consider analysed information collated at group and geographic levels so that they can organise resources and provide appropriate services. If the connotation of an 'agent of intelligence' is negative, then this should be reversed. When one considers that analysed information (intelligence) leads to the procurement of safe and secure accommodation for an offender then the focus is upon providing support to an offender. In that context, the study posits that probation would happily be seen as an agent of intelligence. In the appropriate context, being an agent of intelligence is entirely in keeping with the philosophy of probation work and the persistence of casework activity in the advise, assist and befriend mould. A further consideration would be when probation shares information with enforcement agencies such as the police; in this instance then there could be trust implications at the probation practitioner level particularly in the light of persistent literature surrounding relational aspects of supervision. However, as the literature review and the findings of this study has shown, it is common practice for probation staff to share information with third parties. The study posits that there would be fewer implications for probation staff who are not offender facing; those who collect, collate, analyse, and share conviction data

for instance. Staff who are not probation officers or probation service officers and who are not trained to supervise offenders are unlikely to be bound by any prevailing cultural attitudes.

The literature review provided a myriad of evidence to show that probation has been subject to decades of change and there is evidence to show how some change, for instance the use of technology is embraced. Martin & Zettler (2021) found that probation staff were amenable to change noting widespread acceptance of the use of technology during the pandemic, essentially ensuring its place within ongoing probation practice. The general acceptance of change is encouraging in this context as technology was used to enhance probation provision (face to face supervision) during the Covid pandemic but was kept beyond the Covid restrictions. When one considers intelligence practice in the same light, when used to enhance probation practice, whether it is front line practitioners or back-office staff, the findings are encouraging. Also it is argued in the principles of effective probation practice (Chapman & Hough, 1998) that practice should be directed and supported by effective information systems. HMIP (2020) quote Chapman & Hough who argue that intelligence transforms information into ideas. Furthermore, they argue that probation should use information to improve effectiveness (HMIP, 2020,p.6). The literature confirms that the use of intelligence is entirely in keeping with the enhancing probation practice and the culture of the service. The challenge is to promote intelligence activity in an appropriate way. Tracy (2004, p.134) when discussing organisational tension within a corrections organisation offers a theoretical model to address problematic tensions. The core of the model is to frame tension as

complementary dialectic which enables employees to re consider organisational problems and transform them into complementary mechanisms. The concept is significant to this study as this may be a necessary action for the new national service to re-frame any preconceived 'Taylorised' or 'Managerial' connotations erroneously accredited to an intelligence system. As mentioned above (or previously), framing intelligence activity as a positive compliment to offender management would ease the transition to an explicit intelligence system being implemented. Tretheway & Ashcraft (2007, p.83) offer that contradictory and problematic organisational environment are normal conditions of organisational life and that unpacking these tensions can lead to a better understanding of organisational practice. Whilst arguably problematic, perhaps from the standpoint of the prevalent logic outwardly associated with probation work (offender facing work and its associated culture), the introduction of a formal intelligence system would undoubtedly expose the tacit intelligence activity already underway. This could go some way to subsuming intelligence work into the wider organisational culture of probation workers.

Integrated offender Management Impact

With regards to IOM, the findings within this study are consistent with some of those noted in the two IOM evaluations referenced within this document. The study found that the probation staff working in IOM were closer to the police than to any other service reportedly involved with the 'strategic umbrella' of IOM. No other service was involved in the cohort allocation process, this was

evident during the observations undertaken by the cohort allocation meetings and is reflective of the recent review literature (Hadfield *et al*, 2020).

Given the higher percentage scores provided by IOM staff compared to their colleagues in general offender management one could argue that IOM staff are more influenced by intelligence than their colleagues. Further research would be necessary to pursue the question of why this is so. The literature review uncovered studies showing an assimilation of cultural values between police and probation which, given further research may offer an explanation as to the higher scores found in this study.

The police have a joint responsibility for offender management within IOM and they took an active part in the allocation process where possible. Dominey (2019) could not comment on the positive outcomes of the "Thick" supervision model which places emphasis on sturdy relationships, monitoring and enforcement, however, as the study found parity between Dominey's theory and the IOM model, the positive results found here are encouraging with regards to close working relationships. The close working relationship is evident in the bespoke intelligence exchange system set up in one of the IOM areas when co-location was no longer possible. Given that the literature review reports a history of silo working between police and probation which has changed somewhat in recent years (Mawby & Worrall, 2011) IOM with co-location as outlined in the evaluations, offers the opportunity for closer partnership working and the benefits that will bring. The remarks regarding trust as an impacting factor on information exchange would appear to resonate with the literature surrounding police and probation co-operation. What the findings show in this study is that the two organisations appear to have

converged into a single mission where they are equally responsible for its success and are acting as one organisation. Sonndegaard *et al* 2007 suggest that knowledge management and information sharing should be considered integral to any business strategies and this study agrees with that statement in the light of the evidence collected here. In view of the evidence as it relates to the literature, this study posits that the socio-technical structure of the police-probation IOM schemes should be re-visited to enabled the transparent understanding of probation information, in particular the analytical rigour behind the OASys assessment.

The study found that the opportunity to increase, intelligence sharing, transparency of mission and general co-operation is in danger due to the shift in resourcing which saw co-located police officers withdrawn from IOM teams and placed into the neighbourhood teams within the police. If the IOM allocation discussions were more probation centric and focussed on the risk scores of offenders, the question of what that would mean in relation to the impact on reoffending suggests itself and is worthy of further research.

A broader reflection on the literature is uncovered. The study described IOM as a tactical tool, however, perhaps the IOM scheme is as Crawford (1994, p.500) claimed, when commenting on the partnership approach, a managerial solution "which removes gaps, limits friction and ensures the smooth running of the system as a whole." From that perspective the apparent success of IOM could be claimed as a triumph for managerialism.

Police Impact

Given the decades long push towards Intelligence-Led Policing introduced in the initial chapter, the study can corroborate the literature review findings of an over reliance on police intelligence in a partnership environment but only to a point. Police were the only members of the cohort allocation meetings actively citing “intelligence” and as the transcripts show, it was always from their own sources. The police officers present during cohort allocation meetings regarded probation information with due professional courtesy and participated in the decision-making process when probation information was provided. By acting upon probation information, the police officers are arguably accepting information from another agency, accepting it as valid and then basing an operational decision on it. This observed activity contrasts with much of the associated literature regarding police using data from outside agencies. The literature claimed that an intelligence led organisation such as the police could maintain a cultural disregard for actionable intelligence from a trusted partner. Certainly, the literature provided indications of police preferring to use their own intelligence data. Although the transcripts show an abundance of police intelligence being provided in a certain area (Area B) the evidence shows that police are willing to accept and work with information provided by probation staff. Given that probation do not call their data intelligence and the meaning that this term conveys to an intelligence led organisation, police are likely to be unaware of the potentially rich seams of intelligence within probation data. This study calls for a recognition of probation data for the intelligence that it is, however, that recognition will have to start with the probation service itself. The desire for the Police Service to

accommodate a Neighbourhood Policing Model (Bullock and Tilley, 2009) has had an obvious effect on the running of IOM schemes in the CRC region. The findings show that the scant policing resources allocated to IOM were removed to bolster Neighbourhood Policing teams. Three of the six IOM teams did not have a co-located police presence, two of these could not readily share intelligence, and effectively carried out IOM cohort allocation in isolation.

Corroborative claims - Socio-technical systems.

In accordance with the literature provided on systems design, the research findings clearly demonstrate that a system is in place.

The activities of probation staff in IOM are arranged in such as was as to conform to Meadow's (2008) systems exercise which proves that the activities are not an *un-coordinated* range of tasks but an actual system. The evidence shows that there are several inputs to the system which consist of raw data such as arrest information and analysed data such as offender assessment scores. The evidence also shows that there is a socio-technical aspect to the system in that people and technology interact during the system stages and that there are dependencies between the two without which the desired system outputs would not be achieved (Sommerville, 2013). The evidence shows that there are elements of processing of information into intelligence and that in the case of cohort allocation activity, this processing activity is analytic in nature. The results of the analysis (system outputs) are then acted upon by decision makers at each level within the CRC. The findings of this study also show that the impact of the intelligence system is reviewed

which provides an element of feedback to the operational activity undertaken. The process mapping undertaken by this study revealed a mature socio-technical system with regards to information exchange of arrest and conviction data. Staff with specialist IT skills were involved in the exchange process from both police and probation and they interacted with several specialist and standard systems to process raw data into actionable intelligence. This evidence provided further assurance that a socio-technical system was in existence. In concordance with the literature, the process and capability maps constructed for this study are a useful knowledge repository which may be followed in any future research (White & Cicmil, 2015). Sondergaard *et al* (2007) theorised that knowledge management is recognised as a social process in which trust and location are two major factors in successful information exchange. The data has shown to corroborate Sondergaard as in the case of cohort allocation, it is the presentation and consideration of that data in a social setting which ultimately enables the decision to be made.

Overall, the study provides a contrasting viewpoint of systems within criminal justice to that adopted by McAra & McVie (2007). Although outside the scope of the research questions, the findings offer encouraging signs that adoption of an intelligence system does not appear to have a detrimental effect upon those offenders who take part in the IOM scheme.

The study does not claim to have uncovered any new insights into systems theory but has provided corroborative evidence to the theories uncovered in the literature review.

A repeatable model

This project considered the intelligence system in an entirely different way. By focussing on a non-policing, non-prosecution environment it sought to uncover the tacit operational constructs of an intelligence system. The literature review revealed that this approach is different to those commonly associated with the introduction of Intelligence-Led Policing which essentially sought to find conformity to an intelligence system where it was already mandated by standard operating procedure, tested by inspection or in the case of the police, imposed by mandate.

The methods used within this study are testament to it being a re-usable model and as such, the author posits that the methods and data used within this research project are available to others and the project is therefore a repeatable exercise. The author posits that the study was aided greatly by the Mixed Methods research paradigm as it enabled the author to combine qualitative and quantitative research avenues. The overarching framework has been used previously by different researchers and chapter five provides a transparent map with which to re-use the bespoke layered analysis and Gap Analysis constructed for this thesis. The IOM evaluation documents examined in the literature review chapter show that the cohort allocation process is a staple of any IOM scheme. Obtaining data from any probation area would involve approaching the relevant gatekeepers as the researcher has done for this project. A social survey of probation staff involved in offender management whether IOM or general is possible via electronic or physical means and the survey questions were not specific to the probation region in this study. The literature reveals that many IOM schemes collect reoffending data on their IOM

cohort which could be made available to a researcher with appropriate permissions in place.

Researcher Reflection

Carrying out this project was not an easy task. The work was completed as a part time study whilst the researcher was engaged in full time employment. The prospect of being an insider researcher brought with it a degree of confidence in project success, this confidence was initially borne out. Gaining official approval from the Probation Chief Executive and buy in from the Director of Offender Management gave the project face value credibility when discussions with team managers started with regards to access to meetings and data. However, the confidence with which the project started quickly diminished due to the Transforming Rehabilitation agenda which saw the researcher having to quickly re-arrange fieldwork before being made redundant. Losing insider status meant that access to buildings, personnel and data which was once freely available became less so, however, given the agreements in place, the agreement to provide access was relatively easy to re-establish but difficulties remained due to having a new employer.

The problem of employment became a pressing need and a succession of jobs across the UK ensued, five different roles in seven years, some offers were helped by the standing afforded to PhD candidates and the field of study was a great boon when the researcher took up a senior manager role in MOD Intelligence. The wisdom of pursuing a part-time PhD was called into question many times during this period along with numerous bouts of self-doubt. Thankfully, the University is active with regards to student contact which was

found to be a great boon for the part-time student. The researcher was able to take advantage of the University researcher development programme and attended the training appropriate for doctoral students.

In addition to the training provided by the University, the researcher undertook several business analyst courses with the British Computer Society which instilled the skills with which to model business processes. In terms of reflection, it was the researcher's original intent to write a project solely on intelligence, but the project became something much more than this enabling the author to consider intelligence in a much wider context.

Research Limitations

The introduction included a section on limitations to the scope of this research. Conducting a study on a sub-set of offenders (IOM in the main) and with a sub-set of probation staff (CRC staff) could have hindered the discovery of an intelligence system. However, with existing theory and practice as a guide, the aim of the research has been fulfilled. There were several data collection challenges and the field research had to be adapted to the Transforming Rehabilitation agenda which was introduced by the coalition government during 2014. The Transforming Rehabilitation agenda began to move at pace during the early months of 2015 with private sector ownership beginning to release high level intentions with regards to staffing cuts, office locations and changes to working practices. In terms of data collection and the uncertainty surrounding private sector operating model, each of the planned collection methods were potentially at risk of change. Collecting data on how the Probation Service interprets their environment was at risk from organisational

change; the new owners could disband the existing IOM teams from the current six, co-terminus with local authority boundaries and re-organise. The Police Force in the area had already set a precedent for this type of restructure.

With regards to staff redundancy, there were two risks to data collection, one being that the staff currently in place would no longer be there to take part in field research and the other concerns the loss of operational knowledge, the remaining staff may not have been able to provide answers to the research questions. The proposals for a 30% staffing reduction overall included a 38% (n10) reduction in team managers. This announcement came the day before fieldwork started. In terms of monitoring the arrest rates of offenders on IOM schemes, as this was not a statutory requirement and required operational expertise, it was unclear whether the new management team had the desire to retain the capability. In view of the impending changes and the uncertainty this could bring to probation staff, the researcher made the decision to start fieldwork earlier than was originally planned.

It is not clear to what extent, if any, the proposed changes brought about by Transforming Rehabilitation actually had on the respondents who took part in the fieldwork for this research. There was an impact on the planning element of the fieldwork phase in that the online survey was constructed and carried out earlier than had been noted in the agreed research plan. The survey was released as early as possible before any proposed staffing and organisational changes came to fruition.

Analysis of the fieldwork data presents several questions about the methodology and methods for the study in general. Whilst it is felt that the fieldwork produced enough rich data with which to answer the research questions, on reflection, further, supplemental questions were raised during the process which the data could not answer. The supplemental questions are revealed in general below, however, it is felt that some of the questions will warrant further discussion and will be considered when this chapter considers further research.

The data collected for this study could not reveal if actually using the intelligence brought about a reduction in offending, although out of scope for this study, the question is one often brought to bear on crime reduction initiatives. As the intelligence system is a decision-making tool attached to crime reduction and in the case of POP and the NIM inextricably linked, the study suggests that this should be a future piece of research with regards to probation intelligence. The study could provide defensible explanations for but could not prove the reason why any staff group would appear to have favoured one type of intelligence over another. The study could not prove that the IOM teams are more likely to engage with intelligence due of their close association with the police who have longstanding embedded intelligence systems.

The study could not definitively provide an explanation for the exact nature of probation intelligence; that is to say, what is to be formally called out as an intelligence input and an intelligence output.

Further research

Although the preceding paragraphs outline the research impact of this study, it has been an exploratory project and as such has uncovered more avenues worthy of academic endeavour. For the reasons outlined above, research should be carried out to look to probation's own rich data sources to ascertain which of these can be considered intelligence in an operational sense. When a consensus is reached on what is probation intelligence then an effort should be made to consider which product types and delivery methods are most appropriate for a probation audience. With regards to organisational capacity, the role of analysis and the analyst requires research, not least because it causes such confusion in a policing environment. Given the attachment to analysis in almost every part of the literature review and that the accepted position of analysis within each of the intelligence systems there would appear to be a need within the probation service to conduct analysis on its own data. The study found (in terms of percentage comparisons) that IOM officers are more likely to be influenced by intelligence than their general offender management counterparts, but the scope of the study did not pursue why this might be. Whilst this research can provide answers to which type of intelligence has more influence on particular staff in a key role, the study does not uncover why, and this question also presents the opportunity for further research.

Given the figures obtained on arrest data, further research could be carried out to investigate if a cultural change has developed in IOM teams over time (Whelan, 2016) to determine if the apparent use of that intelligence it is due to a closer co-operation with the police service.

Given that this study has accomplished the objectives proposed in the introduction chapter and that this study was acknowledged as explorative from the outset, therein lies a challenge. Given the new position which this study presents with regards to the domains of Intelligence and Probation, the author proposes that the broad aspects of this thesis be separated for further research alongside the new questions that have been uncovered.

Appendices

Appendix A - List of Abbreviations

3i	The 3i Model developed by Ratcliffe
ACPO	Association of Chief Police Officers of England and Wales
BCS	British Computer Society, The Chartered Institute for IT
CDRP	Community Disorder Reduction Partnership
CRC	Community Rehabilitation Company
DSS	Decision Support Systems
DV	Domestic Violence
GCHQ	Government Communications Headquarters
HMIP	Her Majesties Inspectorate of Probation
HMPPS	Her Majesties Prison and Probation Service
IALEIA Analysts	International Association of Law Enforcement Intelligence
INT	Intelligence
ILP	Intelligence-Led Policing
IOM	Integrated Offender Management
IPB	Intelligence preparation of the battlefield
MI5	The Security Service
MI6	Secret Intelligence Service
MOD	Ministry of Defence
MOJ	Ministry of Justice
NI18	National Indicator 18
OASys	Offender Assessment System
OGRS	Offender Group Reconviction Scale
NCIS	National Criminal Intelligence Service
NCSN	National Community Safety Network
NIM	National Intelligence Model
NOMS	National Offender Management Service

NPS	National Probation Service
PEACE	Plan, Engage and Explain, Account, Closure, Evaluation
PESTLE	Political, Economic, Sociocultural, Technological, Legal, Environmental
PNC	Police National Computer
POP	Problem Orientated Policing
PPO	Prolific and Priority Offender
PTRS	Probation Trust Rating System
SFO	Serious Further Offence
SARA	Scanning, Analysis, Response, Assessment
SIMBAD	
SSM	Soft Systems Methodology
SWOT	Strengths, Weaknesses, Opportunities, Threats
T&C	Tasking and Co-ordination Meetings
TOGAF	The Open Group Architecture Foundation
TR	Transforming Rehabilitation

Appendix B - Letter Authorising Research



National Offender
Management Service

UNCLASSIFIED

[Redacted] Probation Trust

Dr Katie Jenkins
Senior Lecturer in Sociology
Dept of Social Sciences and
Languages
Northumbria University
Lipman Building room 212
Newcastle upon Tyne
NE1 8ST

[Redacted] Probation Trust

[Redacted]

S Storey ethics forms

28/05/2014

Dr Jenkins

With reference to the consent form dated 26/02/2014. The request for Steven Storey to carry out research within [Redacted] Probation Trust is authorised.

Yours sincerely,

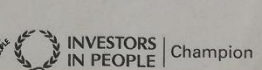
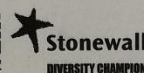
[Redacted signature]

[Redacted name]

Director of Performance, ICT & Service Development

UNCLASSIFIED

Phone: [Redacted]
Minicom: 0191 2407395
www.[Redacted]probation.co.uk



Appendix C - Research information for participants

Faculty of Arts, Design and Social Sciences – Research Ethics Framework Research Information – for participants

**To be completed by the researcher and supplied to participants.
The researcher must ensure the participant has ample time to read all of the information before asking them to sign the Participant Consent form (ASS-RE4)**

Name of project

Intelligence Systems: Their adoption and use with community based offenders.

Research Organisation

Northumbria University

Researcher's name

Steven Storey

Who is funding the research?

Northumbria University

What is the purpose of the research?

To explore and examine the Intelligence business process being used within the IOM sphere of the CRC. This is an under-theorised area of probation related work.

What will happen to the results of the research study?

The results will be used in the researcher's final dissertation to the university and will be used in scholarly articles for reputable online and paper based academic journals.

Why have I been chosen?

You have been identified as having a key roll within the IOM process.

What will I have to do if I agree to take part?

The researcher plans to conduct a semi- structured interview concerning the IOM cohort allocation process. This would be a confidential interview conducted in private and with your permission would be tape recorded.

The researcher also plans to observe and note take during any tasking and co-ordination meetings concerning cohort allocation.

Will my taking part in this research be kept confidential?

Yes. Research participant confidentiality is bound by the ethical considerations of Northumbria University and the British Society of Criminology. In addition to this, any area and team based structures will not be identified in any reports.

Who can I contact for further information about this research contact?

Charlotte Bilby
See Below

Who should I contact if I wish to make a complaint or report an incident concerning this research?

Charlotte Bilby Reader in Criminology & Faculty
Director of Research Ethics
Dept of Social Sciences and Languages
Lipman Room 321, Northumbria University
Newcastle upon Tyne, NE1 8ST

☎: +44 (0)191 243 7245

e-✉: charlotte.bilby@northumbria.ac.uk

You will be given a copy of this Information Sheet and a copy of the Participant Consent Form

Appendix D - Participant consent form

Faculty of Arts, Design and Social Sciences – Research Ethics Framework Participant Consent Form

To be completed by both participant and researcher before research commences

Name of project

Intelligence Systems: Their adoption and use with community based offenders.

Organisation(s) initiating research

Northumbria University

Researcher's name

Steven Storey

Research Organisation

Northumbria University

Participant's name

I confirm that I have been supplied with and have read and understood an Information Sheet (ASS-RE5) for the research project and have had time to decide whether or not I want to participate.

I understand that my taking part is voluntary and that I am free to withdraw at any time, without giving a reason.

I agree with Northumbria University recording and processing this information about me.

I understand that this information will only be used for the purposes set out in the information sheet.

I have been told that any data generated by the research will be securely managed and disposed of in accordance with Northumbria University's guidelines.

I am aware that all tapes and documents will remain confidential with only the research team having access to them.

My consent is conditional upon the University complying with its duties and obligations under the Data Protection Act.

Signature of Participant (even if below 18 years old)

Date

Signature of Parent/Guardian/Representative

(if participant is under 18 years old)

Date

I can confirm that I have explained the nature of the research to the above named participant and have given adequate time to answer any questions concerning it.

Signature of Researcher

Date

Any queries regarding Ethics Forms can be directed to Charlotte Bilby Reader in Criminology & Faculty Director of Research Ethics, Dept of Social Sciences and Languages, Lipman Room 321, Northumbria University Newcastle upon Tyne, NE1 8ST.

APPENDIX F Bibliography

Abbas, A, E. and Howard, R, A. (2016). *Foundations of Decision Analysis*. Global Edition. Essex: Pearson.

Abbott, A. (1988). *The System of Professions: An Essay on the Division of Expert Labor*. Chicago, IL: University of Chicago.

Akca, D., Larivière, C. D., & Eastwood, J. (2021). Assessing the efficacy of investigative interviewing training courses: A systematic review. *International Journal of Police Science & Management*, 23(1), 73–84.

Alach, Z. (2011) 'The Emperor is Still Naked: How Intelligence-Led Policing Has Repackaged Common Sense as Transcendental Truth'. *The Police Journal*, 84 (1), pp.75-97.

Alise, M. A. and Teddlie, C. (2010) 'A Continuation of the Paradigm Wars? Prevalence Rates of Methodological Approaches Across the Social/Behavioral Sciences', *Journal of Mixed Methods Research*, 4(2), pp. 103–126. doi: 10.1177/1558689809360805.

Anderson, C. (2022). *What Do We Mean by Data-Driven? Creating a Data-Driven Organisation*. O'Reilly. Available at: <https://www.oreilly.com/library/view/creating-a-data-driven/9781491916902/ch01.html>. Accessed on 09/12/2022.

Ansbro, M. (2006) 'Serious further offence inquiry', *Probation Journal*, 53(2), pp. 167–169. doi: 10.1177/0264550506063583.

Arber, S. (1999) 'Designing Samples', in Gilbert, N, (1993) (ed). *Researching Social Life*. Sage:London pp 68-92.

Association of Chief Police Officers. (2005) Guidance on the National Intelligence Model. Centrex. National Centre for Policing Excellence. Available at <https://whereismydata.files.wordpress.com/2009/01/national-intelligence-model-20051.pdf>

Atkinson, C. (2013) *Beyond cop culture: the cultural challenge of civilian intelligence analysis in Scottish policing*. PhD thesis. School of Social and Political Sciences, College of Social Sciences. University of Glasgow. Available at: <http://theses.gla.ac.uk/4662/> (Accessed: 01/08/2019).

Barnes, G. (2021) Researcher Positionality: the Liquid Inbetween, *PRACTICE: Contemporary Issues in Practitioner Education*. (published online) DOI: [10.1080/25783858.2021.1968280](https://doi.org/10.1080/25783858.2021.1968280)

BBC Earth. (2018) *Learn the Meerkat Language*. Available at: <https://youtu.be/NokF599u1Ck>. (Accessed 10/01/2018).

Belur, J. & Johnson, S. (2018) 'Is crime analysis at the heart of policing practice? A case study', *Policing and Society*, 28:7, pp.768-786, doi: 10.1080/10439463.2016.1262364

Bertalanffy, L, Von. (1968) *General System Theory: Foundations, Development, Applications*. New York: George Braziler Inc.

Bhaskar, R. (2008) *A Realist Theory of Science*. New York:Routledge.

Breakspear, A. (2013) 'A New Definition of Intelligence', *Intelligence and National Security*, 28:5, pp. 678-693.

Brodeur, J. (2007) 'High and Low Policing in Post-9/11 Times', *Policing: A Journal of Policy and Practice*, 1 (1), pp. 25–37. doi.org/10.1093/police/pam002

Brown, S.D. (2007) 'The Meaning of Criminal Intelligence', *International Journal of Police Science and Management*, 9(4), pp. 836–40.

Bruce, C, W. (2004) 'Fundamentals of crime analysis', in Bruce, C, W. and Hick, S, R. and Cooper, J, P. (eds), *Exploring crime analysis: Readings on essential Skills*. Overland Park: IACA Press, pp. 11-36.

Buckingham.ac.uk. (2020) *Centre for Security and Intelligence Studies (BUCSIS)* Available at: <https://www.buckingham.ac.uk/research/bucsis> (Accessed 01/09/2020)

Bullock, K. (2013) 'Community, intelligence-led policing and crime control', *Policing & Society*, 23(2), pp. 125-144
doi.org/10.1080/10439463.2012.671822

Bullock, K. and Tilley, N. (2009) 'Born to Fail? Policing, Reform and Neighbourhood Problem Solving', *The Police Journal*, 82(2), pp. 117–133. doi: [10.1350/pojo.2009.82.2.459](https://doi.org/10.1350/pojo.2009.82.2.459).

Burcher, M. and Whelan, C. (2019) 'Intelligence-Led Policing in Practice: Reflections From Intelligence Analysts', *Police Quarterly*, 22(2), pp. 139-160.

Burge, S. (2015) *Systems Thinking: Approaches and Methodologies. An Overview of the Soft Systems Methodology*. Available at: <https://www.burgehugheswalsh.co.uk/Uploaded/1/Documents/Soft-Systems-Methodology1.pdf> (Accessed 01/08/2016).

Burnett, R, and McNeill, F (2005) 'The place of the officer–offender relationship in assisting offenders to desist from crime'. *Probation Journal*, 52 (3) pp. 221–242.

Business.com (2020) *Decision Support Systems Applications and Uses..*
Available at: <https://www.business.com/articles/decision-support-systems-dss-applications-and-uses/> (Accessed 24/06/2020).

Canton, R. (2012) 'The point of probation: On effectiveness, human rights and the virtues of obliquity'. *Criminology & Criminal Justice*, 13 (5). pp. 577-593.

Carr, N. (2019) 'Probation re-nationalisation...not quite', *Probation Journal*, 66(3), pp. 279–282. doi: 10.1177/0264550519866332.

Carter, D.L and Carter, J. G. (2009) 'Intelligence-Led Policing : Conceptual and Functional Considerations for Public Policy'. *Criminal Justice Policy Review*, 20(3), pp.310-325.

Chapman, T. and Hough, M. (1998) *Evidence Based Practice: A Guide to Effective Practice*. London: HM Inspectorate of Probation available at <https://webarchive.nationalarchives.gov.uk/ukgwa/+https://www.nationalarchives.gov.uk/ERORrecords/HO/421/2/P2/hmiprob/ebp.htm#Chapter%201>
accessed 01/03/2023

Checkland, P. (1999) *Systems Thinking, Systems Practice*. Chichester: Wiley.

Checkland, P, B and Haynes, M, G (2001) *Soft Systems Methodology: a 30-year retrospection*. Chichester: Wiley

Christopher, S. (2004) 'A practitioner's perspective of UK strategic intelligence', in Ratcliffe, J. (ed). *Strategic thinking in criminal intelligence*. Annandale, N.S.W.: Federation Press, pp. 177-193.

Cluley, E. (2009) 'Effective supervision for reducing offending', *Probation Journal*, 56(2), pp. 181–183. doi: 10.1177/0264550509106157.

College of Policing. (2015) *Intelligence management: Intelligence report*. Available at <https://www.app.college.police.uk/app-content/intelligence-management/intelligence-report/> (Accessed, 01/01/2016).

College of Policing. (2023). Intelligence career pathway. Available at: <https://www.college.police.uk/career-learning/career-development/career-pathways/intelligence>. (Accessed, 01/02/2023)

Collins, C. S. and Stockton, C. M. (2018) 'The Central Role of Theory in Qualitative Research', *International Journal of Qualitative Methods*, 17, pp. 1-10 doi: [10.1177/1609406918797475](https://doi.org/10.1177/1609406918797475).

Cooper, R. A. (1981) 'Jeremy Bentham, Elizabeth Fry, and English Prison Reform', *Journal of the History of Ideas*, 42(4) pp.675–690. <https://doi.org/10.2307/2709127>

Cope, N. (2004) 'Intelligence Led Policing or Policing Led Intelligence: Integrating Volume Crime Analysis into Policing' *British Journal of Criminology*, 44(2), pp.188–203.

Coyne, J. (2017) *Opinion, Intelligence is no dark art*. Australian Strategic Policy Institute. Available at <https://www.aspi.org.au/opinion/intelligence-no-dark-art>. (Accessed 19/01/2021)

Craissati, J, Sindall, O. (2009) 'Serious further offences: An exploration of risk and typologies', *Probation Journal*, 56 (1), pp. 9–27.

Cram, F. (2020) 'The 'carrot' and 'stick' of integrated offender management: implications for police culture', *Policing and Society*, 30(4), pp.378-395, doi: 10.1080/10439463.2018.1547719

Cram, F. (2023). *Integrated Offender Management and the Policing of Prolific Offenders*. Routledge Studies in Crime, Security and Justice. London: Routledge.

Crawford, A. (1994) 'The Partnership Approach to Community Crime Prevention: Corporatism At the Local Level?' *Social & legal studies*, 3(4), pp.497–519.

Crotty, M. (1998) *The Foundations of Social Research: Meaning and Perspective in the Research Process*. Sage: Sydney.

Darroch, S and Mazerolle, L (2015) 'Intelligence-led policing: a comparative analysis of community context influencing innovation uptake', *Policing & Society*, 25 (1), pp. 1-24.

Deacon, D, Bryman, A & Fenton, N. (1998) Collision or collusion? A discussion and case study of the unplanned triangulation of quantitative and qualitative research methods, *International Journal of Social Research Methodology*, 1:1, 47-63, DOI: [10.1080/13645579.1998.10846862](https://doi.org/10.1080/13645579.1998.10846862)

Dean, G., Filsted, C. and Gottschalk, P. (2006) 'Knowledge sharing in criminal investigation: an empirical study of Norwegian Police as value shop', *Criminal Justice Studies*, 19 (4), pp. 423-37.

De Long, D.W. and Fahey, L. (2000) 'Diagnosing cultural barriers to knowledge management', *Academy of Management Executive*, 14(4), pp. 113-28.

Denscombe, M. (2003) *Ground Rules for Good Research: a 10 point guide for social researchers*. Maidenhead: Open University Press.

Denscombe, M. (2003) *The Good Research Guide: for small scale social research projects*. Maidenhead: Open University Press.

Department for Work and Pensions. (2002) 'Investigative Interviewing training manual'. DWP Training. HMSO.

Devens, R. M. (1865) *Cyclopaedia of commercial and business anecdotes*. New York: D. Appleton and Company. Available at <https://ia801409.us.archive.org/25/items/cyclopaediacom00devegoog/cyclopaediacom00devegoog.pdf> (Accessed via Google digital archive 21/07/2015).

Dominey, J. (2019) 'Probation supervision as a network of relationships: Aiming to be thick, not thin', *Probation Journal*, 66(3), pp. 283–302. doi: 10.1177/0264550519863481.

Drell, B. (1993) *Intelligence Research: Some Suggested Approaches*. Available at <https://www.cia.gov/static/48f47d96698aabee7c4750407e664405/Intelligence-Research-Suggested-Approaches.pdf> (Accessed 01/04/2016).

Driscoll, J. (ed.) (2007) *Practicing Clinical Supervision: A Reflective Approach for Healthcare Professionals*. Edinburgh: Elsevier.

Duthel, H. (2014) *Global Secret and Intelligence Services 3: Hidden Systems that Deliver Unforgettable Customer Service*. Norderstedt, Germany: BOD-Books on Demand.

El-Sawad, A., Arnold, J., & Cohen, L. (2004). 'Doublethink': The prevalence and function of contradiction in accounts of organizational life. *Human Relations*, 57(9), 1179–1203. <https://doi.org/10.1177/0018726704047142>

Evans, G (2009) 'Rethinking Military Intelligence Failure – Putting the Wheels Back on the Intelligence Cycle', *Defence Studies*, 9(1), 22-46, DOI: 10.1080/14702430701811987.

Evetts, J. (2013) 'Professionalism: Value and ideology', *Current Sociology*, 61(5–6), pp. 778–796. doi: 10.1177/0011392113479316.

Fish, S. (1985) 'Anti-Professionalism', *New Literary History*, 17(1), pp. 89-108. <https://doi.org/10.2307/468981>.

Fitzgibbon, D. W. M. (2007) 'Risk analysis and the new practitioner: Myth or reality?', *Punishment & Society*, 9(1), pp. 87–97. doi: 10.1177/1462474507070554.

Fitzgibbon, D.W. (2008) 'Deconstructing Probation: Risk and Developments in Practice', *Journal of Social Work Practice*, 22(1), pp.85-101, DOI: 10.1080/02650530701872405.

Fitzgibbon, D.W. (2010) 'Reasons to be Fearful: Dealing with Risk in The Probation Service', *EuroVista*. 1(2), pp. 101-105. Available at <https://www.cep-probation.org/wp-content/uploads/2019/01/VOL-1.2-Reasons-to-be-Fearful-Dealing-with-Risk-in-The-Probation-Service.pdf>.

Fitzgibbon, D.W. (2013) 'Risk and privatisation', *British Journal of Community Justice*. 11 (2-3), pp. 87-90. Available at https://www.researchgate.net/profile/Wendy-Fitzgibbon-2/publication/298628007_Risk_and_privatisation/links/5766d14b08ae1658e2f7176d/Risk-and-privatisation.pdf.

Fitzgibbon, D.W. and Lea, J. (2014) 'Defending probation: Beyond Privatisation and Security'. *European Journal of Probation*. 6 (1), pp. 24-41. <https://doi.org/10.1177/2066220314523226>

Flood, B. (2004) 'Strategic aspects of the UK National Intelligence Model', in Ratcliffe, J. (ed). *Strategic thinking in criminal intelligence*. Annandale, N.S.W.: Federation Press, pp. 37-52.

Fournier, V. (1999) 'The Appeal to 'Professionalism' as a Disciplinary Mechanism', *The Sociological Review*, 47(2), pp. 280–307. doi: 10.1111/1467-954X.00173.

Fox, K. J. (2016) 'Civic commitment: Promoting desistance through community integration', *Punishment & Society*, 18(1), pp. 68–94. doi: 10.1177/1462474515623102.

Fox, W. M. (1995) 'Sociotechnical System Principles and Guidelines: Past and Present', *The Journal of Applied Behavioral Science*, 31(1), pp. 91–105. doi: 10.1177/0021886395311009.

Fuentes, J, R. (2006) New Jersey State Police: Practical guide to Intelligence-led Policing. *Manhattan Institute for Policy Research*. Available at https://www.njsp.org/divorg/invest/pdf/njsp_ilpguide_010907.pdf (Accessed 01/01/2014).

Fujitsu Image Scanners. (2020) 'What is Organisational Intelligence and how does it make sense of digital transformation?' Organisational Intelligence Research Report. Fujitsu. Available at [pfu-organisational-intelligence-en.pdf](https://www.fujitsu.com/uk/organisational-intelligence-en.pdf) (fujitsu.com). (Accessed 26/04/2022).

Gabriel, H. (2007) 'Police wait for convicts at prison gates', *The Press*. Available at <https://www.yorkpress.co.uk/news/1168229.police-wait-for-convicts-at-prison-gates/> (Accessed on 01/08/2014).

Garside, R. (2004) 'Crime, Persistent Offenders and the Justice Gap', Centre for Crime and Justice Studies at Kings College London. Available at: <https://www.crimeandjustice.org.uk/sites/crimeandjustice.org.uk/files/crime%20C%20persistent%20offenders.publication.pdf> (Accessed 01/01/2021).

Gernke, P., Hengst, M., Rosmalen, F. and De Boer, A. (2019) 'Towards a maturity model for intelligence-led policing: A case study research on the investigation of drugs crime and on football and safety in the Dutch police', *Police Practice and Research*, 22(1), pp. 190-207. doi: 10.1080/15614263.2019.1689135

Gibbs, G. (1988) *Learning by Doing: A Guide to a Teaching And Learning Methods*. Oxford, Polytechnic: Further Educational Unit

Gill, P. (1998) 'Police intelligence processes: A study of criminal intelligence units in Canada', *Policing and Society*, 8(4), pp. 339-365. doi: 10.1080/10439463.1998.9964795

Gill, P. (2012) 'Intelligence, Threat, Risk and the Challenge of Oversight', *Intelligence and National Security*, 27(2), pp. 206-222, doi: 10.1080/02684527.2012.661643

Gill, P. (2017) 'The Way Ahead in Explaining Intelligence Systems and Process', paper presented to International Studies Association Annual

Conference, Baltimore, February 2017. Available at, https://www.academia.edu/31691986/The_way_ahead_in_explaining_intelligence_systems_and_process. (Accessed on 08/03/2022)

Gill, P and Phythian, M. (2012) *Intelligence in an Insecure World*. Cambridge: Polity.

Gill, P and Phythian, M. (2016) 'What is Intelligence Studies?', *The International Journal of Intelligence, Security and Public Affairs*, 18:1, pp 5-19.

Gladfelter, A. S., & Haggis, W. A. (2022). Burnout Among Probation Officers: The Importance of Resilience. *International Journal of Offender Therapy and Comparative Criminology*, 0(0).

Glass, R, R. and Davidson, P, B. (1948) *Intelligence is for Commanders*. Military Service Publication Co:USA.

Goldstein, H. (2001) Arizona State University, Centre for Problem-Oriented Policing. *What is POP?* Available at: <http://www.popcenter.org/about/?p=whatispop> (Accessed: 29/07/2015).

Godfrey, E, D. & Harris, D, R. (1971) *Basic Elements Of Intelligence: A Manual of Theory, Structure and Procedures for Use by Law Enforcement Agencies against Organised Crime*. US Department of Justice. Available at

<https://www.ojp.gov/pdffiles1/Digitization/143136NCJRS.pdf> (Accessed 01/06/2014).

Gottschalk, P. (2006) 'Stages of knowledge management systems in police investigations', *Knowledge-Based Systems*, 19(6), pp. 381-387. doi=10.1.1.97.3971&rep=rep1&type=pdf

Gray, D. (2014) '*Doing Research in the real world*' Third., London: Sage. Available at https://www.academia.edu/29567720/Doing_Research_in_the_Real_Worl_David_E_Gray (Accessed 01/03/2015).

Grieve, J. (2004) 'From SID to the National Intelligence Model', in Ratcliffe, J. (ed) *Strategic thinking in criminal intelligence*. Annandale, N.S.W.: Federation Press, pp. 25-36.

Grimwood, G, G. and Berman, G. (2012) *Reducing Reoffending: The "What Works" debate*. House of Commons Research Paper 12/71. Available at: <https://commonslibrary.parliament.uk/research-briefings/rp12-71/> (Accessed 01/03/2015).

Guidetti & Martinelli (2010) 'Intelligence-Led Policing: A Strategic Framework', *Police Chief*, 76(10), pp. 132-136.

Gul, Z. (2009) '*A Partial Test of the Intelligence-Led Policing Model*'. PhD thesis. Kent State University. Available at: https://etd.ohiolink.edu/apexprod/rws_olink/r/1501/10?p10_etd_subid=54559&clear=10 (Accessed 01/10/2016).

Gul, Z & Kule, A (2013) 'Intelligence Led Policing: How the use of Crime Intelligence Analysis translates into the decision making', *International Journal of Security and Terrorism*, 4(1), pp. 21-40.

Hadfield, E. Sleath, E, Brown and Holdsworth, E. (2020) 'A systematic review into the effectiveness of Integrated Offender Management', *Criminology & Criminal Justice*. doi: 10.1177/1748895820912295.

Halal, W. (1997) 'Organisational Intelligence: What is it, and how can managers use it?'. Strategy+Business. Available at Organizational Intelligence: What is it, and how can managers use it? (strategy-business.com). (Accessed 28/04/2022)

Handel, M. (1989) *War, Strategy and Intelligence*. Oxon: CASS.

Hanser, R. D. (2014) *Community Corrections*. California: Sage.

Harding, D. J., Western, B., & Sandelson, J. A. (2022). From Supervision to Opportunity: Reimagining Probation and Parole. *The ANNALS of the American Academy of Political and Social Science*, 701(1), 8–25.

Hare, N. P. and Collinson, P. (2013) 'Organisational culture and intelligence analysis: A perspective from senior managers in the Defence Intelligence Assessments Staff', *Public Policy and Administration*, 28(2), pp. 214–229. doi: 10.1177/0952076712460715.

Hart, C. (2001) *Doing a Literature Review*. London: Sage.

Heydon, G. (2012) 'Helping the Police with Their Enquiries: Enhancing the Investigative Interview with Linguistic Research', *The Police Journal*. 85 (2), pp. 101-122.

Heaton, R. (2000) 'The prospects for intelligence-led policing: Some historical and quantitative considerations', *Policing and Society*, 9(4), 337–356.

Heldon, C. (2004) 'Exploratory intelligence tools', in Ratcliffe, J. (ed) *Strategic thinking in criminal intelligence*. Annandale, N.S.W.: Federation Press, pp. 99-118.

Heuer, R, J. (1999) *Psychology of Intelligence Analysis*. Central Intelligence Agency. Available at: <https://books.google.co.uk/books?hl=en&lr=&id=rRXFhKAiG8gC&oi=fnd&pg>

=PR7&dq=heuer+r+1999&ots=RDOiLYw2nQ&sig=HFYs9TPjnuWvru0ASUx
wNGoeM8k#v=onepage&q=heuer%20r%201999&f=false (Accessed
01/05/2018).

Hindle, K. (2015) 'Modelling Business Processes', in Paul, D., Yeats, D and
Cadle, J. (eds). *Business Analysis*. Third Edition. Swindon:BCS.

Hodgson, D. (2005) 'Putting on a Professional Performance':
Performativity, Subversion and Project Management', *Organization*,
12(1), pp. 51–68. doi: [10.1177/1350508405048576](https://doi.org/10.1177/1350508405048576).

Hofinger, V. (2019) 'Mission Impossible? The professionalisation of Austrian
probation between desistance and "what works"', *European Journal of
Probation*, 11(1), pp. 1–13. doi: [10.1177/2066220319852372](https://doi.org/10.1177/2066220319852372).

Holmes, A, G, D. (2020) 'Researcher Positionality – A Consideration of Its
Influence and Place in Qualitative Research – A New Researcher Guide',
Shanlax International Journal of Education, 8(4), pp. 1-10.

Home Office (2009) *Integrated Offender Management Government Policy
Statement*. London: Home Office/Ministry of Justice.

Home Office (2011) *Drug Interventions Programme Operational Handbook*.
London. Home Office. Available at:
<https://assets.publishing.service.gov.uk/government/uploads/system/uploads>

/attachment_data/file/118069/DIP-Operational-Handbook.pdf (Accessed 01/11/2014).

HM Inspectorate of Probation. (2020). *Integrated Offender Management: Effective Practice Guide*, London: HM Inspectorate of Probation. Available at: <https://www.justiceinspectorates.gov.uk/hmiprobation/wp-content/uploads/sites/5/2020/02/Effective-practice-guide.pdf> (Accessed 01/03/2020).

HM Inspectorate of Probation. (2021). *Building the evidence base for high-quality probation services: The role of probation providers*. Available at: <https://www.justiceinspectorates.gov.uk/hmiprobation/wp-content/uploads/sites/5/2021/02/Research-and-evidence-base.pdf>. Accessed 01/03/2023

HM Inspectorate of Probation and HM Inspectorate of Constabulary and Fire & Rescue Services. (2020) *A joint thematic inspection of Integrated Offender Management*. Available at: <https://www.justiceinspectorates.gov.uk/hmicfrs/publications/a-joint-thematic-inspection-of-integrated-offender-management/> (Accessed 20/03/2020).

HM Prison and Probation Service. (2018) National Intelligence Unit, Milestone, Roll out of Intelligence Professionalisation Programme/Intelligence Apprenticeships. *HM Prison and Probation Service Business Plan 2018-2019*, National Security Group, p.40. Available at:

<https://www.gov.uk/government/publications/hmpps-business-plan-2018-to-2019> (Accessed 01/10/2019).

HM Prison and Probation Service. (2022) Probation Service Change Bulletin, 11. Available at: <https://www.gov.uk/government/publications/strengthening-probation-building-confidence-monthly-bulleting/probation-service-change-bulletin-issue-11-march-2022>.

Howard, T. (2017) *Knowledge is power: How intelligence sharing assists investigations*. Available at: <https://www.corrections1.com/evergreen/articles/knowledge-is-power-how-intelligence-sharing-assists-investigations-L5rEDyndrQOQwVOU/> (Accessed 07/10/2020).

Hulnick, A. S. (2006) 'What's wrong with the Intelligence Cycle', *Intelligence and National Security*, 21(6), pp. 959-979, DOI: 10.1080/02684520601046291

Hutchinson, R. (2006) *Elizabeth's Spy Master: Francis Walsingham And The Secret War That Saved England*. London: Phoenix.

Hutchison, T. (2020). *The PEACE Investigative Interviewing Model*. International Institute of Legal Project Management. Available at: <https://www.iilpm.com/the-peace-investigative-interviewing-model/>. Accessed 25/11/2022.

Innes, M., N. Fielding and N. Cope (2005) "The Appliance of Science: the Theory and Practice of Crime Intelligence Analysis", *British Journal of Criminology*. 45 (1) 39-57.

International Association of Law Enforcement Intelligence Analysts, (2001) *Starting an Analytic Unit for Intelligence-Led Policing*. 2nd edn. Lawrenceville: IALEIA.

Improvement Service. (no date) *Introduction to Gap Analysis*. Available at: - <https://www.improvementservice.org.uk/business-analysis-framework/analyse-needs/gap-analysis>. (Accessed 01/01/2021).

Jabareen, Y. (2009) 'Building a Conceptual Framework: Philosophy, Definitions, and Procedure', *International Journal of Qualitative Methods*, pp. 49–62. doi: [10.1177/160940690900800406](https://doi.org/10.1177/160940690900800406).

Jackson, M. (2009) 'Fifty years of systems thinking for management', *Journal of the Operational Research Society*, 60(1), pp.24–32. <https://doi.org/10.1057/jors.2008.176>

James, A. (2013). *Examining Intelligence-Led Policing: Developments in Research, Policy and Practice*. Hampshire: Palgrave Macmillan.

James, A (2014) 'Forward to the past: reinventing intelligence-led policing in Britain', *Police Practice and Research*, 15(1), pp. 75-88.

Jasper, M. (2013). *Beginning Reflective Practice*. Andover: Cengage Learning.

Jarvis, F, V (1972) *Advise, Assist, Befriend: A History of the Probation and After-Care Service*. London: National Association of Probation Officers.

Jashapara, A. (2007) 'Moving beyond tacit and explicit distinctions: a realist theory of organizational knowledge', *Journal of Information Science*, 33(6), pp. 752–766. doi: 10.1177/0165551506078404.

Jaffel, H.B. and Larsson, S. (2022). Introduction: What's the Problem with Intelligence Studies? Outlining a New Research Agenda on Contemporary Intelligence. *Problematizing Intelligence Studies*, pp.3-29.

Jeffery, K. (2010) *MI6: The History of the Secret Intelligence Service 1909 – 1949*. London: Bloomsbury.

John, T., Maguire, M., Quinn, A and Raybould, S. (2004) 'The NIM: Early implementation experience in three police force areas' (School of Social Sciences Working Paper; No.50). Cardiff University. Available at <https://orca.cardiff.ac.uk/id/eprint/78093/>

Johnson, L. K. (1986) 'Making the intelligence "Cycle" work', *International Journal of Intelligence and Counterintelligence*, 1(4), pp.1-23, DOI: 10.1080/08850608608435033

Johnson, R. B., Onwuegbuzie, A. J. and Turner, L. A. (2007) 'Toward a Definition of Mixed Methods Research', *Journal of Mixed Methods Research*, 1(2), pp. 112–133. doi: 10.1177/1558689806298224.

Johnson, S. D. et al. (2004) 'Evaluating Crime Prevention Scheme Success: Estimating 'Outcomes' or How Many Crimes Were Prevented', *Evaluation*, 10(3), pp. 327–348. DOI: 10.1177/1356389004048281.

Jupp, V. (1999). *Methods of Criminological Research*. London: Routledge.

Kahn, D. (2008) 'An Historical Theory of Intelligence' in Gill, P. Marrin, S. and Phythian, M. (eds.) *Intelligence Theory: Key Questions and Debates*. London: Routledge.

Kemshall H. (1998) 'Defensible Decisions For Risk: Or 'It's The Doers Wot Get The Blame'', *Probation Journal*, 45(2), pp. 67–72.

Keszei, A. (2017). Memory and the Contemporary Relevance of the Past. *The Hungarian Historical Review*, 6(4), 804–824.
<http://www.jstor.org/stable/26374407>

Kinver, M. (2010) 'Unlocking meerkats' alarm calls', *BBC News. Science & Environment*. Available at: <https://www.bbc.co.uk/news/science-environment-10728823> (Accessed 26/06/2020).

Kleiven, M. E. (2007) 'Where's the Intelligence in the National Intelligence Model?', *International Journal of Police Science & Management*, 9(3), pp. 257–273. doi: 10.1350/ijps.2007.9.3.257.

Komil-Burley, D. (2021) 'Conducting Research in Authoritarian Bureaucracies: Researcher Positionality, Access, Negotiation, Cooperation, Trepidation, and Avoiding the Influence of the Gatekeepers', *International Journal of Qualitative Methods*, 20, pp. 1-10.

Labrecque, R, M, (2017) 'Probation in the United States: A Historical and Modern Perspective', *Criminology and Criminal Justice Faculty Publications and Presentations*. Portland State University. Available at: https://pdxscholar.library.pdx.edu/cgi/viewcontent.cgi?article=1029&context=ccj_fac (Accessed 01/11/2017).

Larson, M.S. (1977). *The Rise of Professionalism: A Sociological Analysis*. Berkeley, CA: University of California.

Lord, C., Kenny, T., and Wood, M, (2014) 'The Role of Offender Managers in Community Orders: Results from the Offender Manager Community Cohort Study', *Ministry of Justice Analytical Series*. Available at: <https://www.gov.uk/government/collections/the-offender-management-community-cohort-study> (Accessed March 2014).

Luen, T.W. and Al-Hawamdeh, S. (2001) 'Knowledge management in the public sector: principles and practices in police work', *Journal of information Science*, 27 (5), pp. 311-18. doi: [10.1177/016555150102700502](https://doi.org/10.1177/016555150102700502)

Luhn, H, P. (1958) A Business Intelligence System. *IBM Journal of Research and Development*, pp. 314-319. Available at: <http://altaplana.com/ibmrd0204H.pdf> (Accessed 01/10/2014).

Maguire, M. (2000) 'Policing by risks and targets: Some dimensions and implications of intelligence led crime control', *Policing and Society*, 9(4), pp. 315–336.

Marrin, S. (2007) 'Intelligence Analysis: Structured Methods or Intuition?', *American Intelligence Journal*, 25(1), pp. 7-16.

Marrin, S. (2016) 'Improving Intelligence Studies as an Academic Discipline'. *Intelligence and National Security*, 32(2), pp. 266-279. DOI: [10.1080/02684527.2014,952932](https://doi.org/10.1080/02684527.2014.952932).

Marshall, A. (1994) *Intelligence and Espionage during the Reign of Charles II, 1660-1685*. Cambridge:Cambridge University Press.

Marrin, S. (2017) 'Understanding and Improving Intelligence Analysis by Learning from other Disciplines', *Intelligence and National Security*, 32:5, pp.539-547, DOI: 10.1080/02684527.2017.1310913.

Marrin, S. (2018) Evaluating intelligence theories: current state of play, *Intelligence and National Security*, 33:4, 479-490, DOI: [10.1080/02684527.2018.1452567](https://doi.org/10.1080/02684527.2018.1452567)

Martin, K. D., & Zettler, H. R. (2022). COVID-19's Impact on Probation Professionals' Views About Their Roles and the Future of Probation. *Criminal Justice Review*, 47(2), 167–184.

Maruna, S. and Farrall, S. (2003), 'Desistance from Crime: A Theoretical Reformulation', *Kolner Zeitschrift fur Soziologie und Sozialpsychologie*, 43, pp. 171-194. Available at: https://www.researchgate.net/publication/284224611_Desistance_from_Crime_A_Theoretical_Reformulation (Accessed 01/12/2013).

Mawby, R. C. & Worrall, A. (2011) 'Probation workers and their occupational cultures', University of Leicester. Available at:

https://www2.le.ac.uk/departments/criminology/documents/Final_report_Nov_2011%20-17%20Nov%202011.pdf (Accessed 10/12/2014).

Maxwell, J.A & Mittaphalli, K (2010) 'Realism as a Stance for Mixed Methods Research', in Tashakkori, A and Teddlie, C (eds.) *SAGE Handbook of Mixed Methods in Social and Behavioral Research, 2nd ed.* London: Sage Publications, pp. 145-167.

May, T. and Annison, J. (1998). 'The de-professionalization of probation officers', in: Abbott, P. and Meerabeau, L. (eds.) *The Sociology of the Caring Professions. Second Edition.* London: University College London.

McAra, L. and McVie, S. (2007) 'Youth Justice?: The Impact of System Contact on Patterns of Desistance from Offending', *European Journal of Criminology*, 4(3), pp. 315–345. doi: 10.1177/1477370807077186.

McEachern, A. W. and Newman, J. R. (1969) 'A System for Computer-Aided Probation Decision-Making', *Journal of Research in Crime and Delinquency*, 6(2), pp. 184–198. doi: 10.1177/002242786900600207.

McGarrell, E., Freilich, J. and Chermak, S. (2007) Intelligence-Led Policing As a Framework for Responding to Terrorism. *Journal of Contemporary Criminal Justice*, 23 (2), pp. 142-158.

McNeill, F (2006) 'A desistance paradigm for offender management', *Crime and Criminal Justice*. 6(1), pp. 39-62.

McNeill, F (2009) '*Towards Effective Practice in Offender Supervision*' [Report], University of Strathclyde. Glasgow. Available at: Report 2009.01 - Towards Effective Practice in Offender Supervision (strath.ac.uk). (Accessed 26/04/2022).

McNeill, F. (2012) 'Four forms of offender rehabilitation: Towards an integrated perspective', *Legal and criminal psychology*. 17(1), pp 18-36.

McNeill, F, Batchelor, S, Burnett, S, and Knox, J. (2005) '*21st Century Social Work. Reducing Reoffending: Key Practice Skills*'. Edinburgh: The Scottish Executive. Available at: https://strathprints.strath.ac.uk/38070/1/21st_c.pdf (Accessed 01/10/2020).

McNeill, F. & Maruna, S. (2007) 'Giving up and giving back: Desistance generativity and social work with offenders' in McIvor, G. and Raynor, P. (eds.), *Developments in social work with offenders*. Research highlights in social work, 48. London: Kingsley.pp.224-339.

McNeill, F., Farrall, S., Lightowler, C., and Maruna, S. (2012) 'How and why people stop offending: Discovering desistance. *Insights 15*. Institute for Research and Innovation in Social Services. Available at:

<https://www.iriss.org.uk/insights/how-and-why-people-stop-offending-discovering-desistance> (Accessed 27/05/2020).

McNeill, F. *et al.* (2012) 'Reexamining Evidence-Based Practice in Community Corrections: Beyond "A-Confined View" of What Works', *Justice Research and Policy*, 14(1), pp. 35–60. doi: 10.3818/JRP.14.1.2012.35.

McWilliams, W. (1983) 'The Mission to the English Police Court 1876-1936', *The Howard Journal*, 22: 129-147.

Meadows, D.H. (2008) *Thinking in Systems: A Primer*. Chelsea Green: Vermont.

Mifsud, D. (2016) Data representation with a dramatic difference: negotiating the methodological tensions and contradictions in qualitative inquiry. Confessions of a budding playwright ..., *International Journal of Qualitative Studies in Education*, 29:7, 863-881, DOI: [10.1080/09518398.2016.1174902](https://doi.org/10.1080/09518398.2016.1174902)

Mingers, J. (2014) *Systems Thinking, Critical Realism and Philosophy: A Confluence of Ideas*. New York: Routledge.

Ministry of Defence. (1991) *Intelligence Wing Student Notes*. Defence Intelligence & Security School. pp.P1-A1.

Ministry of Justice. (2009) *Integrated Offender Management: Government Policy Statement*. London: HMSO.

Ministry of Justice. (2010) *Draft Structural Reform Plan*. London: HMSO. Available at: <https://www.justice.gov.uk/downloads/publications/corporate-reports/MoJ/2010/moj-structural-reform-plana.pdf> (Accessed 05/07/2015).

Ministry of Justice. (2010) *Breaking the Cycle: effective punishment, rehabilitation and sentencing of offenders*. London: HMSO. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/185936/breaking-the-cycle.pdf (Accessed 06/07/2015)

Ministry of Justice. (2012) *Punishment and Reform: effective probation services*. Consultation Paper CP7/2012. London: HMSO. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/236077/8333.pdf (Accessed 10/07/2015).

Ministry of Justice. (2012) *Punishment and Reform: effective community sentences*. London: HMSO. Available at: <https://consult.justice.gov.uk/digital-communications/effective-community-services-1/results/punishment-and-reform-effective-community-sentences-response.pdf> (Accessed 12/07/2015).

Ministry of Justice. (2013). *Transforming Rehabilitation: A Revolution in the way we manage offenders*. Consultation Paper CP1/2013. London: HMSO. Available at:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228580/8517.pdf (Accessed 14/07/2015).

Ministry of Justice. (2013). *Transforming rehabilitation: a strategy for reform. Response to Consultation CP® 16/2013*. London: HMSO. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228744/8619.pdf (Accessed 20/08/2015).

Ministry of Justice, (2014). *Local Adult Reoffending 1 January 2013 – 31 December 2013 England and Wales*. Ministry of Justice Statistics bulletin. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/312417/local-adult-reoffending-trusts-jan13-dec13.pdf (Accessed on 01/06/2014)

Ministry of Justice (2015) National Offender Management Service. *Practice Framework: National Standards for the management of offenders for England and Wales*. London: HMSO. Available at <https://www.gov.uk/government/publications/national-standards-for-the-management-of-offenders-practice-framework>. (Accessed 01/5/2016)

Ministry of Justice. (2015) *Consultation on changes to reoffending statistics following the introduction of the Rehabilitation Programme*. London: HMSO. Available at: <https://www.gov.uk/government/consultations/changes-to->

reoffending-statistics-following-the-introduction-of-the-rehabilitation-programme. (Accessed 26/08/2015)

Mullineux, J. Taylor, B.J and Giles M.L. (2018) 'Probation officers' judgements: A study using personal construct theory'. *Journal of Social Work*. 0(0), pp.1-19. DOI: 10.1177/1468017318757384

National Community Safety Network. (2010) *Community Safety Problem-Solving Foundation Course*. Course workbook. Unpublished.

NCIS. (1999) *NCIS and the National intelligence Model*. NCIS Corporate Communications. London: NCIS.

Newell, R. (1999) 'Questionnaires', in Gilbert, N. (ed) *Researching Social Life*. London. Sage, pp. 94-115.

National Offender Management Service. (2007) *A Century of Cutting Crime*. London: Home Office.

National Offender Management Service. (2011). *Key Concepts and Definitions. Making Defensible Decisions*. Available at http://nomsintranet.org.uk/roh/roh/1-key_concepts/01_07.htm (Accessed 01/10/2015).

National Offender Management Service. (2015). *A compendium of research and analysis on the Offender Assessment System (OASys) 2009-2013*. Available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/449357/research-analysis-offender-assessment-system.pdf (Accessed 10/10/2018).

National Offender Management Service. (2016) *Public Protection Manual:PSI 18/2016 & PI17/2016*. Available at: <https://www.gov.uk/government/publications/public-protection-manual-psi-182016-pi-172016> (Accessed 03/05/2018).

Nguyen, T. N. M., Whitehead, L., Dermody, G., and Saunders, R. (2022) 'The use of theory in qualitative research: Challenges, development of a framework and exemplar'. *Journal of Advanced Nursing*, 78, pp.e21– e28. <https://doi.org/10.1111/jan.15053>

Noordegraaf, M. (2007) 'From "Pure" to "Hybrid" Professionalism: Present-Day Professionalism in Ambiguous Public Domains', *Administration & Society*, 39(6), pp. 761–785. doi: [10.1177/0095399707304434](https://doi.org/10.1177/0095399707304434).

Northumbria Community Rehabilitation Company. Annual Service Plan. (2015).

Oliver, P and Jupp, V (2006) '*Purposive sampling*', in: The SAGE dictionary of social research methods. Sage, pp. 244-245.

Oliver, W. (2017) *August Vollmer: The Father of American Policing*. Carolina: Carolina Academic Press.

O'Malley, P. (2015) Revisiting the classics: 'Policing the Risk Society' in the Twenty-first Century. *Policing and Society*. 25 (4), pp. 426-421. <https://doi.org/10.1080/10439463.2015.1031500>

Osborn, N. (2012). *To what degree have the non-police public services adopted the National Intelligence Model? What benefits could the National Intelligence Model deliver?* Professional Doctorate Thesis. Portsmouth University.

O'Shea, T. and Nicholls, K. (2003) 'Police crime analysis: A Survey of us police departments with 100 or more sworn personnel', *Police Practice and Research*, 4(3), pp. 233-250, DOI: [10.1080/1561426032000113852](https://doi.org/10.1080/1561426032000113852)

Parritt, B. (2011) *The Intelligencers: British Military Intelligence From The Middle Ages to 1929*. Barnsley: Pen & Sword.

Patten, M. L. (2011) *Questionnaire Research: A Practical Guide*. USA: Pyczak Publishing.

Paul, D & Yeats, D & Cadle, J. (eds) (2015) *Business Analysis*. Third Edition. Swindon:BCS

Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. London: Sage.

Payne, M. (2002) 'The Politics of Systems Theory within Social Work', *Journal of Social Work*, 2(3), pp. 269–292. doi: 10.1177/146801730200200302.

Peterson, M, B. (2005) *Intelligence Led Policing: The New Intelligence Architecture*. Washington, D.C: Bureau of Justice Assistance. Available at <https://www.ojp.gov/pdffiles1/bja/210681.pdf> (Accessed 02/05/2015).

Peterson, M. (2009). *An Introduction to Decision Theory*. Cambridge: Cambridge University Press.

Phillips, C. Jacobson, J. Prime, R. Carter, M. and Considine, M. (2002) *Crime and Disorder Reduction Partnerships: Round one progress*. Police Research Series. Paper 151. London: Home Office Available at: <http://library.npia.police.uk/docs/hopolicers/prs151.pdf> (Accessed 02/02/2012).

Phillips, E, M. and Pugh, D, S. *How to get a phd: A handbook for students and their supervisors*. Third Edition. Philadelphia: Open University Press.

Pinto, O. (1952) *Spycatcher*. London: Panther.

Phythian, M. (ed) (2013) *Understanding the intelligence cycle*. Oxon: Routledge.

Phythian, M. (2017) '*Intelligence analysis and social science methods: exploring the potential for and possible limits of mutual learning*', *Intelligence and National Security*, 32(5), pp. 600-612. doi: 10.1080/02684527.2017.1310972

Popcenter/Arizona State University (2021) *About Us, Mission and History of the Centre for Problem Oriented Policing*. Available at: <<https://popcenter.asu.edu/content/about-us>> (Accessed 27 January 2021).

Popcenter/Arizona State University (2021) *The SARA Model*. Available at: <https://popcenter.asu.edu/content/sara-model-0> (Accessed 27 January 2021).

Professional Head of Intelligence Assessment. (2019). Professional Development Framework for All-Source Intelligence Assessment. Available at: <https://www.civil-service-careers.gov.uk/professions/working-in-intelligence-analysis/> Becoming an Intelligence Analyst (p.1). (Accessed 01 January 2023).

Ratcliffe, J. (2002) 'Intelligence Led Policing and the problems of turning rhetoric into practice', *Policing and Society*, 12(1), pp.53-66. doi: 10.1080/10439460290006673

Ratcliffe, J. (2003) 'Intelligence-Led Policing'. *Trends & Issues in crime and criminal justice*. Australian Institute of Criminology. Canberra. Available at: <https://www.aic.gov.au/publications/tandi/tandi248> (Accessed 01/12/2013).

Ratcliffe, J. (ed). (2004). *Strategic thinking in criminal intelligence*. Annandale, N.S.W.: Federation Press.

Ratcliffe, J (2005). 'The Effectiveness of Police Intelligence Management: A New Zealand Case Study', *Police Practice and Research*, 6(5), pp. 435-451. doi.org/10.1080/15614260500433038

Ratcliffe, J. (2016) *Intelligence-Led Policing*. London: Routledge.

Ratcliffe, J,H. and Guidetti, R. (2008) 'State police investigative structure and the adoption of intelligence-led policing', *Policing: An International Journal of Police Strategies and Management*, 31(1): 109-128.

Raynor, P. and Vanstone, M. (2018) 'What matters is what you do: The rediscovery of skills in probation practice', *European Journal of Probation*, 10(3), pp. 199–214. doi: 10.1177/2066220318820199

Read, T. & Oldfield, D. (1995) *Local Crime Analysis*. Crime Detection & Prevention Series, Paper 65. Home Office: Police Research Group. Available at: <https://www.scribd.com/document/411641062/Local-Crime-Analysis> (Accessed 09/11/2019).

Ritchie, R., Lewis, J., McNaughton-Nicholls, C., and Ormston, R. (eds). (2003) *Qualitative Research Practice: A guide for social science students and researchers*. Second Edition. London: Sage.

Rollason, C. (2015) 'The Competencies of a Business Analyst', in Paul, D., Yeats, D. and Cadle, J. (eds) *Business Analysis*. Third Edition. Swindon: BCS.

Rowe, M. (2007) 'Tripping Over Molehills: Ethics and the Ethnography of Police Work', *International Journal of Social Research Methodology*, 10:1, pp.37-48.

Rowe, M. and Soppitt, S. (2014) "'Who you gonna call?' The role of trust and relationships in desistance from crime', *Probation Journal*, 61(4), pp. 397–412. doi: 10.1177/0264550514548252

Rowley, J. (2014) 'Designing and using research questionnaires', *Management Research Review*, 37 (3), pp. 308-330. <https://doi.org/10.1108/MRR-02-2013-0027>

Ruhland, E., & Scheibler, E. (2022). Probation officer discretion in monitoring and violating supervision conditions. *Probation Journal*, 69(2), 177–196.

Sanders, M., Jones, L., & Briggs, E. (2022). A What Works Centre for Probation: Challenges and possibilities. *Probation Journal*, 69(1), 107–114.

Schneider, S, R. (1995) 'The criminal intelligence function: Toward a comprehensive and normative model'. *International Association of Law Enforcement Intelligence Analysts Journal*. 9(2), pp. 403-427.

Scott, W. R. (2008) 'Lords of the Dance: Professionals as Institutional Agents', *Organization Studies*, 29(2), pp. 219–238. doi: 10.1177/0170840607088151.

Scott, L. & Jackson, P. (2004) 'The Study of Intelligence in Theory and Practice'. *Intelligence & National Security*, 19(2), pp.139-169.

Seba, I. & Rowley, J. (2010) 'Knowledge management in UK police forces', *Journal of Knowledge Management*, 14(4), pp.611-626.

Shepherd, B. (2019). Back to the future? The long view of probation and sentencing: A practitioner response. *Probation Journal*, 66(4), 456–463.

Sheptycki, J. (2004) 'Organizational Pathologies in Police Intelligence Systems: Some Contributions to the Lexicon of Intelligence-Led Policing',

European Journal of Criminology, 1(3), pp. 307–332. doi:
10.1177/1477370804044005.

Sherman, L. W., Gottfredson, D., MacKenzie, D., Eck, J., Reuter, P. and
Bushway, S. (1998) 'Preventing Crime: What Works, What Doesn't, What's
Promising', *National Institute of Justice Research in Brief*, Washington, D.C.:
National Institute of Justice.

Singh, S. (1999) *The Code Book: The Science of Secrecy from Ancient Egypt
to Quantum Cryptography*. London: Fourth Estate.

Skyttner, L. (1996) *General Systems Theory: An Introduction*. London:
Macmilan Press

Smith, C. (2018) 'The Controversial Crime-Fighting Program That Changed
Big-City Policing Forever: Is CompStat's main legacy safe streets – or stop
and frisk?' *NY Mag / Intelligencer*. Available at:
[https://nymag.com/intelligencer/2018/03/the-crime-fighting-program-that-
changed-new-york-forever.html](https://nymag.com/intelligencer/2018/03/the-crime-fighting-program-that-changed-new-york-forever.html) (Accessed 10/10/2019).

Sommerville, I. (2013) *Introducing Sociotechnical systems*. Available at:
<https://www.youtube.com/watch?v=xdFftbIToV0>. (Accessed 03/08/2020).

Søndergaard, S., Kerr, M., and Clegg, C. (2007) 'Sharing knowledge: contextualising socio-technical thinking and practice', *The Learning Organization*, 14 (5), pp. 423-435. Available at: <https://doi.org/10.1108/09696470710762646> (Accessed 25/10/2019).

Staff Writer. (2022). *Investigative Interviewing: A Practical Guide for using the PEACE Model*. Professional Investigators College of Australia. Available at: <https://www.pica.edu.au/wp-content/uploads/2020/12/PEACE-guide.pdf>. Accessed 25/11/2022.

Storey, S. (2014) 'To boldly go'. *Probation Quarterly*. Issue 2. Probation Institute. Available at: https://researchportal.port.ac.uk/portal/files/3548606/PQ_FINAL_Issue_2_low_res.pdf

Tangen, J. and Briah, R. K. (2018) 'The revolving door of reform: Professionalism and the future of probation services in England and Wales', *Probation Journal*, 65(2), pp. 135–151. doi: 10.1177/0264550518768398.

Teague, M. (2011) 'Probation in America: Armed, private and unaffordable?', *Probation Journal*, 58(4), pp. 317–332. doi: [10.1177/0264550511421518](https://doi.org/10.1177/0264550511421518).

Teddlie, C. and Tashakkori, A. (2009) *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioural Sciences*. California: SAGE

The Vidocq Society. (2020). *The Life of Monsieur Vidocq*. <https://www.vidocq.org/history/#monsieur-vidocq>. Accessed 14/06/2022.

Thierauf, R. J. (2001) *Effective Business Intelligence Systems*. London:Quorum.

Tidmarsh, M. (2020) 'The probation service in England and Wales: A decade of radical change or more of the same?', *European Journal of Probation*, 12(2), pp. 129–146. doi: 10.1177/2066220320947243.

Tidmarsh, M. (2020) 'If the cap fits'? Probation staff and the changing nature of supervision in a Community Rehabilitation Company. *Probation Journal*, 67 (2), 98-117.

Toft, B. & Reynolds, S. (1994) *Learning from disasters: A management approach*. Oxford: Perpetuity Press.

Tracy, S (2004) Dialectic, contradiction, or double bind? Analyzing and theorizing employee reactions to organizational tension, *Journal of Applied Communication Research*, 32:2, 119-146, DOI: [10.1080/0090988042000210025](https://doi.org/10.1080/0090988042000210025)

Trethewey, A & Ashcraft, K, L. eds. (2004) Practicing Disorganisation: The Development of Applied Perspectives on Living with Tension. *Journal of Applied Communication Research*, 32:2, 81-88, DOI: [10.1080/0090988042000210007](https://doi.org/10.1080/0090988042000210007)

Trist, E (1981) The Evolution of Socio-Technial Systems: a conceptual framework and action research program Toronto: Ontario Ministry of Labour, Ontario Quality of Working Life Centre. Available at: http://sistemas-humano-computacionais.wdfiles.com/local--files/capitulo%3Aredes-socio-tecnicas/Evolution_of_socio_technical_systems.pdf (Accessed 01/02/2015)

Tuddenham, R. (2000) 'Beyond Defensible Decision-Making: Towards Reflexive Assessment Of Risk And Dangerousness', *Probation Journal*, 47(3), pp. 173–183. doi: [10.1177/026455050004700302](https://doi.org/10.1177/026455050004700302).

United Nations Office on Drugs and Crime. (2011) *Criminal Intelligence: Manual for Managers*. United Nations office on Drugs and Crime. New York: United Nations. Available at https://www.unodc.org/documents/organized-crime/Law-Enforcement/Criminal_Intelligence_for_Managers.pdf (Accessed 25/10/2015).

Viglione, J. (2017) 'Street-Level Decision Making: Acceptability, Feasibility, and Use of Evidence-Based Practices in Adult Probation', *Criminal Justice and Behavior*, 44(10), pp. 1356–1381. doi: 10.1177/0093854817718583.

Walsh, P. F. and Mitchell, M (2011) *Intelligence and Intelligence Analysis*, Willan Publishing, Cullompton. Available from: ProQuest Ebook Central. Accessed: 9 February 2023.

Walsh, W. F. and Vito, G. F. (2004) 'The Meaning of Compstat: Analysis and Response', *Journal of Contemporary Criminal Justice*, 20(1), pp. 51–69. doi: 10.1177/1043986203262310.

Ward, T. and Brown, M. (2004) 'The good lives model and conceptual issues in offender rehabilitation', *Psychology, Crime & Law*, 10:3, 243-257, DOI: [10.1080/10683160410001662744](https://doi.org/10.1080/10683160410001662744).

Warner, M. (2013) 'The Past and Future of the Intelligence Cycle', in Pyhthian, M (ed) *Understanding the intelligence cycle*. Oxon: Routledge.

Warner, M. (2014). *The Rise and Fall of Intelligence: An International Security History*. Washington, D.C.: Georgetown University Press.

Watson, H. & Wixom, B. (2007) 'The Current State of Business Intelligence', *Computer*. 40, pp. 96-99.

Webster, R. (2013) *The Evidence on Reducing Reoffending*. Available at: www.russellwebster.com/the-evidence-on-reoffending/ (accessed 27/05/2020)

Weick, K. (1995) *Sense making in Organisations: Foundations for Organisational Science*. California: Sage.

Whelan, C. (2016) 'Organisational culture and cultural change: A network perspective', *Australian & New Zealand Journal of Criminology*, 49(4), pp. 583–599. doi: 10.1177/0004865815604196

White, G.R.T. and Cicmil, S. (2016) 'Knowledge acquisition through process mapping: Factors affecting the performance of work-based activity', *International Journal of Productivity and Performance Management*, 65 (3), pp. 302-323. <https://doi.org/10.1108/IJPPM-01-2014-0007>

Williams, M. and Dyer, W. (2004) 'Realism and Probability' in Carter, B and New, M. (eds). *Making Realism work: Realist Social Theory and Empirical Research*. London: Routledge.

Wong, K. & Senior, P. (2011). *Process Evaluation of Five Integrated Offender Management Pioneer Areas*. London: Home Office / Ministry of Justice.
Available at

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/217376/evaluation-integrated-offender-mgt-pioneer-areas.pdf

Worrall, A. and Mawby, R. C. (2014) 'Probation worker cultures and relationships with offenders', *Probation Journal*, 61(4), pp. 346–357. doi: [10.1177/0264550514548251](https://doi.org/10.1177/0264550514548251).

Wu, D., Chen S, & Olson, D. (2014) 'Business intelligence in risk management: Some recent progresses', *Information Sciences*, Volume 256, pp. 1-7, Available at <http://www.sciencedirect.com/science/article/pii/S0020025513007238> (Accessed 17/12/2020).

Younanzadeh, E. (2021). Are you really a Data-Driven Organization? Forbes. Available at: <https://www.forbes.com/sites/forbescommunicationscouncil/2021/12/29/are-you-really-a-data-driven-organization/?sh=2b389d493906>. Accessed on 09/12/2022.